



# VICTORIA GOVERNMENT GAZETTE.

Published by Authority.

[Registered at the General Post Office, Melbourne, for transmission by post as a newspaper.]

No. 14]

FRIDAY, FEBRUARY 2.

[1934

## MINING NOTICES.

### CENTRAL GARDEN GULLY GOLD MINING COMPANY NO LIABILITY.

NOTICE.—A Call (the 5th) of Threepence per share has been made on the capital of this company, due and payable at the company's office, Charing Cross, Bendigo, on Wednesday, 14th February, 1934.

J. J. STANISTREET  
5231 (McColl, Rankin, and Stanistreet), Manager.

### NEW DON NO LIABILITY.

NOTICE.—A Call (the 7th) of Threepence per share has been made on the capital of this company, due and payable at the company's office, Charing Cross, Bendigo, on Wednesday, 14th February, 1934.

J. J. STANISTREET  
5232 (McColl, Rankin, and Stanistreet), Manager.

### NORTH VIRGINIA GOLD MINING COMPANY NO LIABILITY.

NOTICE.—A Call (the 4th) of Threepence per share has been made on the capital of this company, due and payable at the company's office, Charing Cross, Bendigo, on Wednesday, 14th February, 1934.

J. J. STANISTREET  
5233 (McColl, Rankin, and Stanistreet), Manager.





# VICTORIA GOVERNMENT GAZETTE.

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**No. 15]                      FRIDAY, FEBRUARY 2.                      [1934**

No.	Number of Tenders.	Particulars of Contract.	Country of Manufacture or Production.	Amount.	Name of Contractor.
184	..	Railways Stores Suspense Account, Act 3759, Section 105— Supply and delivery of Stores, as ordered, from 1st October, 1933, to 30th September, 1934.	As per annex ..	Rates as per annex	As per annex

Melbourne, 26th January, 1934.

## Schedule of Rates Contracts

FOR THE

## SUPPLY OF STORES

TO THE

## VICTORIAN RAILWAYS,

Period 1.10.1933 to 30.9.1934.

E. C. EYERS,

By order of The Victorian Railways Commissioners.

## SUPPLY AND DELIVERY OF STORES.

As ordered, from 1.10.33 to 30.9.34.

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Items marked \* to be supplied (subject to the General Conditions of Contract) to sample or samples exhibited by the Corporation.

Items marked † to be supplied to sample or samples furnished by the Contractor.

Items for which the Country of Manufacture is shown as a State of Australia are to be wholly or partly manufactured in such State.

No subletting will be allowed.

All rates are exclusive of Sales Tax.

## MINERAL LUBRICATING OILS.

(See Appendix "A" for Specification.)

The different classes of oil required shall be supplied in containers branded "Super. Cyl. Oil," "Sat. Cyl. Oil," "Sum. Bear," "Win. Bear," "C. & W.," "Car," as the case may be.

**Payment.**—Payment will be on gallonage calculated on net weight ascertained by approved methods by the Comptroller of Stores or his representative at the place of delivery, and the specific gravity ascertained in the Victorian Railways Laboratory from samples drawn from such delivery.

The rates do not include Exchange between Australia and London, and are based on the following rates of conversion between London and the country of production:—London-New York conversion 4·86½ dollars to the £1 sterling. Items 3 and 4—London-Japan conversion one yen equalling 1s. 3d. sterling, and Item 4A—London-Japan 24·582 pence to the yen.

T.T. Exchange and variation in conversion are to the Corporation's account and the contract rate is to be adjusted by adding or deducting the rate of exchange and/or conversion operating on the date of delivery between Australia and the country of production in the following manner:—

For each item, a factor in pence is shown. This is to be multiplied by the percentage of exchange ruling on the date of delivery between Australia and the country of production shown and the result will determine the amount to be added to or deducted from the contract rate per gallon. As regards Items Nos. 1, 2, 3, 4 and 4A it will be noted that the computation is to be made on certain percentages of the factors. In this connexion it will be noted that the London-Japan conversion rate included in the contract is 1 yen = 1s. 3d. for Items 3 and 4, and 24·582 pence per yen for Item 4A.

As regards Items 3 to 4A two factors are shown, and they are to be used separately for calculating the Australia-New York and Australia-Japan exchange respectively.

The rate of exchange and conversion notified by the Commonwealth Bank of Australia as ruling on the date of delivery to the Corporation *will in all cases be adopted.*

As regards Item No. 1, the Vacuum Oil Co. Pty. Ltd. and the Atlantic Union Oil Co. Ltd. should share equally the Department's requirements.

As regards Item No. 6, Socony Pty. Ltd. should receive 80 per cent. of requirements. The "P.982" Oil, Items 6A and 6B, is for summer use, and it is considered that 11,000 gallons, say 20 per cent. of the estimated requirements, will be ordered.

Estimated requirements have been amended accordingly.

As regards Items Nos. 5 and 6A, the rate covers delivery direct from the Wharf to Spencer-street, and where advantage can be taken of direct delivery it should be done.

Excepting Item 6, all rates in this Schedule include wharfage, and where time for importation can be allowed, the Contractors should be requested to have the Bill of Lading made out in the name of the Victorian Railways Commissioners so that wharfage may be saved and the amount involved deducted from the Contractor's invoice in addition to obtaining the benefit of the lower contract rate for delivery ex wharf.

As regards Item 6, the rate covers delivery either ex wharf or store at Department's option. No deduction is to be made for wharfage.

The contract rates cover delivery direct to the Oil Store, Newport, if so ordered.

Item 1B is provided for the use of the State Rivers and Water Supply Commission.

Item No.	Description.	Country of Manufacture.	Estimated Requirements.	Rate per—	Rate.	Name of Contractor.
					£ s. d.	
†1	Locomotive Cylinder Oil, Specification L.1, Superheater Steam— "A.U." in 40-45-gallon black iron drums Exchange Factor 95 per cent. of 135d. gallon	U.S.A. and Vict.	20,000 gall.	gallon	**0 1 10½	Atlantic Union Oil Co. Ltd.
†1A	"C.796" in 40-45-gallon drums Exchange Factor 143d. gallon	"		do.	**0 2 4	Vacuum Oil Co. Pty. Ltd.
†1B	"600 W." in 40-45-gallon drums Exchange Factor 184d. gallon (for use by State Rivers and Water Supply Commission)	"		do.	**0 3 4	
†2	Locomotive Cylinder Oil, Specification L.1, Saturated Steam— "A.U." in 40-45-gallon black iron drums Exchange Factor 95 per cent. of 125d. gallon	"	12,000 gals.	do.	**0 1 9½	Atlantic Union Oil Co. Ltd.
†3	Locomotive Bearing Oil, Specification L.2, Summer— "Shell" in 40-44 gallon iron drums Exchange Factor 80 per cent. of 025d. gallon U.S.A. Exchange Factor 20 per cent. of 276d. gallon Japan	U.S.A., Japan, & Vict.	13,000 "	do.	**0 1 10½	Shell Co. of Aust. Ltd.
†4	Winter— "Shell B." in 40-44-gallon iron drums Exchange Factor 87½ per cent. of 064d. gallon U.S.A. Exchange Factor 12½ per cent. of 276d. gallon Japan	"	2,750 "	do.	**0 1 9½	

Item No.	Description.	Country of Manufacture.	Estimated Requirements.	Rate per—	Rate.	Name of Contractor.
					£ s. d.	
MINERAL LUBRICATING OILS—continued.						
†4A	Winter—continued. “A.U. Loco. Bearing Oil, B.C.” .. Exchange Factor 85 per cent. of .085d. gallon U.S.A. Exchange Factor 15 per cent. of .205d. gallon Japan Car and Wagon Axle Oil (Black Oil), Specification L.3—	U.S.A., Japan, & Vict.	8,250 gals.	gallon	**0 1 10 $\frac{3}{4}$	Atlantic Union Oil Co. Ltd.
†5	“B.817” in 40-45-gallon drums ex wharf Exchange Factor .068d. gallon	U.S.A.	11,000 „	do.	**0 1 2 $\frac{3}{8}$	Vacuum Oil Co. Pty. Ltd.
†5A	“B.817” in 40-45-gallons drums ex store Exchange Factor .068d. gallon	„		do.	**0 1 2 $\frac{7}{8}$	
†6	Car Oil (Red Oil), Specification L.3A— “L.9” in drums ex wharf or store .. Exchange Factor .078d. gallon	„	45,000 „	do.	**0 1 3 $\frac{1}{2}$	Socony Pty. Ltd.
†6A	“P.982” in 40-45-gallon drums ex wharf Exchange Factor .11d. gallon	„	11,000 „	do.	**0 1 7 $\frac{1}{8}$	Vacuum Oil Co. Pty. Ltd.
†6B	“P.982” in 40-45-gallon drums ex store Exchange Factor .11d. gallon	„		do.	**0 1 7 $\frac{5}{8}$	
7 to 10	Nil.					

## LUBRICATING OILS (MOTOR, ENGINE, AND MACHINERY).

(See Appendix “B” of Specification.)

Payment will be made on gallonage calculated on net weight ascertained by approved methods by the Comptroller of Stores or his representative at the place of delivery, and the specific gravity ascertained in the Victorian Railways Laboratory from samples drawn from such delivery.

\*\* The rates do not include Exchange between Australia and London, and are based on the following rates of conversion between London and the country of production:—London-New York conversion on 4.86 $\frac{3}{4}$  dollars to the £1 sterling. London-Berlin on 20.43 reichmarks to the £1 sterling. London-Japan on 1 yen equalling 1s. 3d. sterling.

Exchange and Conversion is to Corporation's account and the contract rate is to be adjusted by adding or deducting the rate of Exchange and/or conversion operating on the date of delivery between Australia and the country of production in the following manner:—

For each item, a factor in pence is shown. This is to be multiplied by the percentage of Exchange ruling on the date of delivery between Australia and the country of production shown. The result will determine the amount to be added to or deducted from the contract rate per gallon.

The rate of Exchange and conversion notified by the Commonwealth Bank of Australia as ruling on the date of delivery to the Corporation will in all cases be adopted.

As regards Items 27 and 27A, two factors are shown, and they are to be used separately for calculating the Australian-New York and Australian-Japan Exchange respectively. The calculation for Exchange in each case is to be made only on the percentage of the factors shown in the schedule, viz., 90 per cent. for U.S.A. Exchange, and 10 per cent. for Japanese Exchange.

More than one tender has been accepted for each of the following items for supply to this Department, and provided satisfactory service is rendered, the business should be allotted as follows:—

Items 13-13c .. ..	Atlantic Union Oil Co. Ltd.	.. 80	} As determined by Electrical Engineering Branch.
	Vacuum Oil Co. Pty. Ltd. ..	.. 20	
Items 17-17c .. ..	C. C. Wakefield and Co. Ltd.	.. 80	
	Atlantic Union Oil Co. Ltd.	.. 20	
Item 28B .. ..	J. Carrigan .. ..	.. ..	}
Item 28c .. ..	Vacuum Oil Co. Pty. Ltd. ..	.. ..	

This allocation does not apply to items which are specially provided for other Government Departments.

The rates for Items 31 and 31A are based on Castor Seed at £15 per ton c.i.f. and e. Sydney, and will vary 2 $\frac{1}{4}$ d. per gallon for every £1 variation per ton of seed, variations of fractions of £1 to be treated pro rata. The average price of castor seed c.i.f. and e. paid by Contractor for shipments received by him during each month shall govern the price of castor oil supplied by Contractor during the month following and until a further shipment of castor seed is received. The Contractor shall forward to the Comptroller of Stores with each invoice, particulars of the c.i.f. and e. value of the Castor Seed, and shall submit, if called upon, documentary evidence in support of his claim.

In the event of the Castor Oil not being supplied from stock from Melbourne, orders should provide for the material being consigned on Bill of Lading to the Comptroller of Stores, Victorian Railways, to enable the Department to obtain free wharfage, and the amount of wharfage involved should be deducted from Contractor's invoice.

Storehouse Manager and Shipping Clerk to arrange accordingly.

## OILS (VARIOUS).

Item No.	Description.	Country of Manufacture.	Estimated Requirements.	Rate per—	Rate.	Name of Contractor.
					£ s. d.	
LUBRICATING OILS (MOTOR, ENGINE, AND MACHINERY)—continued.						
MOTOR, ENGINE, AND MACHINERY OILS.						
†11	Specification L4; Grade—extra light—Oil, for refrigerating machines, in 4-gallon tins "No. 1 Refrigerator" Exchange Factor .14d. gallon	U.S.A.	32 gals.	gal.	**0 2 3	C. C. Wakefield & Co. Ltd.
†12	Specification L4; Grade—Light—Oil, Cylinder for Water-cooled Petrol Engines, suitable for Ford Model T. cars, "Motor Oil Light"—in 4-gallon tins ..	U.S.A. & Vict.	240 "	do.	**0 2 0½	Vacuum Oil Co. Pty. Ltd.
†12A	Exchange Factor .08d. gallon in 40/45 gallon drums .. Exchange Factor .08d. gallon	"	"	do.	**0 1 9½	
†13	Specification L4; Grade—Medium—Oil, Cylinder for water-cooled Petrol Engines, suitable for Chevrolet, Dodge, Ford Model A. and Morris Cars— in 4-gallon tins, "M.M.1206" ..	U.S.A.	4,500 "	do.	**0 2 3	Atlantic Union Oil Co. Ltd.
†13A	Exchange Factor .125d. gallon in 40/45 gallon drums, "M.M.1206" .. Exchange Factor .125d. gallon	"		do.	**0 1 11	
†13B	in 4-gallon tins, "Motor Oil Medium" ..	U.S.A. & Vict.	4,500 "	do.	**0 2 1½	Vacuum Oil Co. Pty. Ltd.
†13C	Exchange factor .11d. gallon in 40/45 gallon drums, "Motor Oil Medium"	"		do.	**0 1 10½	
†13D	Exchange Factor .11d. gallon in 4-gallon tins, "Valvoline" for use at Mt. Buffalo	U.S.A.	36 "	do.	**0 5 9	J. Carrigan
†13E	Exchange Factor .55d. gallon in 40/45 gallon drums, "Valvoline" for use at Mt. Buffalo Exchange Factor .48d. gallon	"		do.	**0 5 3	
†14	Specification L4; Grade—Heavy Medium—Oil, Cylinder for water-cooled Petrol Engines, including Gang Cars, Types K. and K.S., 2 cycle water-cooled Engines, suitable for Armstrong Siddeley, Austin, Dodge Cars; Chevrolet, Morris and Graham Trucks— in 4-gallon tins, "Atrco M.M.1248" ..	U.S.A. & Vict.	4,000 "	do.	**0 2 7	Atlantic Union Oil Co. Ltd.
†14A	Exchange Factor .155d. gallon in 40/45 gallon drums, "Atrco M.M.1248"	"		do.	**0 2 3	
†14B	Exchange Factor .155d. gallon in 4-gallon tins, "Motor Oil" for other Government Departments	"	750 "	do.	**0 2 4	Vacuum Oil Co. Pty. Ltd.
†14C	Exchange Factor .12d. gallon in 40/45 gallon drums, "Motor Oil," for other Government Departments Exchange Factor .12d. gallon	"		do.	**0 2 1	
†15	Specification L4; Grade—Heavy—Oil, Cylinder for water-cooled Petrol Engines, suitable for Austin, Daimler and Morris Cars; Bean, International and White trucks— in 4-gallon tins, "Triple Shell," for Country Roads Board	U.S.A.	3,000 "	do.	**0 3 1½	Shell Co. of Aust. Ltd.
†15A	Exchange Factor .153d. gallon in 40/50-gallon drums, "Triple Shell," for Country Roads Board	"		do.	**0 2 10½	
†15B	Exchange Factor .153d. gallon in 4-gallon tins "Castrol X.L." for Police Department	"	300 "	do.	**0 4 1	C. C. Wakefield & Co. Ltd.
†15C	Exchange Factor .245d. gallon in 40/45-gallon drums, "Castrol X.L.," for Police Department Exchange Factor .245d. gallon	"		do.	**0 3 10	

Item No.	Description.	Country of Manufacture.	Estimated Requirements.	Rate per—	Rate.	Name of Contractor.
					£ s. d.	
LUBRICATING OILS (MOTOR, ENGINE, AND MACHINERY)— <i>continued.</i>						
Motor, Engine, and Machinery Oils— <i>contd.</i>						
Specification L.4; Grade—Extra Heavy—						
Oil, Cylinder, for Water-cooled Petrol Engines, and Air-cooled Petrol Engines, suitable for Talbot cars, A.E.C. Karrier and Vulcan trucks; Goventry Eagle Motor Cycles and J.A.P. Air-cooled Engines—						
† { 16	in 4-gallon tins, "Mobil Oil B." ..	U.S.A.	4,000 gals.	gallon	**0 3 3	Vacuum Oil Co. Pty. Ltd.
16A	Exchange factor, .215d. gallon	"		do.	**0 3 0	
† { 16B	in 40/45-gallon drums, "Mobil Oil B." ..	"	500 "	do.	**0 3 2	Shell Co. of Aust. Ltd.
	Exchange factor, .215d. gallon	"				
16C	in 4-gallon tins, "Golden Shell" for Country Roads Board ..	"		do.	**0 3 2	
	Exchange factor, .157d. gallon	"				
† { 16D	in 40/45-gallon drums, "Golden Shell" for Country Roads Board ..	"	900 "	do.	**0 2 11	
	Exchange factor, .157d. gallon	"				
† { 16E	in 4-gallon tins, "Castrol X.X.L." for Police Department ..	"	900 "	do.	**0 4 3	C. C. Wakefield & Co. Ltd.
	Exchange factor, .255d. gallon	"				
† { 16F	in 40/45-gallon drums, "Castrol X.X.L." for Police Department ..	"	150 "	do.	**0 4 0	J. Carrigan
	Exchange factor, .255d. gallon	"				
16G	in 4-gallon tins, "Valvoline Heavy Oil" for use at Mt. Buffalo ..	"		do.	**0 6 3	
	Exchange factor, .58d. gallon	"				
† { 17	in 40/45-gallon drums, "Valvoline Heavy Oil" for use at Mount Buffalo ..	"	1,500 "	do.	**0 5 9	
	Exchange factor, .55d. gallon	"				
† { 17A	Specification L.4; Grade—Extra Heavy, Special—Oil, Cylinder, for Water-cooled petrol Engines, suitable for Rail Motors, and Petrol Electric Rail Motors—		1,500 "	do.	**0 3 6	C. C. Wakefield & Co. Ltd.
	in 4-gallon tins, "Castrol G.P." ..	"				
† { 17B	Exchange factor, .235d. gallon	"	1,500 "	do.	**0 3 3	
	in 40/45-gallon drums, "Castrol G.P." ..	"				
† { 17C	Exchange factor, .235d. gallon	"	1,500 "	do.	**0 2 9	Atlantic Union Oil Co. Ltd.
	in 4-gallon tins, "Atreco M.1168" for trial purposes ..	"				
† { 18	Exchange factor, .16d. gallon	"	800 "	do.	**0 2 5	
	in 40/45-gallon drums, "Atreco M. 1168" ..	"				
† { 18A	Exchange factor, .16d. gallon	"	800 "	do.	**0 5 9	J. Carrigan
	Oil, Cylinder, for Deisel Engines, suitable for Junker Deisel Engines, airless injection cold starting oil engines, McDonald super Deisel road rollers, two-cycle and four-cycle Deisel Engines of 60–200 H.P.—	"				
† { 18B	in 4-gallon tins, "Valvoline" ..	"	800 "	do.	**0 5 3	
	Exchange factor, .46d. gallon	"				
† { 18C	in 40/45-gallon drums, "Valvoline" ..	"	800 "	do.	**0 2 6	Texas Co. (Asia) Ltd.
	Exchange factor, .40d. gallon	"				
† { 18D	in 4-gallon tins, "Texol F." for use at Mt. Buffalo ..	"	600 "	do.	**0 2 3	
	Exchange factor, .115d. gallon	"				
† { 18E	in 40/45-gallon drums, "Texol F." for use at Mt. Buffalo ..	"	600 "	do.	**0 2 9	Atlantic Union Oil Co. Ltd.
	Exchange factor, .115d. gallon	"				
† { 18F	in 4-gallon tins, "Atla Special Heavy" for State Rivers and Water Supply Commission ..	U.S.A. & Vict.	600 "	do.	**0 2 5	
	Exchange factor, .16d. gallon	"				
† { 18G	in 40/45-gallon drums, "Atla Special Heavy" for State Rivers and Water Supply Commission ..	"	600 "	do.	**0 2 5	
	Exchange factor, .16d. gallon	"				



Item No.	Description.	Country of Manufacture.	Estimated Requirements.	Rate per—	Rate.	Name of Contractor.
					£ s. d.	
LUBRICATING OILS (MOTOR, ENGINE, AND MACHINERY—continued.)						
† 18F	Motor, Engine, and Machinery Oils—cont. in 4-gallon tins, "D.T.E. Extra Heavy," for State Rivers and Water Supply Commission	U.S.A.	1,000 gals.	gallon	**0 3 8	Vacuum Oil Co. Pty. Ltd.
18G	Exchange factor, .245d. gallon in 40/45-gallon drums, "D.T.E. Extra Heavy," for State Rivers and Water Supply Commission	"		do.	**0 3 5	
† 18H	Exchange factor, .245d. gallon in 4-gallon tins, "C.U.3," for Country Roads Board	Germany	200 "	do.	**0 2 11½	Shell Co. of Aust. Ltd.
18I	Exchange factor, .193d. gallon in 40/45-gallon drums, "C.U.3," for Country Roads Board	"		do.	**0 2 8½	
† 19	Exchange factor, .193d. gallon Oil, for lubrication in enclosed crank cases of Leyland and Yorkshire steam wagons, in 4-gallon tins, "B. 9B"	U.S.A.	460 "	do.	**0 3 3	Shell Co. of Aust. Ltd.
† 20	Exchange factor, .161d. gallon Specification L.4A; Grade—Medium—Oil, cylinder for Kerosene Engines, including Crossley, Coulson, Smith and Searle, V.R. Standard, in 4-gallon tins, "Vacme Oil Heavy Medium X."	U.S.A. & Vict.	400 "	do.	**0 2 7	Vacuum Oil Co. Pty. Ltd.
† 21	Exchange factor, .125d. gallon Specification L.5; Grade—Extra Light Oil, bearing, suitable for small electric motors, light line shafting, pumps, small machines, spindles, automatic signal mechanism, power sewing machines, power separators, light printing machines and ring oil bearings, in 4-gallon tins "Libra"	U.S.A.	60 "	do.	**0 1 9	Texas Co. (A'sia) Ltd.
† 22	Exchange factor, .104d. gallon Specification L.5; Grade—Light—Oil, bearing, suitable for signal apparatus, medium line shafting, light ball bearings and races, medium printing machines, small milling machines, and ring oil bear- ings, in 40/45-gallon drums, "Aleph"	U.S.A.	300 "	do.	**0 1 5½	Texas Co. (A'sia) Ltd.
† 23	Exchange factor, .118d. gallon. Specification L.5; Grade—Medium—Oil, bearing, suitable for large electric motors and dynamos, heavy ball bearings and races, tricycles, windmills, large pumps, gyratory stone crushers, saw milling machinery, lathes, drilling machines, and large milling machines— in 4-gallon tins, "Shell G.918"	"	3,500 "	do.	**0 1 7½	Shell Co. of Aust. Ltd.
	Exchange factor, .080d. gallon. in 40/45-gallon drums, "Shell G.918"	"		do.	**0 1 4½	
	Exchange factor, .080d. gallon.	"		do.	**0 1 7½	
† 24	Specification L.5; Grade—Heavy—Oil, bearing, suitable for large machine tools, signal mechanism, heavy electric motors, road roller bearings, and heavy engine bearings, in 40/45-gallon drums, "Atlantic Heavy Bearing"	"	120 "	do.	**0 1 7½	Atlantic Union Oil Co. Ltd.
† 25	Exchange factor, .103d. gallon. Specification L.5; Grade—Extra Heavy— Oil, bearing, for stone crushers, tractors, and similar machinery, in 40/45-gallon drums, "Texas No. 671"	"	120 "	do.	**0 1 4	Texas Co. (A'sia) Ltd.
† 26	Exchange factor, .074d. gallon. Specification L.5; Grade—Extra Heavy— Special—Oil, bearing, for rail and road motor transmission gear, in 40/45-gallon drums, "S.D. Gear Oil"	"	1,200 "	do.	**0 1 9½	Socony Pty. Ltd.
	Exchange factor, .12d. gallon.					

Item No.	Description.	Country of Manufacture.	Estimated Requirements.	Rate per—	Rate: £ s. d.	Name of Contractor.
LUBRICATING OILS (MOTOR, ENGINE, AND MACHINERY)—continued.						
†26A	Motor, Engine, and Machinery Oils—cont. in 40/45-gallon drums, "Unacal 9015," for Public Works Department Exchange factor, .095d. gallon. Specification L.5A; Grade—Light—Oil, bearing, for marine steam engines— in 4-gallon tins, "Kalif D.D." ..	U.S.A.	200 gals.	gallon	**0 1 8	Atlantic Union Oil Co. Ltd.
†27	Exchange factor— 11d. gallon on 90%, U.S.A. 25d. gallon on 10%, Japan.	U.S.A., Japan, & Vict.	600 "	do.	**0 2 5½	Vacuum Oil Co. Pty. Ltd.
†27A	in 40/45-gallon drums, "Kalif D.D." Exchange factor— 11d. gallon on 90%. 25d. gallon on 10%.	"	"	do.	**0 2 2½	
†28	Specification L.6; Grade—Medium and Light—Oil, for turbines— in 4-gallon tins, "D.T.E. Heavy Medium," for State Rivers and Water Supply Commission	U.S.A.	1,300 "	do.	**0 3 2½	Vacuum Oil Co. Pty. Ltd.
†28A	Exchange factor, .21d. gallon. in 40/45-gallon drums, "D.T.E. Heavy Medium," for State Rivers and Water Supply Commission	"		do.	**0 2 11½	
†28B	Exchange factor, .21d. gallon. in 40/45-gallon drums, "Valvoline" ..	"	2,750 "	do.	**0 4 9	J. Carrigan
†28C	Exchange factor, .40d. gallon. in 40/45-gallon drums, "D.T.E. Light" Exchange factor, .21d. gallon. Specification L.6; Grade—Medium—Oil, for air compressors— in 4-gallon tins, "Algol" ..	"	450 "	do.	**0 2 11½	Vacuum Oil Co. Pty. Ltd.
†29	Exchange factor, .167d. gallon.	"	800 "	do.	**0 2 5	Texas Co. (A'sia) Ltd.
†29A	in 40/45-gallon drums, "Algol" .. Exchange factor, .167d. gallon.	"	320 "	do.	**0 2 2	
†29B	in 4-gallon tins, "P.931," for Public Works Department	"	300 "	do.	**0 2 2	Vacuum Oil Co. Pty. Ltd.
†29C	Exchange factor, .124d. gallon in 40/45-gallon drums, "P.931," for Public Works Department	"		do.	**0 1 11	
†30	Exchange factor, .124d. gallon Specification L.7; Grade—Light—Oil, for transformers and switch gear, in 4-gallon tins, "Vacuum A. Transformer Oil" Exchange factor, .21d. gallon. Specification L.8; Castor Oil— in 5-gallon drums ..	"	500 "	do.	**0 2 7½	Vacuum Oil Co. Pty. Ltd.
†31	in 40/45-gallon drums ..	N.S.W. (partly)	840 "	do.	*0 4 10	Marrickville Margarine Ltd.
†31A	Oil, Neatsfoot, pure—in 4-gallon tins ..	Vict.	60 "	do.	0 3 6	
†32	Oil, Neatsfoot Compound—in 40/45-gallon barrels or drums Soluble Cutting Compound, "Soluble P."— in 4-gallon tins ..	"	300 "	do.	0 1 8½	Ramsay & Treganowan Ltd.
†34	Exchange factor, .06d. gallon.	U.S.A. & Vict.	1,000 "	do.	**0 2 7	Vacuum Oil Co. Pty. Ltd.
†34A	in 40/45-gallon drums .. Exchange factor, .06d. gallon.	"		do.	**0 2 4	
†35	Oil, Fish, for tempering springs, in 40/45- gallon barrels or drums Exchange factor, .140d. gallon.	Japan	400 "	do.	**0 1 10	Shell Co. of Aust. Ltd.
†36	Oil, Lardine, in 4-gallon tins ..	Vict.	100 "	do.	0 2 5½	Ramsay & Treganowan Ltd.
†37	Oil, Lard, in 4-gallon tins .. Exchange factor, .09d. gallon.	U.S.A. & Vict.	48 "	do.	**0 3 11	Vacuum Oil Co. Pty. Ltd.
38 to 40	Nil					

## GREASES.

(See Appendix "C" for Specification.)

\*\* The rates for items 41 to 45, 47-48A, and 50 to 50c do not include Exchange between Australia and London, and excepting item 44 are based on the par rate of conversion between London and the country of production. London-New York conversion is based on 4.86½ dollars to the £1 sterling.

Exchange and/or Conversion is to the Corporation's account and the contract rates are to be adjusted by adding the rate of Exchange and/or Conversion operating on the date of delivery between Australia and the country of production in the following manner.

For each item, a factor in pence is shown. This is to be multiplied by the percentage of Exchange ruling on the date of delivery between Australia and the country of production shown, and the result will determine the amount to be added to or deducted from the contract rate, per lb. or cwt., as the case may be.

The rate of Exchange and Conversion notified by the Commonwealth Bank of Australia as ruling on the date of delivery to the Corporation will in all cases be adopted.

As regards item 44, purchase of Graphite Grease for trial purposes on pantographs will not be an infringement of contract.

Item 45 does not provide for Grease for Power House, supplies of which may be obtained elsewhere.

As regards item 48, it is expected that Shell grease will be used for all engines excepting "S" class. For the latter purpose, Texas will be used. This should result in the business being approximately equally shared by each Contractor.

The Contract rates cover delivery at the Oil Store, Newport, if required.

Item No.	Description.	Country of Manufacture.	Estimated Requirements.	Rate per—	Rate.	Name of Contractor.
					£ s. d.	
†41	Specification M.1, Grease suitable for lubrication of Gears, Conveyors, Compression Cups, in barrels, "Voco Dark Gear" Exchange factor, ¾d. cwt.	U.S.A. and Vict.	125 cwt.	cwt.	**1 0 0	Vacuum Oil Co. Pty. Ltd.
†42	Specification M.2, Grease, suitable for use in lubrication of road and rail motor chassis parts, gears, and of such parts of Motor Equipment and other machinery as are lubricated by means of compression cups. (Items Nos. 42 and 42A may also be used for Ball Bearings, grease packed or lubricated with grease gun. Items Nos. 43, 43A, and 43B may also be used for Ball Bearings lubricated with compression cups	U.S.A.	3 cwt.	lb.	**0 0 4½	Atlantic Union Oil Co. Ltd.
†42A	Grease Cup, No. 2, in 5-lb. tins, "Atlantic No. 2" Exchange factor, .0175d. lb.	"		cwt.	**1 9 2	
†43	Grease, Cup, No. 3, in 5-lb. tins, "Atlantic," No. 3 Exchange factor, .0185d. lb.	"		lb.	**0 0 4½	
†43A	Grease, Cup, No. 3, in 36-lb. containers, "Atlantic," No. 3 Exchange factor, .0185d. lb.	"		do.	**0 0 3½	
†43B	Grease, Cup, No. 3, in barrels, "Atlantic," No. 3 Exchange factor, .0175d. cwt.	"	35 "	cwt.	**1 9 2	
†44	Grease, Cup, No. 4 (Pantograph Collector), in barrels, "Voco No. 4" Exchange factor, 3d. cwt.	U.K.	60 cwt.	cwt.	**1 19 3	Vacuum Oil Co. Pty. Ltd.
†45	Grease Cup, No. 5, in 5-lb. tins "Atlantic No. 5." Not to be used at Power House Exchange factor, .025d. lb.	U.S.A.	50 lb.	lb.	**0 0 5½	Atlantic Union Oil Co. Ltd.
†46	Specification M.3, Grease, Antifriction, for lubrication of Rough Machinery, Rails, Switches, Curves, and other purposes, in 40-lb. tins, "Shell V.R. Antifriction Grease"	Vict.	20 cwt.	cwt.	0 14 0	Shell Co. of Aust. Ltd.
†47	Grease, Lubricating, for lubrication of Westinghouse Brake Cylinders and Triple Valves, to specification, in drums, "T.N. Brake Cylinder Lubricant" Exchange factor, .145d. gal.	U.S.A.	900 gals.	gal.	**0 2 2½	Socony Pty. Ltd.

Item No.	Description.	Country of Manufacture.	Estimated Requirements.	Rate per—	Rate.	Name of Contractor.
					£ s. d.	
GREASES—continued.						
†47A	Grease, Compound, for Locomotive Journals, to specification, in 100-lb. cases, "Texas Driving Journal Compound M" Exchange factor, .018d. lb.	U.S.A.	900 lb.	lb.	**0 0 6½	Texas Co. (A'sia) Ltd.
†48	Grease, Compound, for Locomotive Crank and Coupling Rod Pins, to Specification, in barrels— "Texaco Rod Cup" Exchange factor, .018d. lb.	"	10,000 lb.	do.	**0 0 6½	Texas Co. (A'sia) Ltd.
†48A	"Shell Rod Cup" Exchange factor, .018d. lb.	"		do.	**0 0 6½	Shell Co. of Aust. Ltd.
†49	Compound, Lubricating, for use in the open gears of wheel lathes and other heavy machines, in 36lb. tins "Shell Atlas Gear Compound"	Vict.	144 lb.	do.	0 0 2½	
†50	Petroleum Jelly, to specification, for Tarpaulin dressing and for use by Country Roads Board, in barrels approx. 5 cwt. each. "Atlantic 1507 Petrolatum" Exchange factor, .0105d. lb.	U.S.A.	35,000 lb.	do.	**0 0 1½	Atlantic Union Oil Co. Ltd.
†50A	Petroleum Jelly, to Specification in 36lb tins, "Atlantic 1507 Petrolatum" Exchange factor, .0105d. lb.	"		do.	**0 0 2½	
†50B	Petroleum Jelly (Amber), for use on Accumulators and Dynamo Bearings, in 5-lb. tins "Petrolatum Extra Amber" Exchange factor, .014d. lb.	"	1,000 lb.	do.	**0 0 3½	Vacuum Oil Co. Pty. Ltd.
†50C	Petroleum Jelly (Vaseline), for use of Ambulance, in 5-lb. tins. "Petrolatum Extra Amber." Exchange factor, .014d. lb.	"	20 lb.	do.	**0 0 3½	

## TURPENTINE, TURPENTINE SUBSTITUTE, AND METHYLATED SPIRITS.

*Turpentine.*—Specification A5—Item No. 51.

The materials shall be supplied to Tentative Australian Standard Specification, No. K7—1926 T.

The material shall be tested by standard methods of sampling and testing Tentative Australian Standard Specification, Nos. K7 and 8—1926 T., Part 2.

*Mineral Turpentine.*—Specification A6—Items Nos. 52–52A.

The material shall be supplied to Tentative Australian Standard Specification No. K8—1926 T.

The material shall be tested by Standard methods of sampling and testing Tentative Australian Standards Nos. K7 and 8—1926 T., Part 2.

*Specification for Methylated Spirits.*—Items Nos. 53 and 54.

The material shall be supplied to Tentative Australian Standard Specification No. K30—1928 T.

The material shall be tested by Standard methods of testing Nos. 30 and 31—1928 T., Part 2.

Payments will be made on gallonage calculated on net weights ascertained by approved methods by the Comptroller of Stores or his representative at the place of delivery, and the specific gravity ascertained in the Victorian Railways Laboratory from samples drawn from such delivery.

\*\* As regards Item No. 51, the contract rate does not include Exchange between Australia and London, and is based on the par rate of conversion between London and the country of production. London–New York conversion is based on 4.86½ dollars to the £1 sterling.

Exchange and conversion is to Corporation's account, and the contract rate is to be adjusted by adding the rate of Exchange and conversion operating on the date of delivery between Australia and the country of production in the following manner:—

The factor per gallon, shown in the Schedule, shall be multiplied by the percentage of Exchange ruling on the date of delivery between Australia and the country of production. The result will determine the amount to be added to the contract rate per gallon.

The rate of Exchange and conversion notified by the Commonwealth Bank of Australia as ruling on the date of delivery to the Corporation will be adopted.

† As regards Items Nos. 52–52A, the Contract is based on the wholesale selling rates ruling on 1st July, 1933; the rates are subject to fluctuations on all deliveries made on and after the date such fluctuations became operative.

The rates for Items Nos. 52 and 52A are contingent on this Department furnishing a statutory declaration to the effect that the Turpentine Substitute has not been used as a fuel or an admixture of fuel. In the event of the Department not being in a position to furnish the statutory declaration, the rates for these Items shall be increased by 6d. per gallon duty.

All requisitions and orders should state the purpose for which this class of material is required, and a copy of order furnished to the Shipping Clerk, who will arrange *re* declaration.

As regards Item No. 54, a charge of 10s. will be made for cylinders, which amount shall be refunded to the Corporation if returned in good order and condition.

Item No.	Description.	Country of Manufacture.	Estimated Requirements.	Rate per—	Rate.	Name of Contractor.
					£ s. d.	
<b>TURPENTINE, TURPENTINE SUBSTITUTE, AND METHYLATED SPIRITS—continued.</b>						
†51	Turpentine, to Specification A.5, in cases, 2 x 4-gallon tins, "Wando" Exchange Factor 0.345d. gallon Turpentine, Substitute, volatile mineral spirit, paint thinners, Specification A.6—"Petropine"	U.S.A.	3,000 gall.	gallon	**0 3 9	Brooks Robinson Pty. Ltd.
†52	In cases, 2 x 4-gallon tins, ..	"	2,500 "	do.	†0 1 10	Vacuum Oil Co. Pty. Ltd.
†52A	In bulk, in returnable drums ..	"	850 "	do.	†0 1 5½	E. L. Yencken & Co. Pty. Ltd.
†53	Spirits, Methylated, in 4-gallon tins, "C.S.R. Co."	N.S.W.	1,600 "	do.	0 2 8½	
†54	Spirits, Methylated, in approx. 40-gallon cylinders, "C.S.R. Co."	"		do.	0 2 6	
55 to 56	Nil					

### ROPE AND TWINES, ETC.

The Rope to be supplied under Items 189 to 194 inclusive shall be packed in hessian. The hessian packing will, as far as practicable, be returned to the Contractor at the Metropolitan Receiving Depot, Spencer-street.

Net weight of Rope only will be paid for.

As regards Items Nos. 193 and 194, any 1½-in. or 2¼-in. Rope ordered shall have one blue strand in each Rope in addition to the blue yarn in one strand or one blue yarn in each strand as specified respectively.

As regards items 205 and 206 the rates include Telegraphic Transfer Exchange between Australia and London at 25½ per cent., and if this rate of Exchange be varied during the contract period, the difference calculated on 50 per cent. of the contract rate shall be to the Corporation's account, and shall apply to any stores that may be ordered after the expiration of a period of two months from the date the amended rate of T.T. Exchange is effective as notified by the Commonwealth Bank.

Item No.	Description.	Country of Manufacture.	Estimated Requirements.	Rate per—	Rate.	Name of Contractor.
					£ s. d.	
173	Cord, Sash, Braided, in coils— No. 6 .. .. .	Vict. (partly)	300 lb.	lb.	0 1 3½	G. Kinnear & Sons Pty. Ltd.
†174	No. 7 .. .. .	"		do.	0 1 3½	
†175	No. 8 .. .. .	"	48 "	do.	0 1 3½	
†176	No. 9 .. .. .	"	100 "	do.	0 1 3½	
†177	No. 10 .. .. .	"	448 "	do.	0 1 4	
†178	Cord, Sash, Braided, Flax or Italian Hemp ..	"	12 "	do.	0 2 9	Downs & Son Pty. Ltd.
†179	Cord, Whip, any sizes ordered ..	"	14 "	do.	0 2 3	
†180	" Marking (Chalk) .. .. .	"	48 "	do.	0 2 3	J. Miller & Co. Pty. Ltd.
†181	" Nicking Line, any sizes ordered ..	"				
†182	Packing, Flax, pure .. .. .	"	10 cwt.	do.	0 1 2½	G. Kinnear & Sons Pty. Ltd.
†183	Rope, Clothes Line .. .. .	"	5 "	cwt.	2 6 0	
184	" Straw, in bundles— ½" .. .. .	Vict.	48 bundles	bundle	0 2 9	J. A. Brown
185	¾" .. .. .	"	20 "	"	0 2 6	
186	1" .. .. .	"	100 "	"	0 2 6	
187 to 188	Nil					
†189	Rope, Europe, bolt, entirely of new Russian hemp, up to 3", as ordered, with blue worsted thread in one strand " Manila, fine and long fibre, with blue worsted thread in one strand— ½" up to 2½", as ordered .. Over 2½" up to 12", as ordered ..	Vict. (partly)	112 cwt.	cwt.	4 0 0	G. Kinnear & Sons Pty. Ltd.
†190	½" up to 2½", as ordered ..	"	50 "	do.	3 4 0	
†191	Over 2½" up to 12", as ordered ..	"	50 "	do.	3 4 0	
†192	" Manila, stretched for power transmission, 4" circ., 3 strand, one blue yarn in one strand	"	50 "	do.	3 10 0	

Item No.	Description.	Country of Manufacture.	Estimated Requirements.	Rate per—	Rate.	Name of Contractor.
					£ s. d.	
ROPE AND TWINES, ETC.—continued.						
†193	Rope, New Zealand hemp, 1" to 2", as ordered, with blue yarn in one strand	Vic. (partly)	700 cwt.	cwt.	2 6 0	G. Kinnear & Sons Pty. Ltd.
†194	" New Zealand hemp, 2½" to 3", as ordered, with one blue yarn in each strand	"	500 "	do.	2 6 0	
†195	Rope, Lashing, New Zealand Flax .. ..	"	16 "	do.	2 5 0	
†196	Marline, 3 cord, in 1-lb. hanks .. ..	"	300 lb.	lb.	0 0 10½	
†197	Spun yarn, Jute .. ..	"	3 cwt.	cwt.	2 5 0	
†198	Twine, Binder, free of oil, in 4½-lb. balls, 425 feet per lb.	"	20 "	do.	2 4 0	Downs & Son Pty. Ltd.
†199	" Fine, in ½-lb. balls .. ..	"	1,500 lb.	lb.	0 0 10½	
†200	" Medium, in ½-lb. balls .. ..	"	1,300 "	do.	0 0 10	
†201	" Coarse, in ½-lb. balls .. ..	"	540 "	do.	0 0 9½	
†202	" Seaming, Flax, 3-ply, "Sample No. 0," "Samson"	"	900 "	do.	0 3 0	
†203	" Coarse, Special, for Trimmers' use ..	"	600 "	do.	0 0 9½	G. Kinnear & Sons Pty. Ltd.
†204	" Mattress, No. 2, 4-ply, in 1-lb. balls	Vict.	800 "	do.	0 1 5½	
†205	" Machine, best 6-cord, right or left hand twist, as ordered, in 1-lb. kops, best pure linen thread, "Wm. Barbour & Sons," "Invincible"	U.K.	3,500 "	do.	0 4 4	Frank & Bryce Ltd.
†206	" Machine, best 5-cord, right or left hand twist, as ordered, in 1-lb. kops, best pure linen thread, "Wm. Barbour & Sons," "Invincible"	"	250 "	do.	0 4 4	
207 to 209	} Nil.					

**FOUNDRY COKE.****SPECIFICATION FOR COKE.**

Moisture content shall be not more than 3 per cent. (Item No. 347) and .5 per cent. (Item No. 347A).

Ash content shall be not more than 16 per cent. (Item No. 347) and 14.6 per cent. (Item No. 347A).

Sulphur content shall be less than 1 per cent.

Volatile matter shall be less than 2 per cent.

The Coke must be reasonably free from dust and small pieces.

The Coke is to be ordered in minimum quantities of 50 tons (Item No. 347) and 150 tons (Item No. 347A).

The rates do not include wharfage dues of the Melbourne Harbour Trust. The Corporation will arrange clearance.

Delivery will be taken in railway trucks at Victoria Dock, Williamstown, or any other suitable discharging berth at the port of Melbourne at Contractor's option, and payment will be made on the out-turn weights as ascertained over the weighbridges of the Corporation at the place where the ship discharges.

The first order for Coke is to be placed under item No. 347A. The quantities to be ordered under Items Nos. 347 and 347A will be dependent on result of tests of Coke supplied under the aforementioned order.

347	Coke, Foundry, Purified, "B.H.P."	N.S.W.	} 300 tons	ton	2 1 0	Broken Hill Pty. Co. Ltd.
347A	" " " "Federal"	"		do.	2 2 0	Melbourne Steamship Co. Ltd.

**FILES AND RASPS.**

The estimated requirements are based on the full price list.

The Files and Rasps for Items 348 to 354 shall be of any description, shade, length or edge ordered.

The Tenderer shall submit one sample of each 14-inch Hand Second Cut and 14-inch Hand Bastard File for testing purposes.

As regards items 348 to 355b, the rates include Telegraphic Transfer Exchange between Australia and London at 25½ per cent., and if this rate of Exchange be varied during the contract period, the difference calculated on 66½ per cent. of the contract rate shall be to the Corporation's account, and shall apply to any stores that may be ordered after the expiration of a period of two months from the date the amended rate of T.T. Exchange is effective as notified by the Commonwealth Bank.

Item No.	Description.	Country of Manufacture.	Estimated Requirements.	Rate per—	Rate.	Name of Contractor.
					£ s. d.	
FILES AND RASPS—continued.						
					Percentage of the Price Lists submitted with the tender which shall be firm during the period of this contract.	
† 348	Files, bastard, as ordered, "Brown Bayley's Steel Works Ltd."	U.K.	£400	..	53 $\frac{3}{4}$ %	F. Dawborn Pty. Ltd.
† 349	Files, 2nd cut, as ordered, "Brown Bayley's Steel Works Ltd."	"		..	53 $\frac{3}{4}$ %	
† 350	Files, smooth, as ordered, "Brown Bayley's Steel Works Ltd."	"		..	53 $\frac{3}{4}$ %	
† 351	Files, saw, as ordered, "Eagle and Globe Steel Co."	"	£75	..	54 $\frac{1}{4}$ %	The Eagle & Globe Steel Co. Ltd.
† 352	Rasps, wood, as ordered, "Sheffield Steel Products," "J. J. Saville," or "J. Barnsley"	"	£50	..	51 $\frac{1}{2}$ %	McPherson's Pty. Ltd.
† 353	Rasps, cabinet, as ordered, "Sheffield Steel Products," "J. J. Saville," or "J. Barnsley"	"		..	51 $\frac{1}{2}$ %	
† 354	Rasps, horse ( $\frac{3}{4}$ rasp, $\frac{1}{4}$ file), as ordered "Sheffield Steel Products," "J. J. Saville," or "J. Barnsley"	"		..	51 $\frac{1}{2}$ %	
† 355	Files, block, valve rubber, bastard cut, 7" x 1 $\frac{1}{2}$ ", "T. Firth & J. Brown Ltd."	"	18 No.	each	0 7 0	W. Adams & Co. Ltd.
† 355A	Files, block, valve rubber, bastard cut, 6" x 1 $\frac{1}{2}$ ", "T. Firth & J. Brown Ltd."	"	18 "	do.	0 5 0	
† 355B	Files, Band, Saw, single cut, 6" taper, "J. Barnsley"	"	72 "	doz.	0 14 0 less 51 $\frac{1}{2}$ %	McPherson's Pty. Ltd.

## WOODEN HANDLES (VARIOUS).

The Mop Handle under Item No. 373, shall have a hole 2 $\frac{1}{2}$ " x  $\frac{1}{4}$ " bored at the end for the spike of the Mop.

As regards Item No. 378, the handle supplied shall have a metal "D" provided with a  $\frac{1}{4}$ " rivet through the wooden part and rivet fixed securely to the metal "D."

The Handles to be supplied under Items Nos. 362–371 shall conform to the following dimensions:—

Item Number.	Length.	Eye Measurements.			Shoulder Measurements.	
		Thickness.	Width.	Length.	Thickness.	Width.
362	14"	$\frac{3}{8}$ "	1– $\frac{1}{16}$ "	3"	$\frac{7}{8}$ "	1– $\frac{3}{16}$ "
363	16" (small eye)	$\frac{11}{16}$ "	1"	3"	$\frac{3}{4}$ "	1– $\frac{1}{8}$ "
364	16" (large eye)	$\frac{13}{16}$ "	1– $\frac{1}{8}$ "	3 $\frac{1}{4}$ "	$\frac{7}{8}$ "	1– $\frac{3}{16}$ "
365	18"	$\frac{3}{4}$ "	1– $\frac{1}{16}$ "	3 $\frac{1}{4}$ "	$\frac{13}{16}$ "	1– $\frac{3}{16}$ "
366	20" (small eye)	$\frac{7}{8}$ "	1– $\frac{1}{16}$ "	3 $\frac{1}{4}$ "	$\frac{15}{16}$ "	1– $\frac{3}{16}$ "
367	20" (large eye)	1– $\frac{1}{16}$ "	1– $\frac{3}{8}$ "	3 $\frac{1}{2}$ "	1– $\frac{1}{8}$ "	1– $\frac{7}{16}$ "
368	24"	1– $\frac{1}{16}$ "	1– $\frac{3}{8}$ "	4"	1– $\frac{1}{8}$ "	1– $\frac{7}{16}$ "
369	30"	1– $\frac{1}{8}$ "	1– $\frac{9}{16}$ "	5"	1 $\frac{1}{4}$ "	1 $\frac{1}{2}$ "
370	36" (small eye)	1– $\frac{1}{8}$ "	1 $\frac{1}{2}$ "	5"	1 $\frac{1}{4}$ "	1– $\frac{5}{8}$ "
371	36" (large eye)	1– $\frac{1}{8}$ "	1– $\frac{7}{8}$ "	5"	1 $\frac{1}{4}$ "	2"

The measurements shown above must not be exceeded by more than  $\frac{1}{8}$ " as regards width, and by more than  $\frac{1}{16}$ " as regards thickness.

The rate for Item 379 includes Telegraphic Transfer Exchange between Australia and London at 25 $\frac{1}{2}$  per cent., and if this rate of Exchange be varied during the contract period the difference calculated on 45 per cent. of the contract rate shall be to the Corporation's account, and shall apply to any stores that may be ordered after the expiration of a period of two months from the date the amended rate of T.T. Exchange is effective as notified by the Commonwealth Bank.

No adjustment for Conversion.

Orders on John Perry Pty. Ltd. should be for minimum quantities of four bags made up of any items.

In the event of any of these Handles requiring to be imported after receipt of order, the Bill of Lading will be made out in favour of Victorian Railways Commissioners in order that Corporation may receive exemption from wharfage, which should be deducted from Contractor's invoice.

Item No.	Description.	Country of Manufacture.	Estimated Requirements.	Rate per—	Rate.	Name of Contractor.
					£ s. d.	
WOODEN HANDLES—continued.						
	Handles—					
†356	Adze, Spotted Gum, "Gumleaf" ..	N.S.W.	20 doz.	dozen	0 13 3	John Perry Pty. Ltd.
†357	Axe, 32", Spotted Gum, "Gumleaf" ..	"	80 "	do.	0 11 0	
358	Nil					
†359	Broom, Short, 3' 6" x 1 1/8" ..	Vict.	30 "	do.	0 2 0	Chief Mechanical Engineer
†360	Broom, Long, 6' x 1 1/8" ..	"	70 "	do.	0 3 6	
†361	Claw Hammer, Blue Gum, "Acorn" ..	Tas.	3 "	do.	0 3 5	
	Handles, Hammer, first quality—					McPherson's Pty. Ltd.
†362	14", Blue Gum, "Acorn" ..	"	15 "	do.	0 2 11	John Perry Pty. Ltd.
†363	16" (small eye) ..	N.S.W.	40 "	do.	0 3 8	
†364	16" (large eye) ..	"	100 "	do.	0 3 8	
†365	18" ..	"	75 "	do.	0 4 6	
†366	20" (small eye) ..	"	40 "	do.	0 4 10	
†367	20" (large eye) ..	"	10 "	do.	0 4 10	
†368	24" ..	"	45 "	do.	0 5 6	
†369	30" ..	"	50 "	do.	0 6 11	
†370	36" (small eye) ..	"	240 "	do.	0 8 4	
†371	36" (large eye) ..	"	60 "	do.	..	
372	Nil					Nil.
*373	Handles, Mop—Ferruled, 4' 6" x 1 1/8" ..	Vict.	20 "	do.	0 4 9	Chief Mechanical Engineer
	Handles, Pick—					
†374	D.E., Navvy, Spotted Gum, "Gumleaf" ..	N.S.W.	300 "	do.	0 11 0	John Perry Pty. Ltd.
†375	Miners', "Ballarat," Spotted Gum, "Gumleaf" ..	"	36 "	do.	0 13 9	
†376	Coal Miners', 85A, Spotted Gum, "Gumleaf" ..	"	9 "	do.	0 7 0	
†377	Handles, Shovel, long-handled, bent, Blue Gum, "Bushman" ..	Tas.	36 "	do.	0 13 0	McPherson's Pty. Ltd.
†378	Handles, Shovel, S.H., bent, "D" top, Mountain Ash, "Blue Mountain" ..	"	48 "	do.	0 18 3	Hardware Co. of Aust. Pty. Ltd.
†379	Handles, Scythe, Hickory ..	U.S.A.	8 "	do.	4 3 0	McPherson's Pty. Ltd.
†380	Handles, Hatchet, for No. 2 Brades' Hunters' Hatchets, Spotted Gum, "Gumleaf" ..	N.S.W. and Vict.	4 "	do.	0 5 0	John Perry Pty. Ltd.
381 to 386	Nil					

## AXES, HATCHETS, ETC.

As regards Item No. 408, the rate includes Telegraphic Transfer Exchange between Australia and London at 25½ per cent., and if this rate of Exchange be varied during the contract period, the difference calculated on 60 per cent. of the contract rate shall be to the Corporation's account, and shall apply to any stores that may be ordered after the expiration of a period of two months from the date the amended rate of T. T. Exchange is effective as notified by the Commonwealth Bank.

†407	Axes, handled, 5 lb., ..	..	100	each	..	Nil
†408	Hatchets, Axe Pattern, handled, "Brades, No. 378" ..	U.K.	120	do.	0 3 0	C. S. Green & Son
†409	Hooks, Fern, "Gippslander, No. 142" ..	Vict.	120	do.	0 5 0	Scott & Son Pty. Ltd.
†410	Slashers, Straight-handled, "No. 213a" ..	"	12	do.	0 8 9	
411 to 412	Nil					

## WIRE (IRON AND STEEL).

(See Appendix "D" for Specification.)

As regards Items 467–472 and 474, the Contract rates are based on Ryland's present price lists. Should any alteration take place in such lists the difference will be to the Corporation's account, and shall apply to all undelivered material on the date of such alteration with the proviso that the Corporation may if it so elects determine the Contract.

As regards Items 474 and 475, the rates include wharfage. Arrangements to be made for exemption and deduction from invoice where possible when ordering.

## WIRE.

467	Wire, Iron, Charcoal, "Rylands" ..	N.S.W.	6 cwt.	ton	17 19 0	Briscoe & Co. Ltd.
467A	8 s.w. gauge ..	"		do.	18 6 9	
467B	9 ..	"		do.	18 15 0	



Item No.	Description.	Country of Manufacture.	Estimated Requirements.	Rate per—	Rate.	Name of Contractor.
					£ s. d.	
<b>WIRE (IRON AND STEEL)—continued.</b>						
<i>Wire, Iron, Charcoal—continued</i>						
467C	11 s.w. gauge .. .. .	N.S.W.	6 cwt.	ton	19 1 0	Briscoe & Co. Ltd.
467D	12 .. .. .	"		do.	19 5 6	
467E	14 .. .. .	"		do.	19 18 10	
467F	15 .. .. .	"		do.	20 9 10	
467G	16 .. .. .	"		do.	21 5 11	
468	Wire, Iron, Charcoal, Galvanized, 8 S.W.G., for Signal Bonds	..	5 "	do.	..	Nil
<i>Wire, Iron, Galvanized "Rylands"—</i>						
469	6 s.w. gauge .. .. .	N.S.W.	6 "	do.	16 18 9	Briscoe & Co. Ltd.
470	8 .. .. .	"	5 "	do.	16 18 9	
471	10 .. .. .	"	20 "	do.	17 8 9	
472	16 .. .. .	"	30 "	do.	25 13 9	
473	Wire, Iron, Tinman's, 6 to 14 s.w. gauge, as ordered	..	5 "	cwt.	0 18 5	Melbourne Wire Works
†474	Wire, Mild Steel, Hard Black, 6 B.W. gauge (-203) for spark arresters to Specification "Rylands"	..	4 tons	ton	15 10 8	Briscoe & Co. Ltd.
475	Wire, Steel, Galvanized, Stranded, 7/144, to Specification, delivered at Batman avenue	..	4 miles	do.	34 2 6	The Australian Wire Rope Works Ltd.
476	" Galvanized, Plain Fencing, No. 8 gauge to Specification	..	40 tons	do.	..	Nil
477	" Galvanized, Barbed, Fencing, to Specification	..	12	do.	..	
†478	Seals, Truck .. .. .	Vict.	200,000	1,000	0 12 0	The Pylon Seal Co.
479 to 486	} Nil.					

**EXPLOSIVES AND AMMUNITION.**

The rates for Items 494-497 and 498 include Telegraphic Transfer Exchange between Australia and London at 25½ per cent., and if this rate of Exchange be varied during the Contract period, the difference calculated on 60 per cent. of the Contract rate shall be to the Corporation's account, and shall apply to any stores that may be ordered after the expiration of a period of two months from the date the amended rate of T.T. Exchange is effective as notified by the Commonwealth Bank.

Item No. 494, the rate is based on case lots of 5,000, if ordered in less than case lots a repacking charge will be incurred as follows:—Lots of 100, 1s.; lots of 200 to 400, 2s.; lots of 500 and over, 3s. This charge only applies to country deliveries.

Item No. 495, the rate is for case lots of 300 coils, if ordered in less than case lots the price will be 9d. per coil.

The rates for Items Nos. 494, 496, 497, and 498 will be increased as follows:—in the event of delivery being required in Melbourne or the suburbs—

Item No. 494—Lots under 500 .. .. .	..	..	..	s. d.	2 6 per lot
Lots of 500 and over .. .. .	..	..	..	3 6	"
Item No. 496 .. .. .	..	..	..	2 9	per case
Items Nos. 497 and 498 .. .. .	..	..	..	1 1	per 25-lb. case
				2 1	per 50-lb. case

Suburban deliveries can only be made to different districts on certain days, and orders must reach the Contractor at least two days before delivery date.

Country deliveries are made in cylinders per goods train, and a charge of 1s. for the use of each cylinder used will be made.

The Corporation will receive the benefit of any fall in the selling price of Explosives during the Contract period.

**EXPLOSIVES.**

494	Caps, No. 6, in boxes of 100, delivered f.o.r. Laverton, "Nobel's"	U.K.	20 boxes	box	0 6 3	Dalgety & Co. Ltd.
495	Fuse, Single Thread, in coils of 8 yards, "Nobel's" ("Bickford's" Bendigo)	Vict.	50,000 coils	coil	0 0 8	McMicking & Co.
496	Gelignite, 50 per cent., delivered f.o.r. Laverton, "Nobel's"	"	20 cases	case of 50 lb. net	2 15 6	Dalgety & Co. Ltd.

Item No.	Description.	Country of Manufacture.	Estimated Requirements.	Rate per—	Rate.	Name of Contractor.
					£ s. d.	
EXPLOSIVES AND AMMUNITION—continued.						
497	Powder, Nitrate of Potash, Blasting, in 25-lb. cases, delivered f.o.r. Laverton, "Curtiss & Harvey"	U.K.	200 lb.	case	1 7 0	} McMicking & Co.
497A	" " in 50-lb. cases ..	"		do.	2 13 0	
498	Powder, Blasting, Black (nitrate of soda), in 50-lb. Kegs, as ordered, delivered f.o.r. Laverton	"	200 lb.	lb.	0 0 11 $\frac{3}{4}$	
AMMUNITION,						
499	Cartridges, Smokeless, .32 calibre, in boxes of 25 or 50—					
	Auto. Pistol .. .. .		5,000	100	..	Nil
500	Nil					

## TUBES AND FITTINGS.

The estimated requirements are based on the full list price.

The Contractor will require to have all Galvanized Tubes supplied under Items marked (M) tested by the Melbourne and Metropolitan Board of Works, and such Tubes shall bear that Board's test marks before delivery.

All Tubes and Fittings to be of standard weight and all threads to be cleanly cut and in accordance with the British Standard Specification of Pipe Threads for W.I. Pipes. (No. 21—1909).

Galvanizing to be uniform inside and outside and to be free from bubbles, scabs, &c. Sherardized Tubes or Fittings will not be accepted.

The rates for Items 617A, 618, 619A, 620, 621A, 622, 623A, and 624 include Telegraphic Transfer Exchange between Australia and London at 25½ per cent., and if this rate of Exchange be varied during the contract period the difference calculated on 60 per cent. of the contract rates, shall be to the Corporation's account, and shall apply to any stores that may be ordered after the expiration of a period of two months from the date the amended rate of T.T. Exchange is effective, as notified by the Commonwealth Bank.

Provided satisfactory service is given, all orders for Tubes are to be placed with McPherson's Pty. Ltd. It is expected that Stewarts and Lloyds will be manufacturing Tubes in Australia early in 1934, in which event orders should then be issued on this Contractor, provided the Tubes are satisfactory.

### Names of Manufacturers—

Items Nos. 617, 619, 621, 623, 625, 627-632.—Tullochs Phoenix Ironworks Ltd., N.S.W.

Items Nos. 633-638.—E.W. Fittings Ltd. or Thompson & Scougall Ltd., N.S.W.

Items Nos. 617A, 618, 619A, 620, 621A, 622, 623A, 624.—Stewarts & Lloyds, Glasgow.

Items Nos. 627A-632A.—Henderson's Federal Spring Works.

One and three-quarter inch Tubes supplied by Stewarts & Lloyds will be charged at list price for 2-in. Tubes, and at 5 per cent. gross less discount than for diameters up to 3 inches.

				Percentage of the "Price Lists" submitted with the tender and which shall be firm during the period of the Contract.		
	Tubes, Wrought Iron, of approved thickness, in trade lengths, as ordered—		£			
617	Black, up to 3" diameter .. ..	N.S.W.		{ ..	56 1/4%	McPherson's Pty. Ltd.
617A	" .. ..	U.K.	50	{ ..	57 1/4%	Stewarts & Lloyds
618	" over 3" and up to 6" diameter .. ..	"	10	{ ..	43 1/2%	(Aust.) Ltd.
619	Galvanized, up to 3" diameter .. ..	N.S.W.		{ ..	45%	McPherson's Pty. Ltd.
619A	" .. ..	U.K.	750	{ ..	48 3/4%	Stewarts & Lloyds
620	" over 3" and up to 6" diameter .. ..	"	36	{ ..	30%	(Aust.) Ltd.
621	(M) Galvanized, up to 3" diameter .. ..	N.S.W.		{ ..	42 1/8%	McPherson's Pty. Ltd.
621A	" .. ..	U.K.	500	{ ..	43 3/8%	Stewarts & Lloyds
622	(M) Galvanized, over 3" and up to 6" diameter .. ..	"	30	{ ..	23 1/2%	(Aust.) Ltd.
623	Steam, screwed and socketed, up to 3" diameter .. ..	N.S.W.		{ ..	45%	McPherson's Pty. Ltd.
623A	" .. ..	U.K.	1,000	{ ..	46 1/4%	Stewarts & Lloyds
624	" screwed and socketed, over 3" and up to 6" diameter .. ..	"	50	{ ..	28 3/4%	(Aust.) Ltd.
	Bends, Long Screws, and Springs, Wrought Iron, of approved thickness—					
625	Galvanized, up to 3" diameter .. ..	N.S.W.	50	..	35%	Lyall & Sons Pty. Ltd.
626	Galvanized, over 3" and up to 6" diameter .. ..	"	1	..		Nil

Item No.	Description.	Country of Manufacture.	Estimated Requirements.	Rate per—	Rate.	Name of Contractor.
					£ s. d.	
<b>TUBES AND FITTINGS—continued.</b>						
				£	Percentage off the "Price Lists" submitted with the tender and current from time to time during the period of this Contract	
627	Fittings, Wrought Iron, of approved thickness— Black, up to 2" diameter, excluding Flanges	N.S.W.	25	{ ..	34%	McPherson's Pty. Ltd.
627A	„ up to 2" diameter, Flanges only	Vict.			20%	Stewarts & Lloyds (Aust.) Ltd.
628	„ 2½" and up to 6" diameter, excluding Flanges	N.S.W.	5	{ ..	27½%	McPherson's Pty. Ltd.
628A	„ 2½" and up to 6" diameter, Flanges only	Vict.			40%	Stewarts & Lloyds (Aust.) Ltd.
629	Galvanized, up to 2" diameter, excluding Flanges	N.S.W.	50	{ ..	22½%	McPherson's Pty. Ltd.
629A	„ up to 2" diameter, Flanges only	Vict.			10%	Stewarts & Lloyds (Aust.) Ltd.
630	„ 2½" and up to 6" diameter, excluding Flanges	N.S.W.	25	{ ..	17½%	McPherson's Pty. Ltd.
630A	„ 2½" and up to 6" diameter, Flanges only	Vict.			33½%	Stewarts & Lloyds (Aust.) Ltd.
631	Steam, up to 2" diameter, excluding Flanges	N.S.W.	30	{ ..	22½%	McPherson's Pty. Ltd.
631A	„ up to 2" diameter; Flanges only	Vict.			10%	Stewarts & Lloyds (Aust.) Ltd.
632	„ 2½" and up to 6" diameter, excluding Flanges	N.S.W.	5	{ ..	17½%	McPherson's Pty. Ltd.
632A	„ 2½" and up to 6" diameter, Flanges only	Vict.			33½%	Stewarts & Lloyds (Aust.) Ltd.
	Fittings, Malleable Iron, of approved thickness—					
633	Black, up to 2" diameter ..	N.S.W.	20	..	57½%	McPherson's Pty. Ltd.
634	„ 2½" and up to 6" diameter ..	„	1	..	52½%	
635	Galvanized, up to 2" diameter ..	„	100	..	52½%	
636	„ 2½" and up to 6" diameter ..	„	1	..	40%	
637	Steam, up to 2" diameter ..	„	2	..	57½%	
638	„ 2½" and up to 6" diameter ..	„	1	..	52½%	
639 to 642	Nil					

## SPLIT PINS.

The estimated requirements are based on the full list price.

## ITEMS 706-710.—PRICE LIST OF "TAME'S" SPLIT PINS.

Per gross.

Lengths to ..	1".	1¼".	1½".	1¾".	2".	2¼".	2½".	2¾".	3".	3¼".	3½".	3¾".	4".	4½".	5".	5½".	6".	7".
Diameter.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
1/16" ..	1 1	1 2	1 4	1 6	1 8	1 10	2 0	2 2	2 4	..	..	..	..	..	..	..	..	..
1/8" and 1/4" ..	1 1	1 2	1 4	1 6	1 8	1 10	2 0	2 2	2 4	..	..	..	..	..	..	..	..	..
3/16" ..	1 2	1 3	1 5	1 7	1 9	1 11	2 1	2 3	2 5	..	2 9	..	3 2	..	..	..	..	..
1/4" ..	1 4	1 5	1 7	1 9	1 11	2 1	2 3	2 5	2 7	2 9	3 0	..	3 6	..	..	..	..	..
5/16" ..	1 6	1 8	1 10	2 0	2 2	2 4	2 6	2 8	3 0	3 2	3 4	3 6	3 8	4 0	..	..	..	..
3/8" ..	2 0	2 3	2 6	2 9	3 0	3 3	3 6	3 9	4 0	4 4	4 8	5 0	5 4	6 0	6 8	7 4	8 0	..
7/16" ..	2 4	2 7	2 11	3 3	3 6	3 9	4 0	4 4	4 8	5 0	5 4	5 10	6 3	7 3	8 0	8 9	9 9	..
1/2" ..	..	3 4	3 8	4 0	4 6	5 0	5 6	6 0	6 6	7 0	7 6	8 0	8 6	9 6	10 10	11 12	12 16	..
5/8" ..	..	..	..	..	..	8 10	8 11	9 0	9 10	10 11	11 12	12 13	13 14	14 15	15 16	16 17	17 18	..
3/4" ..	..	..	..	..	..	..	12 13	13 14	14 15	15 16	16 17	17 18	18 19	19 20	20 21	21 22	22 23	..
7/8" ..	..	..	..	..	..	..	..	17 18	18 19	19 20	20 21	21 22	22 23	23 24	24 25	25 26	26 27	..
1" ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..

Item No.	Description.	Country of Manufacture.	Estimated Requirements.	Rate per—	Rate.	Name of Contractor.
					£ s. d.	
SPLIT PINS—continued.						
	Pins, Split, "A. E. & F. Tame"—				Percentage off the price list shown above, and which shall be firm during the period of contract.	
706	Any sizes ordered up to and including $\frac{3}{16}$ "	Vict.	£60	..	67½%	A. E. & F. Tame
707	" " over $\frac{3}{16}$ " to $\frac{1}{4}$ "	"	£80	..	67½%	
708	" " over $\frac{1}{4}$ "	"	£100	..	65%	
709	6" x $\frac{1}{4}$ "	"	12 gross	..	65%	
710	7" x $\frac{1}{2}$ "	"	8 "	..	60%	
711 to 714	Nil					

## NAILS, ETC.

The Nails under Items Nos. 724 to 726 shall be free of holding nicks or, failing this, such nicks shall not be more than 2 inches from point of nail.

As regards Items Nos. 729 to 733, the Nails shall be free from excessive machine feed marks, and shall be such that the nail when clamped at the mark in a vice, shall withstand being bent at right angles without cracking or breaking.

Brads, Finishing, Cut—									
715	$\frac{5}{8}$ " x 17 gauge	..	..	Vict.	84 lb.	lb.	0 0 5 $\frac{1}{2}$	E. Duckett & Sons	
716	$\frac{1}{4}$ " x 17 gauge	..	..	"	7 "	do.	0 0 5 $\frac{1}{2}$		
Nails, Clout, Wire—									
717	$\frac{5}{8}$ " bright x 12 gauge	..	..	"	36 "	do.	0 0 3 $\frac{1}{2}$		
718	$\frac{3}{4}$ " x 12 gauge, galvanized	..	..	"	50 "	do.	0 0 4		
719	1" x 12 gauge, galvanized	..	..	"	100 "	do.	0 0 4		
720	1 $\frac{1}{4}$ " x 12 gauge, galvanized	..	..	"	100 "	do.	0 0 4		
Nails, Roofing, Galvanized, Spring-headed, in 1 cwt. cases—									
721	2" x 10 gauge	..	..	"	3 cwt.	cwt.	1 12 6	A. E. & F. Tame	
722	2 $\frac{1}{2}$ " x 10 gauge	..	..	"	3 "	do.	1 12 6		
723	2 $\frac{1}{2}$ " x 10 gauge	..	..	"	5 "	do.	1 12 6		
Nails, Steel, Black, Corrugated—									
724	6" ..	..	..	Vict.	60 cwt.	cwt.	1 5 8	McPherson's Pty. Ltd.	
725	7" ..	..	..	"	40 "	do.	1 5 8		
726	8" ..	..	..	"	3 "	do.	1 5 8		
727	Nails, Steel, Galvanized, 4" Corrugated	..	..	"	3 "	do.	1 16 6		
728	Nails, Steel, Galvanized, 5" ..	..	..	"	2 "	do.	1 16 6		
Nails, Wire, Diamond-headed, any lengths ordered—									
729	No. 6 S.W.G.	..	..	"	100 "	do.	10 19 0	John R. Bell & Co.	
730	No. 7 "	..	..	"	20 "	do.	10 19 0		
731	No. 8 "	..	..	"	20 "	do.	10 19 0		
732	No. 9 "	..	..	"	40 "	do.	10 19 6		
733	No. 10 "	..	..	"	100 "	do.	11 0 0		
734	No. 12 "	..	..	"	50 "	do.	11 1 6		
735	No. 15 "	..	..	"	2 "	do.	11 7 0		
736	Nails, Wire, Flat Head, 1" x 15 S.W. gauge..	..	..	"	5 "	do.	11 7 0		
737	" " " 2" x 12 S.W. gauge	..	..	"	1 "	do.	11 1 6		
738	Pins, Gimp, japanned, $\frac{1}{8}$ "	..	..	"	336 lb.	lb.	0 0 6 $\frac{1}{2}$	E. Duckett & Sons	
739	Pins, Gimp, japanned, $\frac{3}{8}$ "	..	..	"	56 "	do.	0 0 6 $\frac{1}{2}$		
740	Pins, Gimp, japanned, $\frac{1}{2}$ "	..	..	"	36 "	do.	0 0 6 $\frac{1}{2}$		
Pins, Panel, Countersunk—									
741	$\frac{1}{8}$ " x 20 gauge	..	..	"	36 "	do.	0 0 10 $\frac{1}{2}$	McPherson's Pty. Ltd.	
742	$\frac{3}{8}$ " x 19 gauge	..	..	"	24 "	do.	0 0 8 $\frac{1}{2}$		
743	$\frac{1}{2}$ " x 18 gauge	..	..	"	112 "	do.	0 0 7		
744	1" x 17 gauge	..	..	"	448 "	do.	0 0 6 $\frac{1}{2}$		
745	1 $\frac{1}{4}$ " x 16 gauge	..	..	"	260 "	do.	0 0 4 $\frac{1}{2}$	E. Duckett & Sons	
746	1 $\frac{1}{2}$ " x 15 gauge	..	..	"	336 "	do.	0 0 3 $\frac{1}{2}$		
747	2" x 14 gauge	..	..	"	96 "	do.	0 0 3		
Tacks, Copper, Wire (in lieu of Cut Copper Tacks)—									
748	$\frac{5}{8}$ "	..	..	"	112 "	do.	0 1 5	E. Duckett & Sons	
749	$\frac{3}{4}$ "	..	..	"	1,120 "	do.	0 1 5		
750	$\frac{1}{2}$ "	..	..	"	448 "	do.	0 1 5		

† Less 3 per cent. discount payment ten days.

Item No.	Description.	Country of Manufacture.	Estimated Requirements.	Rate per—	Rate.	Name of Contractor.
					£ s. d.	
<b>NAILS, ETC.—continued.</b>						
751	Tacks, Cut, blued, fine—					
752	1" .. .. .	Vict.	56 lb.	lb.	0 0 5 <sup>3</sup> / <sub>8</sub>	} Briscoe & Co. Ltd.
753	1 1/2" .. .. .	"	336 "	do.	0 0 5 <sup>3</sup> / <sub>8</sub>	
754	1 1/2" .. .. .	"	112 "	do.	0 0 4 <sup>3</sup> / <sub>8</sub>	
755	1 1/2" .. .. .	"	112 "	do.	0 0 4 <sup>3</sup> / <sub>8</sub>	
756	1 1/2" .. .. .	"	112 "	do.	0 0 4 <sup>3</sup> / <sub>8</sub>	
757	Tacks, for Gerrard Tacking Machine	"	50,000 No.	100	..	Nil
758 to 766	} Nil.					

**HELIOGRAPHIC PROCESS MATERIALS AND CARBONS FOR ARC LAMPS.**

As regards Items Nos. 771, 772 and 777 to 779, the rates include Telegraphic Transfer Exchange between Australia and London at 25<sup>1</sup>/<sub>2</sub> per cent., and if this rate of Exchange be varied during the contract period, the difference calculated on 50 per cent. of the contract rate shall be to the Corporation's account, and shall apply to any stores that may be ordered after the expiration of a period of two months from the date the amended rate of T.T. Exchange is effective as notified by the Commonwealth Bank.

The rate for Item 778 is firm as regards Conversion.

**HELIOGRAPHIC PROCESS MATERIALS.**

†767	Linen, Ferro Prussiate—						
†768	30" wide x 20 yards long .. ..	N.S.W.	20 rolls	roll	£2 3 1	} Max Wurcker (1930) Ltd.	
	40" wide x 20 yards long .. ..	"	12 "	do.	£2 14 10		
†769	Linen, Heliographic, Gallic Acid Bath—						
	30" wide x 20 yards long .. ..	"	20 "	do.	£2 19 0		
†770	40" wide x 20 yards long .. ..	"	10 "	do.	£3 15 0		
	Paper, Ferro Prussiate, base—"Smooth Finish"—						
*771	30"/31 <sup>1</sup> / <sub>2</sub> " wide .. .. .	U.K.	1 ton	ton	72 0 0	} Wiggins, Teape, & Alex. Pirie (Export) Ltd.	
*772	40" wide .. .. .	"	1 "	do.	72 0 0		
	Paper, Heliographic, Gallic Acid Bath—						
†773	30"/31 <sup>1</sup> / <sub>2</sub> " wide x 20 yards long ..	N.S.W.	75 rolls	roll	£0 13 2	} Max Wurcker (1930) Ltd.	
†774	40" wide x 20 yards long .. ..	"	40 "	do.	£0 16 6		
	Paper, Sepia, thin, negative—						
†775	30" wide x 20 yards long .. ..	"	15 "	do.	£1 6 4		
†776	40" wide x 20 yards long .. ..	"	6 "	do.	£1 12 9		
<b>CARBONS FOR ARC LAMPS.</b>							
†777	12" long x 13 m.m. dia. solid .. ..	U.K.	200	100	2 5 0	British General Electric Co. Ltd.	
†778	12" long x 13 m.m. dia. cored, white flame..	Germany	100	do.	£3 2 6	Max Wurcker (1930) Ltd.	
†779	12" long x 18 m.m. dia. cored, white flame..	U.K.	100	do.	4 5 0	British General Electric Co. Ltd.	
780 to 782	} Nil						

† Less 2<sup>1</sup>/<sub>2</sub> per cent. discount payment 30 days.

**STAMPS, ETC.**

The measurement of all stamps shall be the "Die" measurement and the maximum length of any letter shall not exceed half inch.

NOTE.—For Items Nos. 812 and 818 the rate is at per half inch. The measurement to be paid for shall be the diameter, or the length, as the case may be, of the face of the Stamp.

The rates for Items 813 and 814 are firm as regards Exchanges and Customs Duty.

*805	Faces, Rubber, for Stamps, lettered—						
*806	" V.R., cancelled " .. .. .	Vict.	100	each	0 0 1 <sup>1</sup> / <sub>2</sub>	} H. C. Horton	
*807	" Week-end " .. .. .	"	30	do.	0 0 1		
*808	Goods Clean Receipt .. .. .	"	30	do.	0 0 2		
	Goods more or less Receipt .. ..	"	20	do.	0 0 2		
	Refacing Rubber Stamps, including supply of new pad, all kinds of stamps and type—						
809	Oblong, up to 2" in length, as ordered ..	"	50 lines	line	0 0 10	}	
810	" over 2" in length .. .. .	"	25 ins. of line	inch of line or part thereof	0 0 5		

Item No.	Description	Country of Manufacture.	Estimated Requirements,	Rate per—	Rate.	Name of Contractor.
					£ s. d.	
STAMPS, ETC.—continued.						
811	Refacing Rubber Stamps, &c.—continued Circular or oval, and up to 1½" in length, as ordered	Vict.	3	each	0 2 0	C. G. Roeszler & Son Pty. Ltd.
812	" " and over 1½" in length, as ordered	"	12 ins.	½ inch or part thereof	0 0 9	
*813	Stamps, Dating— No. 1½ .. .. .	Germany	300	each	0 0 8	Australian Stationery Co.
*814	No. 2 .. .. .	"	144	do.	0 1 0	
Stamps, Rubber, oblong, wooden handle, with wooden back, all kinds of stamps and type—						
†815	Up to 2", in length as ordered .. ..	Vict.	300 lines	line	0 0 6	H. C. Horton
†816	Over 2", in length as ordered .. ..	"	500 ins. of line	inch of line or part thereof	0 0 4	
Stamps, Rubber, circular or oval, as ordered, wooden handle with wooden backs, all kinds of stamps and type—						
†817	Up to 1½" in length, as ordered .. ..	"	10	each	0 1 6	C. G. Roeszler & Son Pty. Ltd.
†818	Over 1½" in length, as ordered .. ..	"	20 ins.	½ inch or part thereof	0 0 5	
†819	Stamps, Rubber, self-inking— 1½" x ¾" .. .. .	"	6	each	..	Nil
Pads, Self-inking, any colour ordered excepting red (mostly purple)—						
†820	No. 1. 2¾" x 4¼" .. .. .	N.S.W.	400	do.	0 0 9	Excelsior Supply Co. Ltd.
†821	No. 2. 3¼" x 6¼" .. .. .	"	24	do.	0 1 3	
822 to 830	Nil					

**BROWN PAPER, TICKET BOARDS, CARDS, ETC.**

The Brown Paper under Item No. 870 shall be supplied flat or folded as may be ordered.

The Manila Luggage Checks shall be supplied in tiers of four, measuring 4½ in. x 7½ in. over all, slitted to within ¼ in. of top and bottom of each check, perforated across 2½ in. from top and ¼ in. from bottom, and packed in strawboard boxes each containing 1,000 checks.

The Royal Pasteboards shall be supplied in bundles of 1 gross each, and a label shall be attached to each bundle indicating the thickness of the Boards contained therein.

The Royal Surface Boards shall be supplied in bundles of 1 gross each, and a label shall be attached to each bundle indicating the colour of the Boards contained therein.

The Manila Ticket Boards shall be supplied in bundles of 50 each.

The Wood Pulp Boards or Straw Board (Items Nos. 896 and 897) shall caliper between .070 and .075.

As regards quality and finish, the Ticket Boards supplied shall be in strict accordance with the contract samples.

Ticket Boards shall caliper not less than .029 nor more than .032.

As regards colour, the Ticket Boards supplied shall be in strict accordance with the contract samples, and each delivery shall be marked with the Item No. to which it pertains.

The Ticket Boards shall be supplied trimmed to the exact size ordered, and shall be delivered in wrapped packages of one-half hundredweight each, exclusive of wrapper, and be free from moisture.

As regards Items 888-891, 896, 898, and 899, the rates include Telegraphic Transfer Exchange between Australia and London at 25½ per cent., and if this rate of Exchange be varied during the contract period, the difference calculated on 60 per cent. of the contract rate shall be to the Corporation's account, and shall apply to any stores that may be ordered after the expiration of a period of two months from the date the amended rate of T.T. Exchange is effective as notified by the Commonwealth Bank.

The rate for Item 896 is firm as regards Conversion.

<b>Brown Paper, M. F. Finish—</b>						
†869	Quad. Imperial, Kraft, 58" x 45", 136 lb.	Vict.	10 reams.	ream	1 16 10	Australian Paper Manufacturers Ltd.
†870	Double Imperial, Kraft, 56 lb. .. ..	"	5 tons	ton	30 6 8	
†871	Kraft, 18" wide, 28 lb. to roll .. ..	"	6 rolls	do.	30 6 8	
†872	" in rolls, 30" wide, 80 lb., Double Imperial Substance	"	130 "	do.	30 6 8	
†873	M. F. Kraft, 17" x 27", 80 lb. .. ..	"	30 reams	ream	1 1 8	
†874	" Double Imperial, 120 lb. .. ..	"	3 "	do.	1 12 6	

Item No.	Description.	Country of Manufacture.	Estimated Requirements.	Rate per—	Rate.	Name of Contractor.
					£ s. d.	
BROWN PAPER, TICKET BOARDS, CARDS, ETC.— <i>continued.</i>						
†875	Manila Luggage Checks—					
	Checks, Luggage, Yellow, Sample No. 1 ..	Vict.	75,000	1,000	0 2 11	Sands & McDougall Pty. Ltd.
†876	"    White ..	"	50,000	do.	0 2 9	
*877	Checks, Luggage, 6½" x 2½", printed one side (four stereos supplied), two perforations. Washered. In gangs of four. Boxed in 1,000's	"	400,000	do.	0 3 4½	
†878	Pasteboards, Surface Boards, &c.— Royal Pasteboards, 20" x 25", 3 sheet, 22 lb., Sample "B"	"	500 gross	gross	0 8 6	Arthur J. Wallace
†879	"    "    20" x 25", 6 sheet, 48 lb.	"	50 "	do.	1 1 0	Australian Paper Manufacturers Ltd.
†880	Royal Surface Boards, 20" x 25"— Green coated two sides ..	"	19 "	do.	1 1 0	Sands & McDougall Pty. Ltd.
†881	"    "    one side ..	"	"	"	"	Nil
†882	Red coated two sides ..	Vict.	28 gross	gross	1 1 0	Sands & McDougall Pty. Ltd.
†883	Red coated one side ..	"	"	"	"	Nil
†884	Yellow coated two sides ..	Vict.	75 gross	gross	1 1 0	Sands & McDougall Pty. Ltd.
†885	"    "    one side ..	"	"	"	"	Nil
†886	Blue coated two sides ..	Vict.	10 gross	do.	"	To be obtained from Government Printer
†887	"    "    one side ..	"	"	"	"	
†888	System Boards, 25½" x 30½"— Any standard colours ordered, 140 lb., "Glory"	U.K.	20 reams	ream	4 19 2	Wiggins, Teape, & Alex. Pirie (Export) Ltd.
†889	Any standard colour ordered, 110 lb.	"	20 "	do.	3 15 7	
†890	"    "    "    170 lb.	"	3 "	do.	6 0 5	
†891	"    "    "    220 lb.	"	3 "	do.	7 15 10	
†892	Strawboard— 25" x 30", 12 oz., Plain ..	Vict.	8 cwt.	cwt.	0 15 6	Arthur J. Wallace
†893	25" x 30", 24 oz., Plain ..	"	16 "	do.	0 17 6	
†894	25" x 30", 32 oz., Plain ..	"	5 "	do.	0 17 6	
†895	Pulp Board— Royal Pulp Board, four sheet, assorted light tints	"	500 gross	gross	0 8 6	Australian Paper Manufacturers Ltd.
†896	Wood Pulp Board, 34" x 44", 50's ..	Sweden	20 cwt.	cwt.	1 7 3	Sands & McDougall Pty. Ltd.
†897	Double White Lined Straw board, 34" x 44", 16 oz. substance	Vict.	30 "	do.	1 1 6	Australian Paper Manufacturers Ltd.
†898	Boards, Cloth Lined, 20" x 25", any standard colour ordered	U.K.	2 gross	gross	3 0 0	Wiggins, Teape, & Alex. Pirie (Export) Ltd.
†899	Board, Postcard, coated two sides, 22½" x 28½", 48 lb. per gross	"	10 "	do.	2 8 0	
†900	Ticket Board, 23" x 25"— Buff ..	Vict.	2 tons	ton	32 0 0	Australian Paper Manufacturers Ltd.
†901	Blue ..	"	2 "	do.	32 0 0	
†902	Cerise ..	"	20 "	do.	32 0 0	
†903	Green ..	"	10 "	do.	32 0 0	
†904	White ..	"	50 "	do.	32 0 0	
†905	Yellow ..	"	1 "	do.	32 0 0	
*906	Manila Ticket Board— 22½" x 30½" ..	"	5,000 sheets	100 sheets	4 10 0	
†907	Labels— Linen, Large, No. 5 ..	Vict.	5,000	1,000	0 9 3	Sands & McDougall Pty. Ltd.
*908	"    Small, 2½" x 2" ..	"	5,000	do.	0 5 8	
†909	Manila, No. 5, in gangs of four and boxed	"	300,000	do.	0 2 4½	
†910	"    No. 6, in gangs of four and boxed	"	300,000	do.	0 2 8½	
†911	"    7" x 3½", in gangs of four and boxed	"	120,000	do.	0 3 8½	
†912	Cards, for "Powers" Machines— Code No. 4 ..	"	40,000	100	"	Nil
†913	"    9 ..	"	20,000	"	"	
†914	"    34 ..	"	1,750,000	"	"	
†915	"    50 ..	"	2,400,000	"	"	
†916	"    52 ..	"	40,000	"	"	
†916a	"    54 ..	"	80,000	"	"	
†916b	"    55 ..	"	140,000	"	"	
†916c	"    59 ..	"	200,000	"	"	
†916d	"    60 ..	"	120,000	"	"	

## CONDUIT PIPE AND FITTINGS.

All Conduit Pipes and Fittings shall comply with B.E.S.A. Specification No. 31/1923.

Item No.	Description.	Country of Manufacture.	Estimated Requirements.	Rate per—	Rate.	Name of Contractor.
					£ s. d.	
† 979	Pipe, Conduit, Plain, enamelled— 1/2" .. .. .	Vict.	6,000 feet	100 ft.	0 8 4	John Danks & Son Pty. Ltd.
† 980	2" .. .. .	"	1,000 "	do.	0 13 1	
† 981	1" .. .. .	"	200 "	do.	1 0 6	
† 982	1 1/2" .. .. .	"	200 "	do.	1 19 0	
† 983	Pipe, Conduit, Screwed, enamelled— 1/2" .. .. .	"	2,500 "	do.	0 16 8	John Danks & Son Pty. Ltd.
† 984	2" .. .. .	"	5,000 "	do.	1 0 2	
† 985	1" .. .. .	"	1,000 "	do.	1 13 0	
† 986	1 1/2" .. .. .	"	1,000 "	do.	2 11 7	
† 987	1 1/2" .. .. .	"	Nil	"	"	Associated General Elec. Industries Ltd.
† 988	2" .. .. .	"	200 feet	100 ft.	6 7 3	
† 989	Pipe Conduit, Welded, unenamelled, 1/2" ..	"	1,000 "	do.	0 12 4	British General Elec. Co. Ltd.
† 990	Fittings, Conduit, Plain, " Ring Grip"— Elbows, 1/2" .. .. .	"	100 doz.	doz.	0 1 10 7	
† 991	Tees, 1/2" .. .. .	"	50 "	do.	0 2 5	Remington's Pty. Ltd.
† 992	Sleeves, 1/2" .. .. .	"	24 "	do.	0 1 7 1/2	John Danks & Son Pty. Ltd.
† 993	Fittings, Conduit, Screwed— Bends, 1/2" internal threads .. .. .	N.S.W.	36 "	do.	0 4 10 7	British General Elec. Co. Ltd.
† 994	" 1" .. .. .	"	12 "	do.	0 7 8 1/2	
† 995	" 1 1/2" .. .. .	"	12 "	do.	0 11 6	
† 996	Elbows, 1/2" .. .. .	"	18 "	do.	0 2 1	
† 997	" 1" .. .. .	"	20 "	do.	0 2 7	British General Elec. Co. Ltd.
† 998	" 1 1/2" .. .. .	"	12 "	do.	0 4 5	
† 999	" 1 1/2" .. .. .	"	12 "	do.	0 7 10	
† 1000	" 1" Inspection .. .. .	"	2 "	do.	0 7 8	
† 1001	" 1 1/2" Inspection .. .. .	"	20 "	do.	0 9 11	John Danks & Son Pty. Ltd.
† 1002	Sleeves, 1/2" .. .. .	"	20 "	do.	0 2 1	
† 1003	" 1" .. .. .	"	6 "	do.	0 2 11	
† 1004	" 1 1/2" .. .. .	"	12 "	do.	0 3 10 1/2	
† 1005	" 1 1/2" .. .. .	"	6 "	do.	0 5 9	Lawrence & Hanson Elec. Co. Ltd.
† 1006	Tees, 1/2" .. .. .	"	3 "	do.	0 2 7	
† 1007	" 1" .. .. .	"	6 "	do.	0 3 7 1/2	Brooks, Robinson Pty. Ltd.
† 1008	Boxes, 1/2", 3-way, Screwed .. .. .	Vict.	50	each	0 0 6	
† 1009	" 1/2", Straight-through, plain .. .. .	N.S.W.	50	do.	0 0 7	Lawrence & Hanson Elec. Co. Ltd.
† 1010	Saddles, 1/2" .. .. .	Vict.	420 doz.	gross	0 0 9	
† 1011	" 1" .. .. .	"	100 "	do.	0 0 11	Lawrence & Hanson Elec. Co. Ltd.
† 1012	" 1 1/2" .. .. .	"	18 "	do.	0 1 10	
† 1013	" 1 1/2" .. .. .	"	12 "	do.	0 4 5	
† 1014	" 1 1/2" .. .. .	"	6 "	do.	0 5 6	
† 1015	" 2" .. .. .	"	6 "	do.	0 7 0	Brooks, Robinson Pty. Ltd.
† 1016	Lock Nuts, 1/2" .. .. .	"	10 doz.	gross	0 14 2	
† 1017	" 1" .. .. .	"	18 "	do.	0 15 6	
† 1018	" 1 1/2" .. .. .	"	15 "	do.	0 17 5	
† 1019	" 1 1/2" .. .. .	"	9 "	do.	1 2 6	Nil.
† 1020 to 1048						

## ELECTRIC CABLES AND WIRES.

(See Appendix "E" for Specification.)

\*\* As regards Items 1077-1104, 1121-1125, and 1127, the rates include T.T. Exchange between Australia and London at 25 1/2 per cent., and if this rate of Exchange be varied at date of delivery, the differences calculated on the bases shown hereunder shall be to the Corporation's account:—

Item Nos. 1077-1104 .. .. .	On 45 per cent. of contract rates.
Item No. 1121 .. .. .	£ s. d. 1 10 0 per 100 yards.
Item No. 1122 .. .. .	" 3 0 0 " "



## ELECTRIC CABLES AND WIRES—continued.

	On	£	s.	d.	
Item No. 1123 .. .. .	..	1	5	0	per 100 yards.
Item No. 1124 .. .. .	..	2	13	1	.. ..
Item No. 1125 .. .. .	..	3	8	5	.. ..
Item No. 1127 .. .. .	..	2	1	10	.. ..

The rates for Items 1071/6 are firm as regards Exchange.

\*\* As regards Items 1094–1104, the rates are based on the price of E.C. Wire bars at £40 per ton, and are to be varied up or down by 2d. per lb. for each complete 20s. or part thereof variation in the price of E.C. Wire bars on date of receipt of order.

\*\* As regards Items Nos. 1106–1115, the rates are based on the price of £51 5s. per ton, which is the equivalent in Australian currency of the London Metal Exchange price in English currency for E.C. Wire bars on 27/6/33. The rates are to be varied up or down by one-tenth of a penny per lb. for each complete 20s. or part thereof by which the price in Australian currency of E.C. Wire bars on date of receipt of order is greater than £51 19s. 11d., or less than £51 per ton respectively.

\*\* As regards Items Nos. 1119, 1120, and 1126, the rates include T.T. Exchange between Australia and London at 25½ per cent., and if this rate of Exchange be varied during the contract period, the difference calculated on 45 per cent. of the contract rates shall be to the Corporation's account, and shall apply to any stores that may be ordered after the expiration of a period of two months from the date the amended rate of T.T. exchange is effective as notified by the Commonwealth Bank.

The rates for Items 1119, 1120, and 1126, are firm as regards Conversion.

\*\* As regards Item No. 1116, the rate includes T.T. Exchange at 25½ per cent., and any alteration on the date of delivery will be to the Corporation's account, calculated on £74 per 1,000 yards on the metal basis shown hereafter.

\*\* As regards Item No. 1116, the rate is based on E.C. Wire bars at £41 per ton. Adjustment is to be made in accordance with the London Metal Exchange price published in sterling in Bagot & Thompson's list on the date the order is received at the works in England. The amount of variation is 3s. 3d. per 1,000 yards per 20s. alteration in the price of Copper.

As regards Items Nos. 1077–1104 sufficient time is to be allowed to meet initial orders.

The rates quoted for Items Nos. 1106–1115 are for not less than 10 lb. of one size at a time. For quantities under 10 lb., the rate will be increased by 1d. per lb.

As regards Item No. 1116, the minimum quantity to be ordered is 100 yards.

Item No. 1116, thirteen weeks are to be allowed for delivery.

As regards Item No. 1116 the rate does not include wharfage dues of the Melbourne Harbor Trust, and the Contractor should be requested on each order to arrange for the material to be consigned and Bill of Lading made out in favour of the Victorian Railways Commissioners in order that the Shipping Clerk may arrange for exemption of wharfage, the delivery order to be returned to the Company to enable it to complete delivery.

Item No.	Description.	Country of Manufacture.	Estimated Requirements.	Rate per—	Rate.	Name of Contractor.
					£ s. d.	
	Cable, Hard-drawn, Stranded Copper—					
1051	7/·036, Area 0·007 sq. in. .. ..	..	20,000 feet	lb.	..	Nil
1052	7/·048, Area 0·0125 sq. in. .. ..	..	17,000 "	do.	..	
1053	7/·064, Area 0·0225 sq. in. .. ..	..	5,000 "	do.	..	
1054	7/·080, Area 0·035 sq. in. .. ..	..	5,000 "	do.	..	
1055	7/·097, Area 0·05 sq. in. .. ..	..	20,000 "	do.	..	
1056	7/·118, Area 0·075 sq. in. .. ..	..	500 "	do.	..	
1057	19/·072, Area 0·075 sq. in. .. ..	..	500 "	do.	..	
1058	19/·083, Area 0·10 sq. in. .. ..	..	1,000 "	do.	..	
1059	19/·101, Area 0·15 .. ..	..	1,000 "	do.	..	
1060	37/·093, Area 0·25 sq. in. .. ..	..	1,000 "	do.	..	
1061	61/·103, Area 0·5 sq. in. .. ..	..	1,000 "	do.	..	
1062	Wire, 0·193 Hard Drawn Copper .. ..	..	25,000 "	do.	..	
1063	Wire, 0·25 sq. in. Contact, Hard Drawn Copper (Drawing F.1460) .. ..	..	12,000 "	do.	..	
1064	Cable, copper, 91/·044 annealed, flexible, area 0·14 sq. in. .. ..	..	10,000 yds.	lb.	..	
1065	Wire, copper, to Specification, 150 lb. per mile .. ..	..	3 tons	ton	..	
1066	Wire, copper, to Specification, 200 lb. per mile .. ..	..	10 "	do.	..	
	Sleeves, Jointing, Copper, to Specification—					
1067	No. 5 (Long) .. ..	..	500	1,000	..	
1068	No. 6 (Long) .. ..	..	500	do.	..	
*1069	Tapes, Copper, No. 3, to Specification .. ..	..	100 lb.	lb.	..	
*1070	Binders, Copper, No. 3, to Specification .. ..	..	1,000 "	do.	..	

Item No.	Description.	Country of Manufacture.	Estimated Requirements.	Rate per—	Rate.	Name of Contractor.
					£ s. d.	
<b>ELECTRIC CABLES AND WIRES—continued.</b>						
	Wire, Nickel, Copper Alloy, "Liverpool Electric Cable Co.," London Elec. Wire Co. and Smith's Ltd.—					
1071	14 s.w.g. .. .. .	U.K.	10 lb.	lb.	0 3 0	Warburton Franki (Melb.) Ltd.
1072	16 s.w.g. .. .. .	"		do.	0 3 0	
1073	18 s.w.g. .. .. .	"		do.	0 3 3	
1074	24 s.w.g. .. .. .	"		do.	0 4 0	
1075	26 s.w.g. .. .. .	"		do.	0 4 3	
1076	28 s.w.g. .. .. .	"		do.	0 4 6	
	Wire, Nickel, Chromium Nichrome IV., "Driver Harris Co."—					
1077	12 s.w.g. .. .. .	"	25 "	do.	**0 9 3	
1078	13 s.w.g. .. .. .	"		do.	**0 9 6	
1079	14 s.w.g. .. .. .	"		do.	**0 9 9	
1080	16 s.w.g. .. .. .	"		do.	**0 10 3	
1081	20 s.w.g. .. .. .	"		do.	**0 11 6	
1082	22 s.w.g. .. .. .	"		do.	**0 12 9	
1083	23 s.w.g. .. .. .	"		do.	**0 13 9	
1084	26 s.w.g. .. .. .	"		do.	**0 16 6	
1085	27 s.w.g. .. .. .	"		do.	**0 19 0	
1086	29 s.w.g. .. .. .	"		do.	**0 19 6	
	Strip, Nickel, Chromium, "Nichrome IV.," "Driver Harris Co."—					
1087	.003 x 1/32" .. .. .	U.K.	10 lb.	lb.	**1 13 6	British General Electric Co. Ltd.
1088	.004 x 1/32" .. .. .	"		do.	**1 8 6	
1089	.005 x 1/32" .. .. .	"		do.	**1 6 0	
1090	.006 x 1/32" .. .. .	"		do.	**1 4 0	
1091	.007 x 1/32" .. .. .	"		do.	**1 2 3	
1092	.012 x 1/32" .. .. .	"		do.	**0 18 9	
1093	.006 x 1/16" .. .. .	"		do.	**1 3 0	
	Wire, Copper, tinned (fuse), "General Elec. Co."—					
1094	16 s.w.g. .. .. .	U.K.	3 lb.	do.	**0 1 4½	Nil
1095	18 s.w.g. .. .. .	"	20 "	do.	**0 1 5	
1096	20 s.w.g. .. .. .	"	20 "	do.	**0 1 7	
1097	22 s.w.g. .. .. .	"	10 "	do.	**0 1 8½	
1098	24 s.w.g. .. .. .	"	6 "	do.	**0 1 10	
1099	26 s.w.g. .. .. .	"	5 "	do.	**0 1 10	
1100	28 s.w.g. .. .. .	"	1 "	do.	**0 1 11½	
1101	29 s.w.g. .. .. .	"	10 "	do.	**0 2 2½	
1102	32 s.w.g. .. .. .	"	3 "	do.	**0 2 6	
1103	36 s.w.g. .. .. .	"	1 "	do.	**0 2 10	
1104	40 s.w.g. .. .. .	"	1 "	do.	**0 4 2	
1105	Wire, Copper, enamelled, 20 to 46 s.w.g., any gauge ordered	"	100 "	do.	..	
	Wire, Copper, D.C.C., "Metal Manufactures Ltd."—					
1106	8 s.w.g. .. .. .	N.S.W. (partly)	200 lb.	lb.	**0 1 1·7	Associated General Elec. Industries Ltd.
1107	10 s.w.g. .. .. .	"	50 "	do.	**0 1 2·2	
1108	11 s.w.g. .. .. .	"	100 "	do.	**0 1 2·2	
1109	12 s.w.g. .. .. .	"	5 "	do.	**0 1 3·2	
1110	14 s.w.g. .. .. .	"	20 "	do.	**0 1 2·7	
1111	15 s.w.g. .. .. .	"	100 "	do.	**0 1 3·7	
1112	16 s.w.g. .. .. .	"	100 "	do.	**0 1 4·7	
1113	17 s.w.g. .. .. .	"	100 "	do.	**0 1 5·7	
1114	18 s.w.g. .. .. .	"	100 "	do.	**0 1 6·7	
1115	20 s.w.g., on 14 lb. drum	"	150 "	do.	**0 1 8·7	British Insulated Cables Ltd.
1116	Cable, tinned, copper, 26 pairs, dia. of each strand .0235 min., .024 max., enamelled, two laps of silk and one lap of coloured beeswaxed cotton, the whole braided suitable for indoors	U.K.	500 yards	1,000 yds.	**100 18 0	

Item No.	Description.	Country of Manufacture.	Estimated Requirements.	Rate per—	Rate.	Name of Contractor.
					£ s. d.	
<b>ELECTRIC CABLES AND WIRES—continued.</b>						
1117	Wire, Copper, D.C.C., &c.— <i>continued</i> . Cable, copper, tinned, 15 pairs, dia. of each strand .0235 min., .024 max., enamelled, two lap of silk and one lap of coloured beeswaxed cotton, the whole braided suitable for indoors	..	100 yards	1,000 yds.		Nil
1118	Cable, tinned, copper, 1 pair, dia. of each strand .0235 min., .024 max., enamelled, cotton (beeswaxed) and lead covered	..	500 "	"		Item 1116 to be used. Nil
†1119	Wires, copper, flexible— 23/.0076 twin, office	Holland	3,200 "	100 yds.	0 13 11	A. H. Gibson Electric Co. Pty. Ltd.
†1120	40/.0076 twin, office	"	1,000 "	do.	1 1 4	
†1121	40/.0076 twin, asbestos covered, "British Insulated Cables"	U.K.	1,000 "	do.	2 1 6	Associated General Electric Industries Ltd.
†1122	40/.0076, three core, asbestos covered, "British Insulated Cables"	"	100 "	do.	3 0 0	
†1123	40/.0076, twin, workshop, "W. T. Henley's"	"	1,200 "	do.	1 14 6	W. T. Henley's Telegraph Works Co. Ltd.
†1124	11/.012, 3 core, cab tire, "Siemens"	..	500 "	do.	3 13 2	Siemens (Aust.) Pty. Ltd.
†1125	16/.012, 3 core, cab tire, "Siemens"	..	580 "	do.	4 14 3	
†1126	11/.012, twin, cab tire	Austria	1,000 "	do.	1 7 0	Falk Stadelmann & Co. Ltd.
†1127	16/.012, twin, cab tire, "Macintosh Cable Co."	U.K.	1,500 "	do.	2 17 8	Brooks, Robinson Pty. Ltd.
1128 to 1130	Nil					

**ELECTRICAL FITTINGS.****SPECIFICATION FOR PORCELAIN INSULATORS.—Item No. 1227.**

The term "parcel" shall mean any quantity of finished insulators presented for examination and test at any one time.

The drawing referred to in this Contract is Victorian Railways A.405.

The insulators shall be made of highly vitrified glazed porcelain.

The insulators shall be glazed all over excepting the thread and the head or the edge of the outer petticoat, which may be left unglazed.

The insulators shall be in accordance with the drawing referred to, and this drawing shall form a part of this Specification. The Receiving Officer shall have the right to measure any number of insulators in any parcel.

The insulators and the glazing shall be free from cracks, blow holes, nodules, excrescences, or other defects. They shall be uniform in texture throughout, non-porous, with smooth exterior and interior surfaces, and shall be finished in accordance with the best commercial practice.

The thread shall be in accordance with the drawing referred to, well centred, smooth, of uniform pitch, and such that the standard gauge shown in the drawing can be easily screwed into the insulator up to the crown. When in position on the specified standard gauge the insulator shall not be noticeably loose nor show a perceptible amount of play or rocking.

Any number of insulators from any parcel may be tested in the following manner:—

The insulator shall be inverted and immersed in acidulated water to within a quarter of an inch of the lip of the outer petticoat, and filled with acidulated water to within a quarter of an inch on both sides of the lip of the inner petticoat.

While so immersed, and after 72 hours' immersion, each insulator shall be tested with an electro-motive force of 400 volts, and shall have an insulation resistance of 100,000 megohms in the case of No. 1 insulator and 10,000 megohms in the case of No. 2 insulator when tested (a) across the inner petticoat, and (b) across the outer petticoat respectively.

The Receiving Officer may test any number of insulators from any parcel. If after the examination and testing of any parcel of insulators, five (5) per centum out of any such insulators do not meet the requirements of this Specification, the whole parcel shall be rejected, and no such parcel or any part thereof shall on any account be again presented for examination and testing; and this stipulation shall be deemed to be and treated as an essential condition of the Contract.

The insulators shall be delivered securely and properly packed in good, strong cases, each containing 100 insulators. Each case shall be branded with the Order No. and contents.

## ELECTRICAL FITTINGS—continued.

## SPECIFICATION FOR SHEET MICA.—Item No. 1245.

*General Particulars.*—The mica is required for the manufacture and repair of electrical heating appliances in particular, and other electrical apparatus in general.

*Quality.*—It shall be of the highest grade phlogopite mica, known as clear amber.

*Properties of Tests.*—(a) Dielectric Strength.—The dielectric strength determined on sheets approximately 10 mils in thickness shall not be less than 2,000 volts per mil.

(b) Heat Resistance.—Samples of the mica shall show no signs of deterioration when heated in a furnace at 900 degrees C. for 2 hours.

(c) Loss of Weight.—The loss of weight determined from weighings before and after the heat resistance test shall not exceed 0.5 per cent.

*Size and Thickness.*—The size of the sheets required is six (6) inches by four (4) inches, and the thickness shall not be less than twenty (20) mils.

Two tenders have been accepted for Insulation Sheet under Items 1204 to 1207. "Excellite" is only to be used where high temperature, i.e., above 500 deg. C., or heavy current work is required. For all other purposes "Zelemite" is to be used.

Two tenders have been accepted for Insulation Tape under Items 1214 and 1215. The seamless type of tape is only to be used where essential.

As regards Item 1137, the Ebonite Fork Separators, Demi-Plante, will be supplied of Australian manufacture after Contractor's stock of the British article is exhausted.

Sufficient time is to be allowed the British General Electric Co., if required, to meet initial orders.

If required, a statutory declaration is to be furnished by the Corporation that the insulation material supplied is used in the manufacture or repair of electrical apparatus.

\*\*As regards Items 1140 to 1149, 1151 to 1164, 1172 to 1176, 1178, 1180 to 1203, 1210, 1213 to 1217, 1230, 1231 to 1242, 1243, 1245, 1263 to 1267, 1269, and 1270, the rates include T.T. Exchange between Australia and London at 25½ per cent., and if this rate of Exchange be varied during the Contract period, the difference calculated on the percentages of the respective Contract rates shown hereunder shall be to the Corporation's account, and shall apply as set out:—

Items Nos. 1145 to 1149, 1175, 1176, 1180, 1181, 1183 to 1187, 1203, 1213 to 1217, 1263 to 1266, on 40 per cent. of Contract rate. To be adjusted on rate ruling at date of delivery.

Items Nos. 1231 to 1242, on 65 per cent. of contract rate. To be adjusted on rate ruling at date of delivery.

Items Nos. 1140 to 1144, 1151 to 1164, 1172 to 1174, 1178, 1182, 1188 to 1202, 1210, 1214A, 1215A, 1230, 1231, 1243, 1245, 1267, 1269 and 1270, on 40 per cent. of Contract rate, adjustment involved to be made on any stores that may be ordered after the expiration of a period of two months from the date the amended rate of T.T. Exchange is effective as notified by the Commonwealth Bank.

As regards Items 1204A to 1207A, the rates include T.T. Exchange at 25½ per cent. and 24 Belga to the £1 sterling, any variations in these rates on the date of delivery to be adjusted on 40 per cent. of the Contract rates.

The Contract rate for Item 1137 is firm as regards T.T. Exchange, and the rates for Items 1269 and 1270 are firm as regards Conversion.

The Contract rates for Items 1268, 1271, and 1272 are firm as regards T.T. Exchange and Conversion.

The Contract rate for Item 1178 is firm as regards Conversion between London and country of manufacture.

If sizes other than 4ft. x 3ft. are required under Items 1204A, 1205A, 1206A and 1207A, the Contractor will supply cut sheets at Contract rates, plus 10 per cent.

If orders on Lawrence & Hanson Electrical Co. Ltd. are in excess of ordinary stocks, ten to twelve weeks are to be allowed for delivery.

## Items 1211-1212.—Dunlop Perdreau Rubber Co. Ltd.

In the event of the cost of materials on manufacture being increased by causes beyond the control of Contractor, or in the event of the Federal and/or State Government or Governments imposing further taxation, charges or obligations beyond those obtaining on 21st June, 1933, the Contractor reserves the right, either before or after the commencement of the Contract period, to revise and alter the Contract rates, in order to cover such increases and farther obligations on giving the Corporation seven days' written notice of intention so to do, and if such revised and altered rates are not acceptable to the Corporation, then the Corporation shall have the right of cancelling the Contract upon the expiration of the said period of seven days.

The Contractor shall allow to the Corporation any reductions in the cost of raw material which may affect the Contract rates.

Item No.	Description.	Country of Manufacture.	Estimated Requirements.	Rate per—	Rate.	Name of Contractor.
					£ s. d.	
ELECTRICAL FITTINGS—continued.						
†1131	Adaptors, Bayonet, "Duperite" .. ..	Vict.	200	doz.	0 3 5	The Lawrence & Hanson Electrical Co. Ltd.
†1132	Batteries, Torch, dry, cylindrical, single cell	"	10,000	each	0 0 3	Widdis Diamond Dry Cells Pty. Ltd.
†1133	Blocks, base, wood, 9" x 3" .. ..	"	72	doz.	0 2 11½	} Brooks, Robinson Pty. Ltd.
†1134	" " " 6" x 3" .. ..	"	5	do.	0 2 5	
†1135	" " " 3" dia. .. ..	"	50	do.	0 0 9½	
Ebonite Accumulator Accessories—						
*1136	Ebonite Fork Separators (Standard Tonum Cells, "Stones")	N.S.W.	330 doz.	do.	0 3 9	} Coates & Co. Pty. Ltd.
*1137	" " " Demi-Plante	U.K. & N.S.W.	100 "	do.	0 4 9	
*1138	Ebonite Cell-testing Tubes .. ..	N.S.W.	150 "	do.	0 2 6½	
*1139	Accumulator Floats .. ..	"	125 "	do.	0 7 0	
Ebonite Side Sheets—						
*1140	11-plate, 11 <sup>9</sup> / <sub>16</sub> " x 5 <sup>9</sup> / <sub>16</sub> " x 19 b.w.g. ..	U.K.	600 "	do.	0 5 3½	} Coates & Co. Pty. Ltd.
*1141	15-plate, 11½" x 7¾" x 19 b.w.g. ..	"	30 "	do.	0 6 10½	
*1142	21-plate, 11½" x 11" x 19 b.w.g. ..	"	12 "	do.	0 9 0½	
Ebonite Bottom Sheets,—						
*1143	11-plate, 5½" x 5½" x 19 b.w.g. ..	"	200 "	do.	0 2 3	} Coates & Co. Pty. Ltd.
*1144	15-plate, 7½" x 5½" x 19 b.w.g. ..	"	12 "	do.	0 2 9	
Ebonite Rod—						
1145	<sup>3</sup> / <sub>8</sub> " .. ..	U.K.	30 lin. ft.	lin. ft.	0 0 2½	} British General Electric Co. Ltd.
1146	<sup>1</sup> / <sub>2</sub> " .. ..	"	12 "	do.	0 0 3½	
†1147	<sup>3</sup> / <sub>4</sub> " .. ..	"	10 "	do.	0 0 6½	
1148	1" .. ..	"	6 "	do.	0 0 11½	
1149	1½" .. ..	"	16 "	do.	0 1 4½	
1150	Electrolyte, dry, for Edison Battery	"	10 cwt.	cwt.	..	Nil
Fibre Sheet, red, grey, or black, 3' x 2'—						
1151	<sup>1</sup> / <sub>8</sub> " thick .. ..	U.K.	1 sheet	lb.	0 2 2½	} Mica & Insulating Supplies Co.
†1152	<sup>1</sup> / <sub>4</sub> " .. ..	"	1 "	do.	0 2 6	
1153	1" .. ..	"	50 lb.	do.	0 2 9½	
Fibre Sheet, grey—						
1154	<sup>1</sup> / <sub>16</sub> " to <sup>3</sup> / <sub>8</sub> " thick, as ordered .. ..	"	10 "	do.	0 1 7½	} Mica & Insulating Supplies Co.
†1155	<sup>1</sup> / <sub>8</sub> " thick .. ..	"	45 "	do.	0 1 9½	
1156	<sup>3</sup> / <sub>8</sub> " .. ..	"	40 "	do.	0 2 2½	
Fibre Rod, red, grey or black—						
†1157	<sup>1</sup> / <sub>4</sub> " round .. ..	"	11 "	do.	0 2 10	Warburton Franki (Melb.) Ltd.
1158	<sup>3</sup> / <sub>8</sub> " .. ..	}	35 "	do.	0 7 10	} Mica & Insulating Supplies Co.
1159	<sup>1</sup> / <sub>2</sub> " .. ..			do.	0 6 9	
1160	<sup>3</sup> / <sub>4</sub> " .. ..			do.	0 6 1½	
†1161	1" .. ..			do.	0 6 7½	
1162	1½" .. ..			do.	0 10 7	
1163	1½" .. ..	"	do.	0 14 9	} Mica & Insulating Supplies Co.	
1164	2" .. ..	"	do.	2 0 0		
Fuses, Ironclad—"T. & H."—						
†1165	15 amp. 500 volt. .. ..	Vict.	50	each	0 1 8	Siemens (Aust.) Pty. Ltd.
†1166	30 amp. 500 volt. .. ..	"	50	do.	0 2 6½	The Lawrence & Hanson Electrical Co. Ltd.
†1167	60 amp. 500 volt. .. ..	"	25	do.	0 8 6	Siemens (Aust.) Pty. Ltd.
Fuses, Factory Type, with bases, back connected—						
†1168	5-amp., suitable for 250 volts, "T. & H." ..	"	360	do.	0 0 9½	} British General Electric Co. Ltd.
†1169	15 amp., suitable for 500 volts, "T. & H. Triumph," less studs	"	240	do.	0 1 10.7	
†1170	30 amp., suitable for 500 volts, "T. & H. Triumph," less studs	"	50	do.	0 1 10.7	
†1171	60 amp., suitable for 500 volts, without studs, "T. & H." See and See Type	"	50	do.	0 5 5	Remingtons Pty. Ltd.
Fuses, Cartridge "Zed."—						
†1172	10 amp., 250 volt. .. ..	U.K.	250	do.	0 0 8½	} Siemens (Aust.) Pty. Ltd.
†1173	15 amp., 250 volt. .. ..	"	250	do.	0 0 8½	
†1174	25 amp., 500 volt. .. ..	"	50	do.	0 1 2½	
†1175	Holders, E.S. batten, S.1190, "Magnet" ..	"	50	do.	0 1 6½	} British General Electric Co. Ltd.
†1176	Holders, E.S. or Goliath Screw (as ordered) for Benjamin Reflectors, complete with flanges	"	24	do.	0 6 8	
†1177	Holders, Bayonet, portable hand lamp ..	Vict.	50	do.	0 6 6	Noyes Bros. (Melb.) Pty. Ltd.

Item No.	Description.	Country of Manufacture.	Estimated Requirements.	Rate per—	Rate.	Name of Contractor.
					£ s. d.	
ELECTRICAL FITTINGS—continued.						
†1178	Holders, Porcelain, Screwed Socket Type, G.E., Cat. 9402	U.S.A.	100	each	0 1 5	Associated General Elec. Industries Ltd.
†1179	Holders, Bayonet, batten, with shade carrier ring, bakelite, "Ring-grip No. 30"	Vict.	60	do.	0 0 10½	British General Electric Co. Ltd.
†1180	Holders, Bayonet, keyless, with shade ring carrier, ½", S.1035, "Brass"	U.K.	50	do.	0 0 5.9	
†1181	Holders, Bayonet, keyless, with shade ring carrier, ½", S.1037, "Brass"	"	550	do.	0 0 5.9	Brooks, Robinson Pty. Ltd.
†1182	Holders, Bayonet, keyless, with shade ring carrier, cord grip, "Kirson"	"	750	doz.	0 5 11	
†1183	Holders, Bayonet, keyless, with shade ring carrier, cord grip, Bakelite, S.2103, "Magnet"	U.K.	300	each	0 0 6.7	British General Electric Co. Ltd.
†1184	Insulation Cloth, Empire (36" to 37" wide)—5 mils. thick	"	100 yards	lin. yard	0 1 3.9	
†1185	Insulation Cloth, Empire (36" to 37" wide)—7 mils. thick	"	400 "	do.	0 1 5.5	British General Electric Co. Ltd.
†1186	Insulation Cloth, Empire (36" to 37" wide)—10 mils thick	U.K.	100 yards	lin. yard	0 1 8.75	
†1187	Insulation compound, "Chattertons"	"	36 lb.	lb.	0 2 1	Mica & Insulating Supplies Co.
1188	5 mils., Grade "B"	U.K.	10 lb.	lb.	0 1 8½	
1189	5 mils., Grade "3"	"	24 "	do.	0 1 9½	Mica & Insulating Supplies Co.
1190	5 mils., Grade "4"	"	15 "	do.	0 1 11½	
1191	10 mils., Grade "B"	"	10 "	do.	0 1 5	Mica & Insulating Supplies Co.
1192	10 mils., Grade "3"	"	50 "	do.	0 1 6½	
1193	10 mils., Grade "4"	"	20 "	do.	0 1 9½	Mica & Insulating Supplies Co.
1194	15 mils., Grade "B"	"	10 "	do.	0 1 4½	
1195	15 mils., Grade "3"	"	30 "	do.	0 1 6	Mica & Insulating Supplies Co.
1196	15 mils., Grade "4"	"	100 "	do.	0 1 7½	
1197	20 mils., Grade "B"	"	20 "	do.	0 1 4	Mica & Insulating Supplies Co.
1198	20 mils., Grade "3"	"	30 "	do.	0 1 5½	
1199	20 mils., Grade "4"	"	30 "	do.	0 1 7	Mica & Insulating Supplies Co.
1200	30 mils., in sheets, 6 ft. x 3 ft., Grade "B"	"	10 sheets	sheet	0 5 0	
1201	30 mils., in sheets, 6 ft. x 3 ft., Grade "3"	"	100 "	do.	0 5 3½	Mica & Insulating Supplies Co.
1202	30 mils., in sheets, 6 ft. x 3 ft., Grade "4"	"	50 "	do.	0 5 10	
†1203	Insulation, presspahn, in sheets, 32" x 24", 10 mils	"	36 "	lb.	0 1 1½	British General Electric Co. Ltd.
1204	Insulation Sheet, Ebony grade—¼" thick (6 m.m.) "Zelemite"	S. Aust.	50 lb.	sq. ft.	0 2 11	W. G. Watson & Co. Ltd.
1204A	¼" " " " "Excellite," in 4' x 3' sheets	Belgium		do.	0 2 11½	The Lawrence & Hanson Electrical Co. Ltd.
1205	¾" " (10 m.m.) "Zelemite"	S. Aust.	170 "	do.	0 3 5	W. G. Watson & Co. Ltd.
1205A	¾" " " " "Excellite," in 4' x 3' sheets	Belgium		do.	0 3 11	The Lawrence & Hanson Electrical Co. Ltd.
1206	½" " (12 m.m.) "Zelemite"	S. Aust.	50 "	do.	0 4 6	W. G. Watson & Co. Ltd.
1206A	½" " " " "Excellite," in 4' x 3' sheets	Belgium		do.	0 4 8	The Lawrence & Hanson Electrical Co. Ltd.
1207	¾" " (20 m.m.) "Zelemite"	S. Aust.	90 "	do.	0 7 0	W. G. Watson & Co. Ltd.
1207A	¾" " " " "Excellite," in 4' x 3' sheets	Belgium		do.	0 6 11	The Lawrence & Hanson Electrical Co. Ltd.
†1208	Insulation Sheet, White, "Ausbestos"—¼" thick	S. Aust.	60 "	lb.	0 0 8	Mica & Insulating Supplies Co.
†1209	Insulation Sheet, White, "Ausbestos"—½" thick	"	50 "	do.	0 0 9	
†1210	Insulation Tape, adhesive, black, ½" in 2-oz. rolls of 8 yards each	U.K.	200 "	do.	0 1 4½	Dunlop Perdriau Rubber Co. Ltd.
†1211	Insulation Tape, adhesive, black, ¾" in 8-oz. rolls, approx. 24 yds per roll	Vict.	500 "	do.	0 1 4	
†1212	Insulation Tape, adhesive, grey, ¾" in 8-oz. rolls, net weight, wrapped in tin-foil, or lead-foil, approx. 24 yds per roll	"	500 "	do.	0 2 1½	British General Electric Co. Ltd.
1213	Insulation Tape, Empire, bias cut, in yellow or black—½" wide, 5 mils., seamed	U.K.	gross 12 yards	gross yards	0 2 11½	
†1214	¾" wide, 7 mils., seamed	"	48 "	do.	0 5 0	Mica & Insulating Supplies Co.
1214A	¾" " " " seamless	"		do.	0 5 7	

Item No.	Description.	Country of Manufacture.	Estimated Requirements.	Rate per—	Rate.	Name of Contractor.
					£ s. d.	
<b>ELECTRICAL FITTINGS—continued.</b>						
1215	Insulation Tape, &c.—continued. 1" wide, 7 mils., seamed .. ..	U.K.	gross 24 yards	gross yards	0 6 10	British General Electric Co. Ltd.
†1215A	1" „ „ seamless .. ..	„	„	do.	0 7 6	Mica & Insulating Supplies Co.
1216	1" „ 15 mils., seamed .. ..	„	8 „	do.	0 10 10	British General Electric Co. Ltd.
1217	2" „ 7 „ „ .. ..	„	20 „	do.	0 13 9	„
†1218	Insulation Tape, Mica Flexible, 1½" x 4 mils.	Vict.	10,000 yards	100 yards	0 10 0	Mica & Insulating Supplies Co.
*1219	Insulators, Porcelain— Base, for Traction Motor connexion box, to Drawing No. F.2105	„	150	each	0 2 3	Sunshine Porcelain Potteries Pty. Ltd.
*1220	Brush Yoke, to Drawing No. F. 2104 ..	„	150	do.	0 2 1	Australian Porcelain Insulator Co. Pty. Ltd.
*†1221	Button, 1½" x 1½" x ¾" hole .. ..	„	1,000	doz.	0 1 6	Sunshine Porcelain Potteries Pty. Ltd.
*†1222	Cleat, 2½" x 1" (two wires) pairs .. ..	„	200	each	0 0 3	Australian Porcelain Insulator Co. Pty. Ltd.
*†1223	Knob, 2¼" x 1½" x 7/16" hole .. ..	„	3 gross	gross	3 0 0	„
*†1224	Pin Type, 6,600-volt, grooved top, brown ..	„	120	each	0 2 1	„
†1225	Pin Type, conference No. 600/0.1 .. ..	„	240	do.	0 0 6½	British General Electric Co. Ltd.
†1226	Pin Type, conference No. 600/0.0 .. ..	„	540	do.	0 0 5½	„
†1227	Pin Type, to Specification and Drawing A.405. No. 1	„	5,600	do.	0 1 1	Sunshine Porcelain Potteries Pty. Ltd.
*†1228	Shackle, 1½" x 2½" x ¾" hole .. ..	„	400	do.	0 0 4½	Australian Porcelain Insulator Co. Pty. Ltd.
†1229	Strain, "Egg type," 1,000 volt, 3½" long	„	36	do.	0 1 3½	„
†1230	Lamps, Electric, for hand torches, 3.5-volt, clear, "Philips"	U.K.	1,000	do.	0 0 3	The Lawrence & Hanson Electrical Co. Ltd.
†1231	Lamps, Electric, for Automobiles— 6/8 volts, 2 and 21 C.P., double filament, "Philips"	„	12	do.	0 1 1½	Warburton Franki (Melb.) Ltd.
1232	6/8 volts, 2 C.P., D.C., "Osram" .. ..	„	72	do.	0 0 7½	British General Electric Co. Ltd.
†1233	6/8 volts, 2 C.P., S.C., "Osram" .. ..	„	150	do.	0 0 7½	„
1234	6/8 volts, 4 C.P., S.C., "Osram" .. ..	„	36	do.	0 0 7½	„
†1235	6/8 volts, 21 C.P., D.C., "Philips" .. ..	„	24	do.	0 0 11½	Warburton Franki (Melb.) Ltd.
†1236	6 volts, 48 to 50 C.P., S.C., "Mazda" ..	„	100	do.	0 0 11½	Associated General Electric Industries Ltd.
†1237	12/16 volts, 2 C.P., D.C., "Osram" .. ..	„	120	do.	0 0 7½	British General Electric Co. Ltd.
†1238	12/16 volts, 2 C.P., S.C., "Osram" .. ..	„	120	do.	0 0 7½	„
†1239	12/16 volts, 21 C.P., S.C., "Mazda" .. ..	„	36	do.	0 0 11½	Associated General Electric Industries Ltd.
†1240	12/16 volts, 2 and 21 C.P., double filament, D.C., "Philips"	„	24	do.	0 1 1½	Warburton Franki (Melb.) Ltd.
†1241	12/16 volts, 48 to 50 C.P., D.C., "Mazda" ..	„	18	do.	0 0 11½	Assoc. General Electric Industries Ltd.
†1242	12/16 volts, 48 to 50 C.P., S.C., "Mazda" ..	„	72	do.	0 0 11½	„
†1243	Micanite Sheet, Flexible, 40" x 40" x 7 mils.	„	30 lb.	lb.	0 3 4	Mica & Insulating Supplies Co.
*1244	Micanite Tube, ¾" x ¾", 17" long .. ..	Vict.	1,000	each	0 1 0½	Federal Insulating Products Pty. Ltd.
†1245	Mica, Sheet, 6" x 4", Phlogopite, clear amber, to Specification	U.K.	36 lb.	lb.	1 10 0	W. G. Sleightholm
†1246	Mica, Sheet, Clear, 6" x 4" .. ..	Central Aust.	180 „	do.	0 19 0	Arltunga Mica Co. Pty. Ltd.
†1247	Mica, Sheet, 8" x 4½" (cut to size), Ruby ..	„	60 „	do.	1 5 0	„
†1248	Mica, Sheet, Amber spotted, 4" x 4" (cut to size)	„	48 „	do.	0 9 6	Mica & Insulating Supplies Co.
†1249	Mica Washers, 1½" x 1½" .. ..	Vict. partly	50 „	do.	0 6 4	„
†1250	Mica Washers, 2½" x 1½" .. ..	„	70 „	do.	0 7 6	„
†1251	Paste, Soldering, in 2-oz. tins, for Electrical Work	„	96 tins	tin	..	To be obtained from Spotswood
†1252	Plugs and Sockets, Wall— 2-pin, 5 amp. .. ..	„	250	each	..	Nil
†1253	2-pin, 10 amp. .. ..	„	..	do.	..	Nil
†1254	3-pin, earthing, 10 amp., "Ring Grip" ..	Vict.	400	do.	0 1 7½	J. Danks & Son Pty. Ltd.
†1255	Plugalls, for Kettles, Bakelite, Metal Sheathed	N.S.W.	144	do.	0 1 0½	W. G. Watson & Co. Ltd.

Item No.	Description.	Country of Manufacture.	Estimated Requirements.	Rate per—	Rate.	Name of Contractor.
					£ s. d.	
<b>ELECTRICAL FITTINGS—continued.</b>						
	Radiator Elements, "Hecla" Standard Cones, wired complete—					
†1256	1,000 watt, rating at 110 volts .. ..	Vict.	24	each	0 4 9	The Lawrence & Hanson Electrical Co. Ltd.
†1257	1,000 watt, rating at 230 volts .. ..	"	36	do.	0 4 9	
†1258	1,000 watt, rating at 250 volts .. ..	"	36	do.	0 4 9	
†1259	700 watt, rating at 110 volts .. ..	"	12	do.	0 4 9	
†1260	700 watt, rating at 230 volts .. ..	"	60	do.	0 4 9	
†1261	700 watt, rating at 250 volts .. ..	"	12	do.	0 4 9	Hecla Electrics Pty. Ltd.
†1262	Radiator Bases and Shields, for "Hecla" Standard Radiators	"	144 sets	set	0 2 1	
	Reflectors, vitreous, enamelled—					
1263	14", B.C. Holder, Benjamin No. 4362 ..	U.K.	50	each	0 12 11	British General Electric Co. Ltd.
1264	15", E.S. Holder, Benjamin, No. 4662 ..	"	12	do.	0 18 2	
1265	18", E.S. Holder, Benjamin No. 4673 ..	"	12	do.	1 2 0	
1266	Elliptical Angle Type, Benjamin No. 4782	"	12	do.	1 0 4	
	Reflectors, Enamelled Iron—					
†1267	10" x 1½" hole .. ..	"	400	do.	0 0 6½	Remingtons Pty. Ltd.
†1268	12" x 1½" hole .. ..	Germany	60	do.	0 1 3	Noyes Bros. (Melb.) Pty. Ltd.
†1269	15" x 1½" hole .. ..	"	120	doz.	1 6 2	Warburton Franki (Melb.) Ltd.
†1270	Reflectors, shade, opal, 10" x 1½" hole ..	Japan	370	each	0 0 6½	Remingtons Pty. Ltd.
†1271	Roses, Ceiling, 2-plate, vitreous porcelain ..	Germany	370	do.	0 0 4	Brooks, Robinson Pty. Ltd.
†1272	Roses, Ceiling, 3-plate, vitreous porcelain ..	"	24	do.	0 0 5½	
	Switches, Ironclad Type, 3-pole—					
†1273	15 amp., suitable for 500 volt "T. & H." ..	Vict.	20	do.	0 6 1	The Lawrence & Hanson Electrical Co. Ltd.
†1274	30 amp., suitable for 500 volt "T. & H." ..	"	12	do.	0 8 5	
†1275	60 amp., suitable for 500 volt "Federal" ..	"	5	do.	1 2 4	Assoc. General Electric Industries Ltd.
	Switches, Double Pole, Tumbler—					
†1276	5 amp., suitable for 250 volt service ..	"	100	do.	..	Nil
†1277	10 amp., suitable for 250 volt, "Ring Grip" ..	Vict.	36	do.	0 3 0	Remingtons Pty. Ltd.
†1278	20 amp., suitable for 250 volt ..	"	24	do.	..	Nil
	Switches, Single Pole, Tumbler, "Ring Grip"—					
†1279	5 amp., 250 volt, Bakelite .. ..	Vict.	1,500	do.	0 1 1	Assoc. General Electric Industries Ltd.
†1280	10 amp., 250-volt, Porcelain base with Bakelite cover ..	"	50	doz.	1 10 7	Warburton Franki (Melb.) Ltd.
†1281	Switches, 2-way, 5 amp., 250 volt, "Ring Grip", No. 22 ..	"	30	each	0 1 6	British General Electric Co. Ltd.
†1282	Switches, ceiling, 5 amp., 250 volt, "Ring Grip" ..	"	150	doz.	1 11 9	Warburton Franki (Melb.) Ltd.
†1283	Torches, hand, electric, complete, with 3-cell battery and lamp, "Ever Ready" Type, No. 1828 ..	U.K. & N.S.W.	50	each	0 5 7.775	The Ever-Ready Co. (Great Britain) Ltd.
1284 to 1312	Nil					

**MILD STEEL PLATES.**

The Plates under this Contract are for maintenance purposes only, and in the event of the Corporation deciding to invite tenders for the supply and delivery of Plates for construction purposes, acceptance of any such tender shall not be regarded as an infringement of this Contract.

Orders for at least 10 tons to be issued monthly and time for delivery allowed.

**SPECIFICATION.**

Chemical Analysis.—The Mild Steel Plates shall be manufactured from steel made from selected material by the basic open hearth process and shall show on analysis not more than .06 per centum of sulphur or of phosphorus. The Contractor shall supply an analysis at his own expense when required so to do.

Particulars.—The Mild Steel Plates shall be in accordance with Australian Standard Specification No. A. 1, 1928, for "A" Class Steel as applied to Mild Steel Plates, except where shown otherwise in this Specification.

Rolling and Shearing Margin.—Each Plate shall be true to the ordered thickness within the following limits of tolerance.



## MILD STEEL PLATES—continued.

Thickness.	Up to 48" wide.		Over 48" up to 60" wide.		Over 60" up to 72" wide.		Over 72" up to 84" wide.		Over 84" up to 96" wide.		Over 96" up to 108" wide.		Over 108" up to 120" wide.	
	Over.	Under.	Over.	Under.	Over.	Under.	Over.	Under.	Over.	Under.	Over.	Under.	Over.	Under.
$\frac{1}{16}$ " ..	%	%	%	%	%	%	%	%	%	%	%	%	%	%
$\frac{1}{8}$ " ..	9.0	3.0	10.0	3.0	11.0	3.0	12.0	3.0	14.0	3.0	14.0	3.0	15.0	3.0
$\frac{3}{16}$ " ..	7.5	2.5	8.5	2.5	9.0	3.0	10.0	3.0	11.0	3.0	13.0	3.0	13.0	3.0
$\frac{1}{2}$ " ..	6.0	2.5	7.0	2.5	8.0	2.5	9.0	2.5	10.0	2.5	11.0	2.5	12.0	2.5
$\frac{5}{8}$ " ..	5.0	2.5	5.5	2.5	6.5	2.5	7.5	2.5	8.5	2.5	9.5	2.5	10.5	2.5
$\frac{3}{4}$ " ..	4.0	2.5	4.5	2.5	5.0	2.5	6.0	2.5	7.0	2.5	8.0	2.5	9.0	2.5
$\frac{7}{8}$ " ..	3.0	2.5	3.5	2.5	4.0	2.5	4.5	2.5	5.5	2.5	6.5	2.5	7.5	2.5
and $\frac{1}{2}$ " ..	2.5	2.5	2.5	2.5	3.0	2.5	3.5	2.5	4.0	2.5	5.0	2.5	6.0	2.5
and $\frac{3}{4}$ " ..	2.5	2.5	2.5	2.5	2.5	2.5	3.0	2.5	3.5	2.5	4.0	2.5	5.0	2.5
and $\frac{7}{8}$ " ..	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	3.0	2.5	3.5	2.5	4.5	2.5
1" ..	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	3.0	2.5	3.5	2.5
Over 1" ..	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5

Plates sheared to size shall not be under nor more than  $\frac{1}{8}$  inch over the ordered length or width.

Notwithstanding that plates within the limits of tolerance shown above will be accepted, if otherwise in accordance with this Specification, the weight to be paid for shall not exceed 5 per cent. over the calculated weight of the ordered dimensions of each size in each delivery, for plates  $\frac{3}{16}$ -inch thick, or  $2\frac{1}{4}$  per cent. over the calculated weight of the ordered dimensions of each size in each delivery for plates in excess of  $\frac{3}{16}$ -inch thick. (The calculated weight shall be on the basis that 1 cubic inch of Rolled Steel weighs 0.2833 lb.).

The Contractor shall supply a certificate stating the process of manufacture and a test sheet signed by the manufacturer, giving the results of each of the specified mechanical tests and the chemical analysis of each cast in each delivery of Plates under this Contract. In the event of any Plate being found, after delivery, with injurious defects or not true to the specified dimensions within the specified limits of tolerance, it shall be rejected and shall be replaced by and at the cost of the Contractor, C.I.F., Melbourne.

*Defects Showing During Fabrication.*—Should any portion of a Steel Plate show injurious defects in course of fabrication by the Corporation, the Contractor shall be notified, and provided the Steel Plate has been properly treated by the Corporation, the Contractor shall at his own expense and at the discretion of the Comptroller of Stores, make good the defective Plate or replace same free of all charges, C.I.F. Melbourne.

The rates are C.I.F. Melbourne, and shipment shall be arranged in such a manner as will enable provisional delivery to be taken by the Corporation from the ship's slings into railway trucks at Victoria Dock or Williamstown.

Stevedoring charges, and wharfage, shall be to the Corporation's account.

All weights will be ascertained by weighing the Plates on the weighbridge scales or other weighing machines of the Corporation at Newport, and all such weights so ascertained by the Comptroller of Stores shall for all purposes be accepted by the parties to this contract as correct, final and binding.

In the event of the Companies' current prices falling or rising during the currency of the Contract, such fall or rise, as the case may be, shall be debited or credited to the Corporation in respect of the undelivered balance of any material ordered as at the date of such alteration in the prices.

McPherson's Contract is for Plates up to a maximum weight of 2 tons each.

Provided satisfactory service be given, the business should be equally divided between both Contractors.

Item No.	Description.	Country of Manufacture.	Estimated Requirements.	Rate per—	Rate.	Name of Contractor.
					£ s. d.	
					c.i.f. Melbourne	
1313	Mild Steel Rectangular plates, any lengths or widths, as may be ordered— $\frac{1}{16}$ " thick up to 57" wide .. ..	N.S.W.		ton	13 5 0	The Broken Hill Pty. Co. Ltd.
1313A	$\frac{3}{16}$ " thick up to 57" wide .. ..	"		do.	13 5 0	McPherson's Pty. Ltd.
1314	$\frac{1}{4}$ " thick up to 60" wide .. ..	"		do.	13 0 0	The Broken Hill Pty. Co. Ltd.
1314A	$\frac{1}{2}$ " thick up to 60" wide .. ..	"		do.	13 0 0	McPherson's Pty. Ltd.
1315	$\frac{5}{16}$ " thick up to 66" wide .. ..	"		do.	12 15 0	The Broken Hill Pty. Co. Ltd.
1315A	$\frac{3}{8}$ " thick up to 66" wide .. ..	"		do.	12 15 0	McPherson's Pty. Ltd.
1316	$\frac{1}{2}$ " thick up to 75" wide .. ..	"		do.	12 10 0	The Broken Hill Pty. Co. Ltd.
1316A	$\frac{3}{4}$ " thick up to 75" wide .. ..	"		do.	12 10 0	McPherson's Pty. Ltd.
1317	$\frac{7}{16}$ " thick up to 78" wide .. ..	"		do.	12 10 0	The Broken Hill Pty. Co. Ltd.
1317A	$\frac{1}{2}$ " thick up to 84" wide .. ..	"		do.	12 10 0	McPherson's Pty. Ltd.

Item No.	Description.	Country of Manufacture.	Estimated Requirements.	Rate per—	Rate.	Name of Contractor.
					£ s. d.	
MILD STEEL PLATES—continued.				c.i.f.		
1318	Mild Steel Rectangular plates, &c.—continued. $\frac{1}{2}$ " thick up to 78" wide .. ..	N.S.W.	500 tons	ton	12 10 0	The Broken Hill Pty. Co. Ltd.
1318A	$\frac{1}{2}$ " thick up to 84" wide .. ..	"		do.	12 10 0	McPherson's Pty. Ltd.
1319	$\frac{5}{16}$ " and up to $1\frac{1}{2}$ " thick rising by $\frac{1}{16}$ " or $\frac{1}{8}$ " up to 78" wide .. ..	"		do.	12 10 0	The Broken Hill Pty. Co. Ltd.
1319A	$\frac{5}{16}$ " and up to $1\frac{1}{2}$ " thick, rising by $\frac{1}{16}$ " or $\frac{1}{8}$ ", up to 84" wide .. ..	"		do.	12 10 0	McPherson's Pty. Ltd.
1319B	Over $1\frac{1}{2}$ " and up to $1\frac{3}{4}$ " thick, rising by $\frac{1}{16}$ " or $\frac{1}{8}$ ", up to 78" wide .. ..	"		do.	13 5 0	The Broken Hill Pty. Co. Ltd.
1319C	Over $1\frac{1}{2}$ " and up to $1\frac{3}{4}$ " thick, rising by $\frac{1}{16}$ " or $\frac{1}{8}$ ", up to 84" wide .. ..	"		do.	13 5 0	McPherson's Pty. Ltd.
1319D	Over $1\frac{3}{4}$ " and up to 2" thick, rising by $\frac{1}{16}$ " or $\frac{1}{8}$ ", up to 78" wide .. ..	"		do.	14 0 0	The Broken Hill Pty. Co. Ltd.
1319E	Over $1\frac{3}{4}$ " and up to 2" thick, rising by $\frac{1}{16}$ " or $\frac{1}{8}$ ", up to 84" wide .. ..	"		do.	14 0 0	McPherson's Pty. Ltd.
1320	Extras for width— $\frac{3}{16}$ " exceeding 57" wide up to 60" wide .. ..	"		do.	0 10 0	The Broken Hill Pty. Co. Ltd.
1320A	$\frac{3}{16}$ " exceeding 57" wide up to 60" wide .. ..	"		do.	0 10 0	McPherson's Pty. Ltd.
1321	$\frac{3}{16}$ " exceeding 60" wide up to 63" wide .. ..	"		do.	0 15 0	The Broken Hill Pty. Co. Ltd.
1321A	$\frac{3}{16}$ " exceeding 60" wide up to 63" wide .. ..	"		do.	0 15 0	McPherson's Pty. Ltd.
1322	$\frac{3}{16}$ " exceeding 63" wide up to 66" wide .. ..	"		do.	1 0 0	The Broken Hill Pty. Co. Ltd.
1322A	$\frac{3}{16}$ " exceeding 63" wide up to 66" wide .. ..	"		do.	1 0 0	McPherson's Pty. Ltd.
1323	$\frac{3}{16}$ " exceeding 66" wide up to 69" wide .. ..	"		do.	1 10 0	The Broken Hill Pty. Co. Ltd.
1323A	$\frac{3}{16}$ " exceeding 66" wide up to 69" wide .. ..	"		do.	1 10 0	McPherson's Pty. Ltd.
1324	$\frac{3}{16}$ " exceeding 69" wide up to 72" .. ..	"		do.	2 5 0	The Broken Hill Pty. Co. Ltd.
1324A	$\frac{3}{16}$ " exceeding 69" wide up to 72" .. ..	"		do.	2 5 0	McPherson's Pty. Ltd.
1325	For every 3" or part over the following limits :— $\frac{1}{4}$ " over 60" wide .. ..	"		do.	0 2 6	The Broken Hill Pty. Co. Ltd.
1325A	$\frac{1}{4}$ " over 60" wide .. ..	"		do.	0 2 6	McPherson's Pty. Ltd.
1326	$\frac{5}{16}$ " over 66" wide .. ..	"		do.	0 2 6	The Broken Hill Pty. Co. Ltd.
1326A	$\frac{5}{16}$ " over 66" wide .. ..	"		do.	0 2 6	McPherson's Pty. Ltd.
1327	$\frac{3}{8}$ " over 75" wide .. ..	"		do.	0 2 6	The Broken Hill Pty. Co. Ltd.
1327A	$\frac{3}{8}$ " over 75" wide .. ..	"		do.	0 2 6	McPherson's Pty. Ltd.
1328	$\frac{7}{16}$ " over 84" wide .. ..	"		do.	..	} Nil
1329	$\frac{3}{4}$ " over 84" wide .. ..	"		do.	..	
1330	$\frac{3}{8}$ " and up, over 84" wide .. ..	"		do.	..	
1331	Extra for lengths over 30' 0" up to 35' 0" .. ..	"		do.	0 2 6	The Broken Hill Pty. Co. Ltd.
1331A	Extra for lengths over 30' 0" up to 35' 0" .. ..	"		do.	0 2 6	McPherson's Pty. Ltd.
1331B	Extra for lengths over 35' 0" up to 40' 0" .. ..	"		do.	0 7 6	The Broken Hill Pty. Co. Ltd.
1331C	Extra for lengths over 35' 0" up to 40' 0" .. ..	"		do.	0 7 6	McPherson's Pty. Ltd.
1332	Extras for Narrowness— Sheared plates 20' long and upwards and under 18" down to and including 12" wide .. ..	"		do.	0 5 0	The Broken Hill Pty. Co. Ltd.
1332A	Sheared plates 20' long and upwards and under 18" down to and including 12" wide .. ..	"		do.	0 5 0	McPherson's Pty. Ltd.
1333	Sheared plates 15' long and upwards and under 12" wide .. ..	"		do.	0 10 0	The Broken Hill Pty. Co. Ltd.
1333A	Sheared plates 15' long and upwards and under 12" wide .. ..	"		do.	0 10 0	McPherson's Pty. Ltd.
1334	Extras for Smallness— All plates under 4 square feet in area .. ..	"		do.	0 10 0	The Broken Hill Pty. Co. Ltd.
1334A	All plates under 4 square feet in area .. ..	"		do.	0 10 0	McPherson's Pty. Ltd.
1335	All plates resheared within $\frac{1}{8}$ " .. ..	"		do.	1 0 0	The Broken Hill Pty. Co. Ltd.
1335A	All plates resheared within $\frac{1}{8}$ " .. ..	"		do.	1 0 0	McPherson's Pty. Ltd.
1336	} Nil.					
1501						

## VARNISHES.

(See Appendix "F" for Specification.)

The Corporation may test samples selected at random to ascertain to what extent the material supplied complies with this Specification or with the Contractor's Specification and samples.

Orders for Hard Carriage Wearing Body Varnish to be placed as desired by the Chief Mechanical Engineer.

As regards Items Nos. 1502 and 1503, the Varnish to be supplied by E. L. Yencken and Co. is to be equal to the sample submitted for the 1932-1933 Schedule.

Item No.	Description.	Country of Manufacture.	Estimated Requirements.	Rate per—	Rate.	Name of Contractor.
					£ s. d.	
†1502	Varnish, in $\frac{1}{2}$ -gallon or 1-gallon tins, as ordered— Carriage, Hard Drying, Specification D.1. "Goodlass Wall & Co."	Vict.	1,500 gal.	Imp. gal.	0 9 0	E. L. Yencken & Co. Pty. Ltd.
†1502A	Carriage, Hard Drying, Specification D.1. "Taubman's"	N.S.W.		do.	0 8 7	Taubman's Pty. Ltd.
†1502B	Carriage, Hard Drying, Specification, D.1. "Permalac"	Vict.		do.	0 9 0	Permalac Paint and Varnish Products
†1503	Durable (Wearing Body), Specification D.1. "Goodlass Wall & Co."	Vict.	1,800 "	do.	0 9 0	E. L. Yencken & Co. Pty. Ltd.
†1503A	Durable (Wearing Body), Specification D.1. "Taubman's"	N.S.W.		do.	0 9 6	Taubman's Pty. Ltd.
†1503B	Durable (Wearing Body), Specification D.1. "Permalac"	Vict.		do.	0 9 3	Permalac Paint and Varnish Products
†1504	Copal, Specification, D.2...	N.S.W.	100 "	do.	0 6 1	Victoria Varnish Co.
1505	Nil.					
†1506	Oak, Specification, D.3...	N.S.W.	120 "	do.	0 5 11	Victoria Varnish Co.
†1507	Gold Size, Specification D.4. "Elephant," British Aust. Lead Manufacturers	"	350 "	do.	0 7 6	Alexander Fergusson Pty. Ltd.
†1508	Japan, Black, Specification D.5...	Vict.	50 "	do.	0 7 0	Permalac Paint and Varnish Products
†1509	Liquid Japan Drier (Terebine), Specification D.6 "L. Berger & Sons"	N.S.W.	1,300 "	do.	0 6 5	John Danks & Son Pty. Ltd.
†1510	Paper, Specification, D.7 "L. Berger & Sons"	"	2 "	do.	0 9 7	
†1511	Spirit, White or Brown, as ordered, Specification D.8 "Goodlass Wall & Co."	Vict.	15 "	do.	0 6 0	E. L. Yencken & Co. Pty. Ltd.
†1512	Knotting, Specification D.9...	N.S.W.	20 "	do.	0 7 0	Victoria Varnish Co.
†1513	French Polish, "Goodlass Wall & Co."	Vict.	500 "	do.	0 6 4	E. L. Yencken & Co. Pty. Ltd.
†1514	French Polish, White "Mirror"...	"	8 "	do.	0 9 6	S. Smith & Co. Pty. Ltd.
†1515	Insulating, Quick Air-drying, Black, in 1 or 4 gallon tins, as ordered	N.S.W.	300 "	do.	0 6 4	William Docker
†1516	Insulating, Quick Air-drying, Clear, in 1 or 4 gallon tins, as ordered	"	8 "	do.	0 7 7	Taubman's Pty. Ltd.
†1517	Varnish, Insulating, Black, Stoving, 50 Specification, in 4-gallon tins, for use at Jolimont Workshops	"	130 "	do.	0 7 6	
†1518	Varnish, Bronzine, "L. Berger & Sons"	"	50 "	do.	0 6 11	John Danks & Son Pty. Ltd.
†1519	Varnish, Core-plate, Clear, Quick Air-drying, to Specification, in 1-gallon tins, "Sherwin Williams"—"Ajax"	"	10 "	do.	0 8 3	Warburton .. Franki (Melb.) Ltd.
†1520	Thinners, for Items No. 1519, in 1-gallon tins, "Sherwin Williams"—"Ajax"	"	5 "	do.	0 5 4	
1521 to 1523	Nil.					

## CANDLES, MATCHES, SOAP, PARAFFIN WAX, ETC.

## SPECIFICATION FOR SOFT SOAP—Item No. 1537.

The soft soap supplied under this Contract shall be of the best quality and description, and shall contain not less than 40 per cent. of fatty acids. The soap must not become liquid at a temperature of 90 deg. Fahr., while on being cooled to 32 deg. Fahr. for 24 hours no liquid must separate from it. It shall contain not more than three-tenths of 1% of free caustic alkali.

Any fish oil or marine animal oil used in the manufacture of the soap must be deodorized, and no scenting material such as oil of mirbane shall be present.

The soap will be tested with cold water and should dissolve readily and have a good lather when stirred.

A sample shall be taken from each delivery or part thereof of soft soap delivered under this Contract, and such sample on analysis shall agree in all respects with this Specification, and shall be similar to the accepted sample in colour, textures, and in all other respects not defined in the Specification.

CANDLES, MATCHES, SOAP, PARAFFIN, ETC.—*continued.*SPECIFICATION FOR SPECIAL AND COMMON YELLOW SOAP—*Items Nos. 1540 and 1541*

The soap shall be of the best quality and description and shall be the product derived from the action of a solution of alkali on fats, oils, or resins. It shall contain not less than fifty-nine per centum (59%) of fatty acids, of which not more than one-third may be resin acids. It shall contain not more than three parts per centum of carbonate of soda, and not more than one-tenth of one part per centum of free caustic alkali. It shall not contain any other substance save water, perfume, and harmless colouring matter. It shall be of good pale yellow colour and free from offensive odour.

The amount of fatty and resinous acids shall be ascertained by testing pieces cut from the centre of inside of bar.

A sample shall be taken from each delivery or part thereof of special and common yellow soap delivered under this Contract, and such sample on analysis shall agree in all respects with this specification and shall be similar to the accepted sample in colour, texture and in all other respects not defined in the specification.

SPECIFICATION FOR PARAFFIN WAX—*Item No. 1544.*

The Paraffin Wax shall be a pure petroleum of shale product of the very best quality, free from colour, mineral acid or alkali, and mineral matter. The Paraffin Wax shall have a freezing point of not less than 135 degrees Fahrenheit when tested, in accordance with the standard method of the American Society for Testing Materials.

The Paraffin Wax shall be packed in bags with cotton lining and outer of burlap and delivered at the Newport Workshops.

Orders for Paraffin Wax to be placed in minimum lots of 5 tons, and two months to be allowed for importation. The rate tendered does not include wharfage, but in order that the Corporation will obtain exemption of wharfage, each shipment should be consigned to the Victorian Railways Commissioners, and the Bill of Lading made out in their favour. Wharfage will be arranged by the Corporation, and the Bill of Lading returned to the Contractor to complete delivery.

Item 1544 is firm as regards Exchange.

Solvol Soap under Item 1536A is provided mainly for sale by Refreshment Services Branch to employees—Sales Tax is payable by Refreshment Services Branch.

Item 1536 is to be used for Departmental purposes.

Item No.	Description.	Country of Manufacture.	Estimated Requirements.	Rate per—	Rate.	Name of Contractor.
					£ s. d.	
	Candles, Stearine, full weight or short chamber, as ordered—"Electrine"					
†1529	In 1 lb. packets, 6's .. ..	Vict.	3,000 lb.	lb.	0 0 8½	J. Kitchen & Sons Pty. Ltd.
†1529A	" 12's .. ..				0 0 8½	
†1530	In 50 lb. or 100 lb. containers, 12's ..				0 0 8½	
†1531	Glycerine, pure, in 4-gallon tins .. ..	"	100 "	do.	0 0 7	G. Mowling & Son
†1532	Matches, Wood, Safety, av. contents, 60 per box	"	840 gross boxes	gross of boxes	..	Nil
†1533	Soap, Liquid Cleanser, in 4-gallon tins, for use in floor scrubbing, "Carbolocide"	Vict.	48 gals.	gallon	0 1 6	A. B. Gibson & Sons Pty. Ltd.
†1534	Soap, Powdered, in ¼-lb. or 1-lb. packets, as ordered, "Tilleys"	"	5,000 lb.	lb.	0 0 6 less 2½%	} Arthur Tilley
†1535	Soap, Sand, in boxes of 72 x 12 oz. bars approximately 54 lb. net per box	"	180 boxes	box	0 9 6	
†1536	Soap, "Klex" Pumice Soap, 4½ oz. ..	N.S.W.		doz.	0 1 8	Colgate-Palmolive Peet Co. Ltd.
†1536A	Soap "Solvol" .. ..	Vict.	2,000 cakes	do.	0 3 0	} J. Kitchen & Sons Pty. Ltd.
†1537	" Soft, to specification, in casks 3 to 4 cwt. "Imperial"	"	300 cwt.	cwt.	1 4 0	
†1538	" Toilet, in cakes, "Bouquet" .. ..	"	300 lb.	lb.	0 0 5½	Anglo Dominion Soaps Pty. Ltd.
†1539	" Toilet, in ½ oz. tablets, double-wrapped, perfumed (car equipment, &c.)	"	100 gross	gross	0 5 0	Arthur Tilley
†1540	Soap, Special, yellow, in bars, in boxes of approximately 1 cwt., to specification, unwrapped, "Prize Medal"	Vict.	60 cwt.	cwt.	1 3 6	J. Kitchen & Sons Pty. Ltd.
†1541	Soap, Common, Yellow, in bars, in boxes, of approximately 1 cwt., unwrapped, to Specification, "Tulip," approximately 32 bars per cwt.	"	300 "	do.	1 2 6	G. Mowling & Son
†1542	Soda Crystals, Washing, in bags .. ..	"	100 "	do.	0 7 0	Briscoe & Co. Ltd.
1543	Tapers, Wax, thick, 22" long, "Price's" ..	U.K.	50 lb.	lb.	0 2 3	Thos. Mitchell & Co. Pty. Ltd.
†1544	Wax, Paraffin, for Tarpaulin Dressing to Specification, in bags with cotton lining and outer of burlap	Dutch East Indies	50,000 "	lb.	0 0 4½	Socony Pty. Ltd.
1545 to 1547	Nil					

## CHEMICALS, ETC.

## SPECIFICATION OF ACID, SULPHURIC, FOR STORAGE BATTERIES.—

*Items Nos. 1580 to 1587.*

The Sulphuric Acid shall comply with Australian Engineering Standards Association Specification C. 60.

SPECIFICATION FOR CALCIUM CARBIDE.—*Items Nos. 1595 and 1596.*

The Calcium Carbide required under these items shall be delivered in air-tight metal containers and shall be reasonably free from dust and fine particles.

The Calcium Carbide shall be reasonably free from deleterious or inert impurities, and when tested shall be of such purity that one kilogram (35.3 ounces avoird.) of the carbide, on the application of excess water thereto, shall yield not less than 250 litres (8.825 cub. ft.) of acetylene gas when collected over water saturated with sodium chloride and at temperature of 15.5 deg. C.

The acetylene gas obtained, as described in clause 3, shall be tested for purity when it shall contain over 99% by volume of acetylene gas ( $C_2H_2$ ), and moreover, when further tested for phosphine gas ( $PH_3$ ), shall contain not more than 0.05% by volume thereof.

The Carbide supplied under Item 1595 shall be in lumps of the size known as 50/80 millimetres and not less than 95% of the Carbide shall be of that size.

The Carbide supplied under Item 1596 shall be granulated, of the size known as 7/15 millimetres and not less than 95% of the Carbide shall be of that size.

SPECIFICATION FOR MURIATE OF AMMONIA.—*Item No. 1601.*

**GENERAL DESCRIPTION.**—The material required under Item 1601 is Crystallized Ammonium Chloride (commonly termed Sal-Ammoniac or Muriate of Ammonia) containing not less than 99%  $NH_4Cl$ .

**STANDARD OF PURITY.**—The material shall conform with the following requirements:—

- (a) The crystals and tabloids respectively shall be clean and free from odour.
- (b) 10 grammes of the material, added to 30 cubic centimetres of distilled water at 20° C., should rapidly dissolve with occasional shaking to a clear solution.
- (c) The ash remaining after volatilization, by heating in a platinum dish 3 grammes of the material, should not amount to more than 0.75%.
- (d) Lead, copper, and other metals. 10 cubic centimetres of 10% solution of material in distilled water should show no appreciable darkening on the addition of an equal volume of hydrogen sulphide solution.
- (e) The material shall contain—
  - (i) Not more than 0.2 per cent. of sulphates, calculated in the form of sulphuric anhydride  $SO_3$ .
  - (ii) Not more than 0.01 per cent. of iron, calculated in the form of oxide  $Fe_2O_3$ .
  - (iii) Not more than 0.001 per cent. of compounds of arsenic, calculated as the element As.

**PACKING.**—The material shall be packed in strong, sound kegs or cases. The kegs or cases shall be made of dry well-seasoned new wood, of sufficient strength and suitably secured to prevent any loss of contents by leakage. The kegs or cases shall be well lined with strong brown paper. Item 1601 will be supplied in 2-cwt. casks.

Any delivery of second-hand, repaired, damaged, or broached kegs, casks or cases will be liable to rejection.

**MARKING.**—All containers shall be legibly marked in stencil, with the name of the material, the net weight of the contents, the brand or brand name (if any) and the name of the manufacturer.

**SAMPLES.**—Samples shall be taken from each delivery of the items enumerated, and these samples when tested in the laboratory shall conform to the specification (if any) and the specific gravities (if any) set out in the Schedule.

SPECIFICATION FOR ORANGE SHELLAC.—*Item No. 1603.*

The Shellac shall comply with the Australian Commonwealth Engineering Standards Association Specification K. 38.

**Acids.**—The specific gravity at 60° F. of the acids shall be as shown hereunder:—

Item No.	Acid.	Specific Gravity at 60° deg. F.
1565	Hydrochloric	Not less than 1.1725
1566-1569	Muriatic	Not less than 1.166
1570-1573	Nitric	Not less than 1.400
1574	Nitric C.P.	Not less than 1.400
1576-1579	Sulphuric	Not less than 1.820
1580-1583	Sulphuric for batteries	From 1.100 to 1.215
1584-1587	Sulphuric for batteries	From 1.216 to 1.300
1588	Sulphuric C.P.	Not less than 1.840

As regards Items Nos. 1580 to 1587, the Contractor will charge cartage at the rate of 12s. per ton for ton lots, and in less than ton lots at the Master Carriers Association rates, according to the actual quantity delivered at the one time.

As regards Items 1580 to 1587, 7s. each for jars and 7s. each for crates will be charged and credited if returned in good order and condition to Contractor's works free of cost within three months.

CHEMICALS, ETC.—*continued.*

Each delivery of empties should be properly reviewed, in order that due credit will be obtained, and steps should be taken to cancel any debits raised for jars found to be broken.

Each Jar of Battery Acid contains from 3 to 3½ gallons, and it is preferable that either weight or gallons be ordered rather than jars, which vary somewhat in size.

It should be noted that the Commonwealth Fertilizers and Chemicals Ltd. refused to sign a contract for Items 1580 to 1587, and the arrangement may be terminated by the Corporation at any time should it so desire.

The containers for the items shown below shall be charged for by the Contractors on delivery, but credited to the Department on return in good order and condition at the Metropolitan Receiving Depot:—

Bottles at 2s. 3d. each.—Item Nos. 1562, 1592, 1593.

Bottles at 4s. each.—Item Nos. 1565, 1566, 1570, 1574, 1576, 1588.

Jars at 7s. each and crates at 7s. each.—Items Nos. 1580 to 1587 (see above).

Jars at 7s. each.—1567 to 1569, 1571 to 1573, 1577 to 1579.

Jars at 10s. each.—Item 1600.

7-9 cwt. drums £10 each.—Item 1609.

Other drums, £1 each.—Item 1609.

As regards Items 1595 and 1596, rate is exclusive of stevedoring and wharfage, sufficient time to be allowed for importation to enable Bill of Lading to be made out in favour of Victorian Railways Commissioners so that wharfage may be cleared by Corporation. Storehouse Manager and Shipping Clerk to arrange.

\*\*As regards Items 1564, 1575, 1594, 1594A, 1600, 1601, 1601A, 1603, 1605, 1606, 1611 and 1615, the rates include Telegraphic Transfer Exchange between Australia and London at 25½ per cent. and if this rate of Exchange be varied during the Contract period, the difference calculated on 50 per cent., of the Contract rate shall be to the Corporation's account, and shall apply to any store that may be ordered after the expiration of a period of two months from the date the amended rate of T.T. Exchange is effective as notified by the Commonwealth Bank.

Rates for Items 1575, 1594A, 1603, 1605 and 1606 are firm as regards conversion.

\*\*As regards Item 1609, payment is to be made on basis of £9 2s. 6d. per ton of 41·3 per cent. NaOH, any variation in this percentage to be adjusted on pro rata basis.

Items 1561 and 1608, rates include cost of containers which are non-returnable.

Item 1604—Rate is firm.

Items 1595-1596—Name of Manufacturer—The Australian Commonwealth Carbide Co. Ltd.—IXL Brand.

Item No.	Description.	Country of Manufacture.	Estimated Requirements.	Rate per—	Rate.	Name of Contractor.
					£ s. d.	
1561	Acetone, chemically pure, in 1-lb. bottles ..	Vict.	3 lb.	lb.	0 3 6	H. B. Selby & Co. Pty. Ltd.
1562	Acetic, chemically pure, glacial in Winchester quarts	"	10 "	do.	0 3 5	Felton Grimwade & Duerdins Ltd.
1563	Nil.					
1564	Gallic .. .. .	U.K.	224 "	do.	0 4 1	Felton Grimwade & Duerdins Ltd.
1565	Hydrochloric, chemically pure, in Winchester quarts	Vict.	200 "	do.	0 1 5	Henry H. York & Co. Pty. Ltd.
	Muriatic, Hydrochloric, or Spirits of Salts, as ordered—					
1566	In Winchester quarts .. ..	"	15 cwt.	cwt.	1 5 6	Henry H. York & Co. Pty. Ltd.
1567	In lots of 6 jars or less .. ..	"	28 "	lb.	0 0 2½	
1568	In lots of 7 to 18 jars .. ..	"		do.	0 0 2½	
1569	In lots over 18 jars .. ..	"		do.	0 0 2½	
	Nitric—					
1570	In Winchester quarts .. ..	"	90 lb.	do.	0 0 10	Henry H. York & Co. Pty. Ltd.
1571	In lots of 6 jars or less .. ..	"	600 "	do.	0 0 7½	
1572	In lots of 7 to 18 jars .. ..	"		do.	0 0 7½	
1573	In lots of over 18 jars .. ..	"		do.	0 0 7½	
1574	Chemically pure .. ..	"		do.	0 1 8	
1575	Oxalic, in 1 cwt. kegs or bags ..	Germany	4,480 "	do.	0 0 9¾	Felton Grimwade & Duerdins Ltd.

Item No.	Description.	Country of Manufacture.	Estimated Requirements.	Rate per—	Rate.	Name of Contractor.
					£ s. d.	
CHEMICALS, ETC.—continued.						
1576	Sulphuric— In Winchester quarts .. ..	Vict.	50 lb.	lb.	0 0 2	Henry H. York & Co. Pty. Ltd.
1577	In lots of 6 jars or less .. ..	"	1,000 "	cwt.	0 9 0	
1578	In lots of 7 to 18 jars .. ..	"		do.	0 9 0	
1579	In lots of over 18 jars .. ..	"		do.	0 9 0	
	Sulphuric, for Storage Batteries, delivered ex Contractors' Works to Shelter Shed, North Melbourne, in 3-gallon jars— S.G. 1·100 to 1·215—					
1580	In lots of 6 to 18 jars .. ..	"	20 tons	lb.	0 0 2	Commonwealth Fer- tilizers & Chemicals Ltd.
1581	In lots of 19 to 35 jars .. ..	"		do.	0 0 1½	
1582	In lots of 36 to 51 jars .. ..	"		ton	15 0 0	
1583	In lots of 52 jars and over .. ..	"		do.	12 10 0	
	S.G. 1·216 to 1·300—					
1584	In lots of 6 to 18 jars .. ..	"	112 lb.	lb.	0 0 2½	Henry H. York & Co. Pty. Ltd.
1585	In lots of 19 to 35 jars .. ..	"		do.	0 0 2	
1586	In lots of 36 to 51 jars .. ..	"		ton	16 0 0	
1587	In lots of 52 jars and over .. ..	"		do.	13 0 0	
1588	Sulphuric, chemically pure, in ½-gallon stoppered bottles each containing 9 lb.	"		lb.	0 1 5	
1589	Nil					
1590	Aluminium Sulphate .. ..	"	400 "	do.	0 0 2	Hardie Trading Pty. Ltd.
1591	Nil					
	Ammonia, Liquid, .890 sg.—					
1592	In Winchester quarts .. ..	"	560 "	do.	0 0 8½	Felton Grimwade & Duerdins Ltd.
1593	Chemically pure, in Winchester quarts .. ..	"	6 qts.	Win. quart	0 4 0	
1594	Borax, Lump, in 1-cwt. bags .. ..	U.K.	2,240 lb.	lb.	0 0 3	Robert Bryce & Co. Pty. Ltd.
1594A	Borax, Powdered, in 1-cwt. bags .. ..	U.S.A.		ton	25 10 0	
1595	Calcium Carbide, Lump, in about 5-cwt. drums, 50/80	Tas.	60 tons	do.	26 0 0 c.i.f., Melb.	T. Mitchell & Co. Pty. Ltd.
1596	Calcium Carbide, Granulated, in 2-cwt. drums, 7/15	"	6 "	do.	26 0 0 c.i.f., Melb.	
1597	Carbon, Bi-Sulph., in new 5-gallon drums in crates	Vict.	100 gals.	drum 64 lb. nett	1 17 0	Henry H. York & Co. Pty. Ltd.
	Carbon, Tetra Chloride, S.G. 1·6—					
1598	In 40-gal. drums .. ..	"	19 cwt.	lb.	0 0 10	Felton Grimwade & Duerdins Ltd.
1599	" 5-gal. drums .. ..	"		do.	0 0 10	
1600	Formalin, Liquid, in 2-gallon jars .. ..	U.K.	300 lb.	do.	0 0 8½	Henry H. York & Co. Pty. Ltd.
†1601	Muriate of Ammonia (Sal Ammoniac) fine, in 2-cwt. casks	"	30 cwt.	cwt.	2 5 0	
1601A	Muriate of Ammonia (Sal Ammoniac) lump	"		do.	3 8 0	Felton Grimwade & Duerdins Ltd.
1602	Nil					Nil
1603	Shellac, Orange .. ..	India	60 lb.	lb.	0 1 3	Robert Bryce & Co. Pty. Ltd.
1604	" White .. ..	Vict. (partly)	60 "	do.	0 2 2	W. & G. Dean Pty. Ltd.
1605	" Brown .. ..	India	200 "	do.	0 1 3	Robert Bryce & Co. Pty. Ltd.
1606	" Button, for French Polishing .. ..	"	150 "	do.	0 1 2	
1607	Silver, Nitrate of, Crystal .. ..	Vict.	14 "	do.	1 10 0	Felton Grimwade, & Duerdins Ltd.
†1608	Soda, Caustic, Lump, minimum 73 per cent., Na <sub>2</sub> O in drums	"	30 tons	ton	29 10 0	Commonwealth Fertil- izers & Chemicals Ltd.
†1609	Soda, Caustic, Liquid, 41·3 per cent., NaOH, in drums 16 or 10 to the ton or 7/9 cwt.	"	20 "	do.	**9 2 6	
†1610	Soda, Caustic, Powdered, 1-lb. tins, 98/99 per cent., NaOH, in case lots	" (partly)	48 tins	dozen tins	0 7 3	
1610A	Nil					
1611	Sodium, Bi-Carbonate, chemically pure .. ..	U.K.	440 lb.	lb.	0 0 2½	Felton, Grimwade & Duerdins Ltd.
1612	Sulphur, Flowers of .. ..	Vict.	224 "	do.	0 0 2	W. & G. Dean Pty. Ltd.

Item No.	Description	Country of Manufacture.	Estimated Requirements.	Rate per—	Rate.	Name of Contractor.
					£ s. d.	
CHEMICALS, ETC.— <i>continued.</i>						
1613	Tubes, Glass, charged with 90 per cent. Sulphuric Acid, with blue bead, for Conical Fire Extinguishers, to Litho. No. 148/25 amended 28/1/28	Vict.	1,000	each	0 1 3	Felton, Grimwade, & Duerdins Ltd.
1614	Tubes, Glass, charged with 90 per cent. Sulphuric Acid, with red bead, for Cylindrical Fire Extinguishers, to Litho. No. 148/25 amended 28/1/28	"	200	do.	0 1 3	
1615	Beakers, Pyrex Squat, 600 ccs. . . . .	U.K.	4 doz.	dozen	1 5 0	H. B. Selby & Co. Pty. Ltd.
1616 to 1642	Nil					

## COPPER PRODUCTS.

(See Appendix "G" for Specification.)

In the event of the material requiring to be imported into the State of Victoria the rates tendered shall include wharfage—and in the event of the material requiring to be imported after receipt of an order, and if the quantity involved is sufficient to warrant action being taken, it is desired that the material be consigned to the Comptroller of Stores of the Victorian Railways Department in order that the benefit of free wharfage may be obtained. Officers ordering to arrange accordingly.

Wharfage will be cleared by the Corporation and the Delivery Order returned to the Contractor to complete delivery. The amount involved will be deducted from the Contractor's invoice.

*Delivery.*—Items Nos. 1639 to 1682 at the Metropolitan Receiving Depot, Spencer-street.

Items Nos. 1683, 1685, and 1686 at the Corporation's Electrical Depot Storehouse, Spencer-street.

Items Nos. 1684 and 1686A at the Corporation's Jolimont Workshops Store, Batman-avenue, Melbourne, and the weights as ascertained at the time of delivery at these depots shall be accepted.

†As regards Items 1639 to 1666, and 1686, the rates are based on the price of £52 10s. per ton, which is the equivalent in Australian currency for Electrolytic Copper Wire Bars and are to be varied up or down by 1/10th of a penny per lb. of tubes for each complete 20s. or part thereof by which the price in Australian currency of wire bars on the date of receipt of order is greater than £52 19s. 11d., or less than £52 per ton respectively.

The equivalent in Australian currency of the London Metal Exchange price for Electrolytic Copper Wire Bars is the London Metal Exchange rate for E.C. Wire bars as issued by the Australian Mines and Metals Association plus the percentage as is quoted by the Commonwealth Bank as their buying rate for T.T. on London.

If on any day no price of wire bars is published or if no T.T. Exchange rate is quoted, the rates last issued shall apply in either or both cases.

In the case of a dispute concerning the published buying rate, for telegraphic transfer to London, the figures advised by the Commonwealth Bank as last published by them prior to the day of receipt of the order shall be mutually accepted.

As regards Items 1639 to 1666, and 1686, if under any item a lesser quantity than 3 cwt. is ordered, 2d. per lb. extra will be charged.

If tubes require to be annealed an extra of 0.5 per lb. will be charged.

Extra for dead lengths up to and including 18 feet, 1d. per lb. extra, over 18 feet to 20 feet, 2d. per lb. extra.

Orders under 3 cwt. will be packed and delivered with orders over 3 cwt. If separate delivery of orders under 3 cwt. be required, packing and forwarding charges will be extra to Corporation's Account.

*Delivery.*—Six to eight weeks shall be allowed for delivery.

†As regards Items 1668 to 1678 and 1686A (Austral Bronze Co.) the rates are based on Electrolytic Copper Wire Bars at £35 per ton, plus of T.T. Exchange at 25% which is the Australian equivalent price of E.C. Wire bars and are subject to the corresponding variation in the Australian equivalent price of Electrolytic Copper Wire bars according to the London metal quotations as published in the *Argus* on date of receipt of order and the buying rate for T.T. on London.

If on any day no price of wire bars is published, or if no Telegraphic Transfer Exchange rate is quoted, the rates last issued shall apply in either or both cases.

In the case of a dispute concerning the published price of wire bars the figures advised by the Australian Mines and Metals Association as last received from London Metal Exchange prior to the date of acceptance of order shall be mutually accepted. Similarly in the event of a dispute concerning the Telegraphic Transfer Exchange rate, the figures advised by the Commonwealth Bank as last published by them prior to date of receipt of order shall apply.



COPPER PRODUCTS.—*continued.*

†As regards Items 1679 and 1680, the rates are based on £50 per ton, which is the Australian equivalent of the London price for Electrolytic Copper Wire Bars published in the *Argus* and are to be varied 1/10th of a penny per lb. of sheets for each complete 20s. or part thereof per ton by which the Australian equivalent price published in the *Argus* on the date of receipt of order is greater than £50 per ton or less than £50 per ton respectively. If on any day no price of wire bars is published, the price last published shall apply. If no buying rate is quoted by the Commonwealth Bank for T.T. on London on any day, the rate last published shall apply.

†As regards Items 1681 to 1683, the rates are based on £50 per ton, which is the equivalent in Australian currency for Electrolytic Copper Wire Bars and are to be varied up or down by 1/10th of a penny per lb. of copper for each complete 20s. or part thereof by which the price in Australian currency of wire bars published on the date of receipt of order is greater than £50 19s. 11d. or less than £50 per ton respectively. Same stipulations and adjustments in this regard apply as shown for Items 1639 to 1666, and 1686 above.

Rates quoted are for orders of not less than three standard coils of approximately 130 lb. each at one time. Orders for quantities of less than three coils will be charged ½d. per lb. extra.

*Delivery.*—Three to four weeks from receipt of order.

†As regards Item 1684 the rate is based on Electrolytic Copper Wire Bars at a minimum of £40 per ton. Any rise in the price of Electrolytic Copper Wire Bars above £40 per ton, as published in the *Argus* on the date of receipt of order, will be added to the contract rate.

As regards the Contract with the Austral Bronze Co., should there be any variation in the N.S.W. State basic wage from £3s. 8s. 6d. per week during the Contract period, the Contract rates shall be varied in accordance therewith at the rate of 4s. 6d. per ton for every 1s. per week increase or decrease in the basic wage, the amended rates to apply to all incomplete orders at the date of such amendment.

The rate for Item 1667 is firm.

Item No.	Description.	Country of Manufacture.	Estimated Requirements.	Rate per—	Rate.	Name of Contractor.
					£ s. d.	
	Copper Tubing, Solid Drawn, in 14' to 18' lengths—"Metal Manufactures Ltd."					
1639	20 S.W. gauge, 3/16" outside diameter ..	N.S.W.	1 cwt.	lb.	10 1 11.4	Knox, Schlapp & Co.
1640	18 " " 5/16" " " ..	"	15 "	"	10 1 5	
1641	16 " " 1/2" " " ..	"	1 "	"	10 1 8.7	
1642	16 " " 5/16" " " ..	"	1 "	"	10 1 8.7	
1643	16 " " 3/8" " " ..	"	5 "	"	10 1 5.8	
1644	16 " " 1/2" " " ..	"	6 "	"	10 1 4.8	
1645	14 " " 1/2" " " ..	"	10 "	"	10 1 4.4	
1646	14 " " 3/8" " " ..	"	5 "	"	10 1 4.2	
1647	14 " " 1/2" " " ..	"	5 "	"	10 1 3.9	
1648	14 " " 1 1/2" " " ..	"	1 "	"	10 1 3.2	
1649	12 " " 1 " " " ..	"	25 "	"	10 1 4.2	
1650	12 " " 1 1/4" " " ..	"	20 "	"	10 1 3.2	
1651	12 " " 1 1/2" " " ..	"	1 "	"	10 1 3.2	
1652	10 " " 1 1/2" " " ..	"	5 "	"	10 1 3.2	
1653	10 " " 1 3/4" " " ..	"	42 "	"	10 1 3.2	
1654	10 " " 2 " " " ..	"	1 "	"	10 1 3.2	
1655	10 " " 2 1/4" " " ..	"	1 "	"	10 1 3.2	
1656	10 " " 2 1/2" " " ..	"	1 "	"	10 1 3.2	
1657	8 " " 1 " " " ..	"	9 "	"	10 1 4.5	
1658	3/16" " 4" " " ..	"	1 "	"	10 1 3.9	
1659	3/16" " 5 1/4" " " ..	"	5 "	"	10 1 4.5	
1660	3/16" " 5 1/2" " " ..	"	15 "	"	10 1 4.5	
1661	1/4" " 3 1/2" " " ..	"	1 "	"	10 1 3.9	Austral Bronze Co. Ltd.
1662	1/4" " 4 1/4" " " ..	"	1 "	"	10 1 3.9	
1663	1/4" " 5 1/4" " " ..	"	1 "	"	10 1 4.5	
1664	1/4" " 6" " " ..	"	5 "	"	10 1 4.5	
1665	1/4" " 6 1/2" " " ..	"	5 "	"	10 1 5.5	
1666	5/16" " 4 1/2" " " ..	"	100 "	"	10 1 3.9	
1667	Copper Phosphor, 15 per cent.—"Austral Bronze"	"	5 "	"	0 1 3 1/2	
1668	Copper Rod, Electrolytic—"Austral Bronze"					
1668A	1/8" diameter ..	"	50 lb.	"	10 0 10 1/4	
1669	1/8" " ..	"	"	"	10 0 10 1/4	
1669A	3/16" " ..	"	100 "	"	10 0 10 1/4	
1670	1/8" " ..	"	50 "	"	10 0 10 1/4	

Item No.	Description.	Country of Manufacture.	Estimated Requirements.	Rate per—	Rate.	Name of Contractor.
					£ s. d.	
COPPER PRODUCTS—continued.						
	<b>Copper Rod for Loco. Fire Boxes—Rolled</b>					
	“Austral Bronze”					
1671	$\frac{7}{8}$ " diameter .. .. .	N.S.W.	1 ton	ton	£89 5 0	Austral Bronze Co. Ltd.
1672	1" .. .. .	"	12 "	do.	£89 5 0	
1673	$1\frac{1}{16}$ " .. .. .	"	6 "	do.	£89 5 0	
1674	$1\frac{3}{16}$ " .. .. .	"	3 "	do.	£89 5 0	
1675	$1\frac{5}{16}$ " .. .. .	"	20 cwt.	do.	£89 5 0	
1676	$1\frac{7}{16}$ " .. .. .	"	5 "	do.	£89 5 0	
1677	$1\frac{9}{16}$ " .. .. .	"	10 "	do.	£89 5 0	
1678	$1\frac{11}{16}$ " .. .. .	"	3 "	do.	£89 5 0	George White & Co.
1679	Copper Sheet, best hard rolled, Nos. 12 to 34 Birmingham Sheet Gauges, in any of the following trade sizes and gauges, as ordered— 12 to 26 g 8' x 4', 8' x 3', 6' x 4', 6' x 3', 6' x 2', 6' x 2 $\frac{1}{2}$ ', 4' x 2', 27 to 30 g 6' x 2', 6' x 1 $\frac{1}{2}$ ', 4' x 2', 31 to 34 in strips not over 12" in width “Austral Bronze”	"	15 "	lb.	£0 1 5	
1680	Copper Sheet, best soft rolled, Nos. 12 to 34 Birmingham Sheet Gauge, as ordered, any size gauge ordered, as shown for Item No. 1679, “Austral Bronze”	"	20 "	do.	£0 1 4	
1681	Copper Strip, hard drawn, No. 10 S.W.G., 2 $\frac{1}{4}$ " wide, to be supplied in standard coils of 130 lb., to Specification, “Metal Manufactures Ltd.”	"	360 feet	do.	£0 1 4.3	
1682	Copper Strip, hard drawn, No. 10 S.W.G., 1 $\frac{1}{2}$ " wide, to be supplied in standard coils of 130 lb., to Specification, or in straight lengths of not less than 12', “Metal Manufactures Ltd.”	"	1,200 "	do.	£0 1 2.3	
1683	Half Moon Copper Strip, to Drawing No. 1131 and to Specification, manufactured from new material, and in coils of approximately 80 to 112 lb., “Metal Manufactures Ltd.”	"	4,000 "	do.	£0 2 0.3	
*1684	Copper Angle for contactor tips .. .. .	Vict.	750 lb.	do.	£0 1 0	Brass Co. of Aust. Pty. Ltd.
1685	Arsenical Copper Tube, to Specification .. .. .	N.S.W.	6,000 feet	..	..	Nil
1686	Seamless Copper Tube, to Specification, “Metal Manufactures Ltd.”	"		lb.	£0 1 4.4	Knox Schlapp & Co.
1686A	Copper Strip, for Pantographs, to Specification “Austral Bronze”	"	10,000 lb.	do.	0 0 11	Austral Bronze Co. Ltd.

### METALS—ALUMINIUM, ANTIMONY, BRASS, ETC.

(See Appendix “H” for Specification.)

**Delivery.**—All materials specified in this schedule shall be delivered to the Metropolitan Receiving Depot, and the weights as ascertained at the time of delivery at that depot shall be accepted.

The rates for Items Nos. 1771 and 1772 include Telegraphic Transfer Exchange between Australia and London at 25 $\frac{1}{2}$  per cent., and if this rate of Exchange be varied during the contract period, the difference calculated on 50 per cent. of the contract rate shall be to the Corporation's account, and shall apply to any stores that may be ordered, after the expiration of a period of two months from the date the amended rate of T.T. Exchange is effective as notified by the Commonwealth Bank.

The Pig Lead (Item No. 1764) and Zinc (Item No. 1770) shall be paid for at the latest cabled market *spot* price for Pig Lead and Spelter, respectively quoted in the Melbourne morning daily newspapers prior to the service of the order (unless, in the judgment of the Comptroller of Stores, the price quoted as aforesaid does not correctly represent the *spot* market price for Lead or Spelter prevailing on the day of the date of such cabled market *spot* price) plus the sum set opposite to Items Nos. 1764 and 1770 in the Schedule, as the case may be, always provided that if, in the judgment of the Comptroller of Stores, the cable market *spot* price quoted as aforesaid in the Melbourne morning daily newspapers, or any of them, does not correctly represent the market price for Lead or Spelter prevailing on the day of the date of such cabled market price, then the market price prevailing on such day shall be determined by the Comptroller of Stores on evidence satisfactory to him, and such determination by the Comptroller of Stores shall be final and binding, and the rate of payment for the Pig Lead or Zinc referred to on the particular order shall be in accordance with the price so determined by the Comptroller of Stores, plus the sum set opposite to Item No. 1764 or 1770 as aforesaid. Further as regards Item No. 1764, the rate is based on Telegraphic Transfer Exchange at 25 $\frac{1}{2}$  per cent., any difference in this rate at date of order shall be to the Corporation's account, adjustment to be made on the cable market price only.

METALS—ALUMINIUM, ANTIMONY, BRASS, ETC.—*continued.*

As regards Items Nos. 1689 to 1741 (Austral Bronze Co. Ltd.), the rates are based on Electrolytic Copper Wire Bars at over £25 to £35 per ton and will vary by 2s. 4d. per cwt., when the price of Electrolytic Copper Wire Bars is over £35 to £45 per ton, and a further 2s. 4d. per cwt. for every additional £5 or part per ton increase in the published price of Electrolytic Copper Wire Bars in the *Argus* newspaper on the date of receipt of order by the Contractor.

† As regards Items Nos. 1750 to 1763, the rates are based on Electrolytic Copper Wire Bars at £50 per ton which is the Australian equivalent of the London Metal Exchange price for Electrolytic Copper Wire Bars, and will vary up or down by one-tenth of a penny per lb., for each complete 20/- or part thereof per ton by which the Australian equivalent price of Wire Bars published in the *Argus* newspaper on the date of receipt of an order is greater or less than £50 per ton. If on any day no price of Wire Bars is published the price last published shall apply. If no buying rate is quoted by the Associated Banks for T.T. on London on any day, the rate last published shall apply.

As regards the contract with the Austral Bronze Co. should there be any variation in the N.S.W. State basic wage from £3 8s. 6d. per week during the contract period, the contract rates shall be varied in accordance therewith at the rate of 4s. 6d. per ton for every 1s. per week increase or decrease in the basic wage, the amended rates to apply to all incomplete orders at the date of such amendment.

Item No.	Description.	Country of Manufacture.	Estimated Requirements.	Rate per—	Rate.	Name of Contractor.
					£ s. d.	
METALS.						
†1687	Aluminium, Ingot .. .. .	N.S.W. (partly)	15 cwt.	cwt.	5 14 0	Ingot Metals Ltd.
†1688	Antimony, Ingot, Regulus of, 99.5 per cent. pure, "Star," "O. T. Lempriere"	N.S.W.	250 ..	do.	2 17 6	O. T. Lempriere & Co.
	Brass, Rod, Hexagon, in 6' to 8' lengths, Whitworth standard, "Austral Bronze"—min. max.					
1689	0.187" 0.190" width across flats ..	"	150 cwt.	do.	‡3 14 8	Austral Bronze Co. Ltd.
1690	0.250" 0.253" width across flats ..	"		do.	‡3 14 8	
1691	0.334" 0.338" width across flats, for $\frac{1}{8}$ " nuts	"		do.	‡2 18 4	
1692	0.440" 0.445" width across flats, for $\frac{3}{16}$ " nuts	"		do.	‡2 18 4	
1693	0.520" 0.525" width across flats, for $\frac{1}{4}$ " nuts	"		do.	‡2 18 4	
1694	0.595" 0.600" width across flats, for $\frac{5}{16}$ " nuts	"		do.	‡2 18 4	
1695	0.705" 0.710" width across flats, for $\frac{3}{8}$ " nuts	"		do.	‡2 18 4	
1696	0.750" 0.755" .. .. .	"		do.	‡2 18 4	
1697	0.815" 0.820" width across flats, for $\frac{7}{16}$ " nuts	"		do.	‡2 18 4	
1698	0.915" 0.920" width across flats, for $\frac{1}{2}$ " nuts	"		do.	‡2 18 4	
1699	1.002" 1.010" width across flats, for $\frac{9}{16}$ " nuts	"		do.	‡2 18 4	
1700	1.092" 1.100" width across flats, for $\frac{5}{8}$ " nuts	"		do.	‡2 18 4	
1701	1.192" 1.200" width across flats, for $\frac{11}{16}$ " nuts	"		do.	‡2 18 4	
1702	1.292" 1.300" width across flats, for $\frac{3}{4}$ " nuts	"		do.	‡2 18 4	
1703	1.382" 1.390" width across flats, for $\frac{13}{16}$ " nuts	"		do.	‡2 18 4	
1704	1.468" 1.480" width across flats, for $\frac{7}{8}$ " nuts	"		do.	‡2 18 4	
1705	1.658" 1.670" width across flats, for 1" nuts	"		do.	‡2 18 4	
1706	1.845" 1.860" width across flats, for $1\frac{1}{8}$ " nuts	"		do.	‡2 18 4	
1707	2.035" 2.050" width across flats, for $1\frac{1}{4}$ " nuts	"		do.	‡2 18 4	
1708	2.200" 2.220" width across flats, for $1\frac{3}{8}$ " nuts	"		do.	‡2 18 4	
1709	2.390" 2.410" width across flats, for $1\frac{1}{2}$ " nuts	"		do.	‡2 18 4	
1710	2.555" 2.580" width across flats, for $1\frac{5}{8}$ " nuts	"		do.	‡2 18 4	
1711	2.735" 2.760" width across flats, for $1\frac{3}{4}$ " nuts	"		do.	‡2 18 4	

Item No.	Description.	Country of Manufacture.	Estimated Requirements.	Rate per—	Rate.	Name of Contractor.
					£ s. d.	
<b>METALS—continued.</b>						
	Brass, Rod, round, in 6' to 8' lengths for general use, or drop forgings, as ordered—"Austral Bronze"					
1712	1" diameter .. .. .	N.S.W.		wct.	£3 18 4	Austral Bronze Co. Ltd.
1713	1 1/8" .. .. .	"		do.	£3 10 0	
1714	1 1/4" .. .. .	"		do.	£2 18 4	
1715	1 1/2" .. .. .	"		do.	£2 18 4	
1716	1 3/4" .. .. .	"		do.	£2 18 4	
1717	1 7/8" .. .. .	"		do.	£2 18 4	
1718	2" .. .. .	"		do.	£2 18 4	
1719	2 1/8" .. .. .	"		do.	£2 18 4	
1720	2 1/4" .. .. .	"		do.	£2 18 4	
1721	2 1/2" .. .. .	"		do.	£2 18 4	
1722	2 3/4" .. .. .	"		do.	£2 18 4	
1723	3" .. .. .	"		do.	£2 18 4	
1724	3 1/8" .. .. .	"		do.	£2 18 4	
1725	3 1/4" .. .. .	"		do.	£2 18 4	
1726	3 1/2" .. .. .	"		do.	£2 18 4	
1727	3 3/4" .. .. .	"		do.	£2 18 4	
1728	4" .. .. .	"		do.	£2 18 4	
1729	4 1/8" .. .. .	"	120 cwt.	do.	£2 18 4	
1730	4 1/4" .. .. .	"		do.	£2 18 4	
1731	4 1/2" .. .. .	"		do.	£2 18 4	
1732	4 3/4" .. .. .	"		do.	£2 18 4	
1733	5" .. .. .	"		do.	£2 18 4	
1734	5 1/8" .. .. .	"		do.	£2 18 4	
1735	5 1/4" .. .. .	"		cwt.	£2 18 4	Noyes Bros. (Mell.) Pty. Ltd.
1736	5 1/2" .. .. .	"		do.	£2 18 4	
1737	5 3/4" .. .. .	"		do.	£2 18 4	
1738	6" .. .. .	"		do.	£2 18 4	
1739	6 1/8" .. .. .	"		do.	£2 18 4	
1740	6 1/4" .. .. .	"		do.	£2 18 4	
	Brass Rod, square, in 6' to 8' lengths—"Austral Bronze"					
1741	1" square .. .. .	"	1 cwt.	do.	£2 18 4	
	Brass Sheet, hard rolled, as specified, "Defence Department, Footscray"—					
1742	6' x 2' x 30 B. gauge .. .. .	Vict.		lb.	0 1 3 1/2	
1742A	6' x 2' x 28 B. gauge .. .. .	"		do.	0 1 2 3/4	
1742B	6' x 2' x 26 B. gauge .. .. .	"		do.	0 1 1 1/2	
1742C	6' x 2' x 24 B. gauge .. .. .	"		do.	0 1 1	
1742D	6' x 2' x 22 B. gauge .. .. .	"		do.	0 1 0 3/4	
1742E	6' x 2' x 20 or 18 B. gauge .. .. .	"		do.	0 1 0 1/2	
1742F	6' x 2' x 16, 14 or 12 B. gauge .. .. .	"		do.	0 1 0 1/4	
1742G	6' x 2' x 10 B. gauge .. .. .	"		do.	0 1 0 1/4	
1743	6' x 2' x any of the following thicknesses as ordered:—3/16", 1/4", or 5/16"	"		do.	0 1 3 1/2	
1744	6' x 3' x 24 B. gauge .. .. .	"		do.	0 1 2	
1744A	6' x 3' x 20 or 18 B. gauge .. .. .	"	14 cwt.	do.	0 1 1 1/2	
1744B	6' x 3' x 16, 14 or 12 B. gauge .. .. .	"		do.	0 1 1 1/4	
1744C	6' x 3' x 10 B. gauge .. .. .	"		do.	0 1 1 1/4	
1745	4' x 2' x 30 B. gauge .. .. .	"		do.	0 1 3 1/2	
1745A	4' x 2' x 28 B. gauge .. .. .	"		do.	0 1 2 3/4	
1745B	4' x 2' x 26 B. gauge .. .. .	"		do.	0 1 1 1/2	
1745C	4' x 2' x 24 B. gauge .. .. .	"		do.	0 1 1	
1745D	4' x 2' x 22 B. gauge .. .. .	"		do.	0 1 0 3/4	
1745E	4' x 2' x 20 or 18 B. gauge .. .. .	"		do.	0 1 0 1/2	
1745F	4' x 2' x 16, 14 or 12 B. gauge .. .. .	"		do.	0 1 0 1/4	
1745G	4' x 2' x 10 B. gauge .. .. .	"		do.	0 1 0 1/4	
	Brass, Sheet, annealed as specified—					
1746	6' or 4' x 2' x 30 B. gauge .. .. .	"		do.	0 1 3 1/2	14 cwt.
1746A	6' or 4' x 2' x 28 B. gauge .. .. .	"		do.	0 1 2 3/4	
1746B	6' or 4' x 2' x 26 B. gauge .. .. .	"		do.	0 1 1 1/2	
1746C	6' or 4' x 2' x 24 B. gauge .. .. .	"		do.	0 1 1	
1746D	6' or 4' x 2' x 22 B. gauge .. .. .	"		do.	0 1 0 3/4	
1746E	6' or 4' x 2' x 20 or 18 B. gauge .. .. .	"		do.	0 1 0 1/2	
1746F	6' or 4' x 2' x 16, 14 or 12 B. gauge .. .. .	"		do.	0 1 0 1/4	
1746G	6' or 4' x 2' x 10, 9 or 8 B. gauge .. .. .	"		do.	0 1 0 1/4	
1747	6' x 2' x 3/16" or 1/4" thick .. .. .	"		do.	0 1 3 1/2	

Item No.	Description.	Country of Manufacture.	Estimated Requirements.	Rate per—	Rate.	Name of Contractor.
					£ s. d.	
METALS—continued.						
Brass Sheet, &c.—continued.						
1748	4' x 1' x $\frac{1}{8}$ ", $\frac{3}{8}$ ", $\frac{1}{2}$ " or 1" .. ..	Vict.		lb.	0 1 3 $\frac{1}{2}$	Noyes Bros. (Melb.) Pty. Ltd.
1749	6' x 3' x 22 B. gauge .. ..	"		do.	0 1 1 $\frac{1}{2}$	
1749A	6' x 3' x 20 or 18 B. gauge .. ..	"		do.	0 1 1 $\frac{1}{2}$	
1749B	6' x 3' x 16, 14 or 12 B. gauge .. ..	"		do.	0 1 1 $\frac{1}{2}$	
1749C	6' x 3' x 10 B. gauge .. ..	"		do.	0 1 1 $\frac{1}{2}$	
Brass Tubing (except Boiler Tubes), solid drawn, any length ordered, "Metal Manufacturers Ltd."—						
1750	$\frac{1}{4}$ " outside diameter x 26, 24, 22, 18 or 16 S.W. gauges, as ordered	N.S.W.		do.	10 2 5	George White & Co.
1751	$\frac{5}{16}$ " outside diameter x 24, 20, 18 or 16 S.W. gauges, as ordered	"		do.	10 2 5	
1752	$\frac{3}{8}$ " outside diameter x 20, 18, 16, 14, 12 or 10 S.W. gauges, as ordered	"		do.	10 2 0	
1753	$\frac{7}{16}$ " outside diameter x 20, 18, 16 or 14 S.W. gauges, as ordered	"		do.	10 2 0	
1754	$\frac{1}{2}$ " outside diameter x 20, 18, 16, 14 or 10 S.W. gauges, as ordered	"		do.	10 1 11	
1755	$\frac{9}{16}$ " outside diameter x 20, 18 or 16 S.W. gauges, as ordered	"		do.	10 1 11	
1756	$\frac{5}{8}$ " outside diameter x 20, 18, 16, 14, 12 or 10 S.W. gauges, as ordered	"	1500 lb.	do.	10 1 10	
1757	$\frac{3}{4}$ " outside diameter x 20, 18, 16, 14, 12 or 10 S.W. gauges, as ordered	"		do.	10 1 8 $\frac{1}{2}$	
1758	$\frac{11}{16}$ " outside diameter x 22, 16 or 10 S.W. gauges, as ordered	N.S.W.		lb.	10 1 8 $\frac{1}{2}$	
1759	$\frac{7}{8}$ " outside diameter x 20, 18, 16, 14, 12 or 10 S.W. gauges, as ordered	"		do.	10 1 9 $\frac{1}{2}$	
1760	1" outside diameter x 20, 18, 16, 14, 12 or 10 S.W. gauges, as ordered	"		do.	10 1 8 $\frac{1}{2}$	
1761	1 $\frac{1}{8}$ " outside diameter x 20, 18, 16, 14, 12 or 10 S.W. gauges, as ordered	"		do.	10 1 8 $\frac{1}{2}$	
1762	1 $\frac{1}{4}$ " outside diameter x 20, 18, 16, 14, 12 or 10 S.W. gauges, as ordered	"		do.	10 1 8 $\frac{1}{2}$	
1763	1 $\frac{1}{2}$ " outside diameter x 20, 18, 16, 14, 12, or 10 S.W. gauges, as ordered	"		do.	10 1 8 $\frac{1}{2}$	
LEAD.						
†1764	Lead, Pig, soft (re-melted) .. ..	Vict.	20 tons	ton	13 10 0	Moreland Metal Co. Ltd.
†1765	Lead, Pig, soft, produced from new material .. ..	"	1 ton	do.	..	
†1766	Lead, Sheet, any thicknesses ordered, and cut to any sizes ordered	"	5 tons	do.	..	Nil
Antimonial Lead Strip, extruded, in rolls, to Specification—						
1767	2" wide x .125" thick .. ..	"	28 cwt.	cwt.	..	
1768	2" wide x .06" thick .. ..	"	28 "	do.	..	
1769	1 $\frac{3}{16}$ " wide x .06" thick .. ..	"	9 "	do.	..	
ZINC.						
1770	Zinc, Electrolytic, 99.9 per cent., "Electrolytic Zinc Co."	Tas.	10 cwt.	cwt.	10 8 0	Briscoe & Co. Ltd.
†1771	Zinc, Sheet, Perforated, 84 holes to the square inch, each hole 0.085" diameter, No. 6 Zinc Gauge (0.011"), in sheets 7' x 3' or 8' x 3', as ordered	U.K.	50 sq. ft.	sq. ft.	0 0 2 $\frac{1}{2}$	
†1772	Zinc, Plain, No. 8 Zinc Gauge (0.015"), 9 Zinc Gauge (0.017"), 10 Zinc Gauge (0.019"), 11 Zinc Gauge (0.021"), 12 Zinc Gauge (0.025"), 13 Zinc Gauge (0.028"), 14 Zinc Gauge (0.031"), 20 Zinc Gauge (0.070"), as ordered, by any size ordered	"	2 cwt.	cwt.	2 10 0	
1773 to 1780	Nil.					

## PNEUMATIC AND SOLID TYRES.

All Covers and Tubes must be of the standard first grade production.

As regards Items Nos. 2214 to 2214B, the following Guarantee has been submitted by the three Contractors :—

No specific warranty is given or implied with the Tyres tendered, but should any faults in material or manufacture develop within 180 days, which in Contractor's judgment preclude reasonable service being obtained by the user, then they will be—

- (a) Repaired free of charge, or
- (b) A proportionate allowance will be made on a new Tyre off the then current list, taking into consideration the service rendered by the defective Tyre on a basis of 5,000 miles. No cash refund will be made.

The Contractors expressly disclaim any responsibility for—

- (a) Covers that wear out before 180 days, if, in the Contractor's opinion, the Covers were free from faulty workmanship.
- (b) Covers (whether of faulty workmanship or not) that have been destroyed or injured by accident, improper inflations, used on wheels out of alignment, used on rims that are rusty, damaged, or not of standard size for the Cover, or used in conjunction with any substitute for air, or any other improper usage.
- (c) Covers used on Motor Cycles, Side Cars, or Motor Tricycles.
- (d) Covers used to carry loads that, taking the horse-power of the vehicles and road conditions into consideration, are considered by the Contractors to be excessive.
- (e) Covers bought second-hand, blemished Covers, or Covers marked B or JOB.
- (f) Accidents or damage to persons or property arising from any defect in Covers or Tubes, or to defective fitting by Contractor's servants or others.
- (g) Covers fitted to any vehicle used for towage.

## SPECIFICATION I.R. TYRES.—Items Nos. 2215 to 2223.

As regards Items Nos. 2215 to 2223, the Tyres shall be of the very best quality, solid grey indiarubber, and shall be securely vulcanized to the rims of the Corporation's vehicles. The moulds and rims may be inspected at the workshops of the Corporation at Newport. The moulds and rims will be delivered to the Contractor at the Metropolitan Receiving Depot, and shall be returned with the tyres and rims on the completion of an order or on demand in good order and condition to the Metropolitan Receiving Depot, Spencer-street.

As regards Item No. 2214, the estimated requirements are based on the full list price.

Orders for Tyres, Items Nos. 2214-2214B, are to be issued in following proportions :—

Dunlop 45% ..	..	} of Department's requirements.
Goodyear 35% ..	..	
Barnet Glass 20% ..	..	

The Price Lists are subject to variation, and in the event of rates being increased Corporation has the right to accept amended rates within seven days or cancel contract.

Item No.	Description.	Country of Manufacture.	Estimated Requirements.	Rate per—	Rate.	Name of Contractor.
					£ s d	
2214	Tyres, Pneumatic (Covers and Tubes), for motor cars, trucks, and buses, as may be ordered, "Dunlop"	Vict.	£1,000	each	Per Cent. off Price List dated 27/7/33. 17½%, 7½% and 2½%.	Dunlop Perdriau Rubber Co. Ltd.
2214A	Tyres, Pneumatic (Covers and Tubes), for motor cars, trucks, and buses, as may be ordered, "Barnet Glass"	Vict.		do.	do.	Barnet Glass Rubber Co. Ltd.
2214B	Tyres, Pneumatic (Covers and Tubes), for motor cars, trucks, and buses, as may be ordered, "Goodyear"	N.S.W.		do.	do.	The Goodyear Tyre & Rubber Co. of A'sia Pty. Ltd.
	Tyres, solid rubber, to be moulded on rims, for industrial trucks—					
2215	6½" dia. x 6½" .. .. .	Vict.	2	do.	2 10 3	} Dunlop Perdriau Rubber Co. Ltd.
2216	6½" dia. x 5" .. .. .	"	4	do.	1 13 9	
2217	11½" dia. x 4½" .. .. .	"	6	do.	2 5 0	
2218	14½" dia. x 3" .. .. .	"	2	do.	2 10 0	
2219	14½" dia. x 4" .. .. .	"	2	do.	2 12 6	
2220	16" dia. x 4" .. .. .	"	12	do.	3 2 0	
2221	17½" dia. x 3½" .. .. .	"	4	do.	3 6 0	
2222	17½" dia. x 5" .. .. .	"	4	do.	3 10 0	
2223	20" dia. x 3½" .. .. .	"	4	do.	4 2 0	
2224						
to 2237	Nil					

## GALVANIZED IRON.

## SPECIFICATION.

*Samples.*—The tenderer shall submit one sheet of galvanized iron for each quality of galvanizing of plain and corrugated iron; every sheet submitted shall be clearly branded, and labelled so that the item or items to which each relates is definite.

*Quality.*—The galvanized iron, both corrugated and plain, shall be manufactured from high grade wrought iron or low carbon steel, galvanized with a continuous coating of zinc of uniform thickness, and so applied that it adheres firmly to the surface of the iron or steel. The finished product shall be smooth, without adhering clumps or drops of spelter. The samples submitted shall be subjected to tests to determine the following properties:—

- (a) The weight of zinc coating, expressed in ounces, on both sides of a sheet one foot square;
- (b) The continuity of the zinc coating;
- (c) The uniformity of the zinc coating;

Consideration will be given to the results obtained, in deciding the galvanized iron to be accepted.

*Constants obtained on Tests.*—In the event of the tender being accepted, the results of the above tests, as determined in the departmental laboratory, shall be incorporated in the contract, and all deliveries shall agree therewith.

Orders to be placed in case lots and in minimum quantities of 6 tons, made up of one or more items and three to five weeks from date of order are to be allowed for delivery to permit of importation.

The rates tendered do not include wharfage. The material shall be consigned on the Bill of Lading to the Comptroller of Stores of the Victorian Railways, to enable the Corporation to obtain exemption from wharfage. Copies of orders to be furnished the Shipping Clerk.

The rates shall be varied 18s. 6d. per ton for every rise or fall of £1 per ton or pro rata as the case may be in "Lysaght's" current price list of 1st May, 1933. It shall be the Contractor's obligation within the meaning of clause 21 of the Conditions of Contract to advise the Corporation of any amendment to Lysaght's price list within seven days of the receipt of same by the Contractor. The amended rates shall apply to all undelivered material on date of alteration to price list.

Name of Manufacturer—J. Lysaght (Aust.) Ltd.

Item No.	Description.	Country of Manufacture.	Estimated Requirements.	Rate per—	Rate.	Name of Contractor.
					£ s. d.	
	Sheet, Corrugated, 26 gauge, "Orb"—					
2238	5' .. .. .	N.S.W.	2 tons	ton	22 10 11	
2239	6' .. .. .	"	6 "	do.	22 10 11	
2240	7' .. .. .	"	3 "	do.	22 10 11	
2241	8' .. .. .	"	3 "	do.	22 10 11	
2242	9' .. .. .	"	1 "	do.	23 0 11	
2243	10' .. .. .	"	1 "	do.	23 10 11	
2244	6', 1" pitch .. .. .	"	1 "	do.	23 18 9	
2245	7', 1" pitch .. .. .	"	1 "	do.	23 18 9	
2246	8', 1" pitch .. .. .	"	Nil	do.	..	
	Sheet, Corrugated, 24 gauge, "Orb"—					
2247	5' .. .. .	"	3 tons	do.	21 3 0	
2248	6' .. .. .	"	10 "	do.	21 3 0	
2249	7' .. .. .	"	10 "	do.	21 3 0	
2250	8' .. .. .	"	10 "	do.	21 3 0	
2251	9' .. .. .	"	6 "	do.	21 13 0	
2252	10' .. .. .	"	2 "	do.	22 3 0	
	Sheet, Corrugated, 20 gauge, "Orb"—					
2252A	9' .. .. .	"	2 "	do.	21 18 0	
2252B	10' .. .. .	"	2 "	do.	22 8 0	
	Sheet, Plain, 28 gauge, "Queen's Head"—					
2253	6' x 2' .. .. .	"	1 "	do.	25 11 3	
2254	6' x 2' 6" .. .. .	"	2 "	do.	25 11 3	
2255	6' x 3' .. .. .	"	3 "	do.	25 11 3	
	Sheet, Plain, 26 gauge, "Queen's Head"—					
2256	6' x 2' .. .. .	"	1 "	do.	24 3 5	
2256A	6' x 2' 6" .. .. .	"	3 "	do.	24 3 5	
2257	6' x 3' .. .. .	"	9 "	do.	24 3 5	
	Sheet, Plain, 24 gauge, "Queen's Head"—					
2258	6' x 22" .. .. .	"	9 "	do.	22 15 7	
2258A	6' x 2' .. .. .	"	6 "	do.	22 15 7	
2259	6' x 2' 6" .. .. .	"	6 "	do.	22 15 7	
2260	6' x 3' .. .. .	"	20 "	do.	22 15 7	
	Sheet, Plain, 22 gauge, "Queen's Head"—					
2261	6' x 2' 6" .. .. .	"	1 "	do.	22 15 7	
2262	6' x 3' .. .. .	"	3 "	do.	22 15 7	

Elder, Smith, & Co.  
Ltd.

Item No.	Description.	Country of Manufacture.	Estimated Requirements.	Rate per—	Rate.	Name of Contractor.
					£ s. d.	
<b>GALVANIZED IRON—continued.</b>						
2263	Sheet, Plain, 20 gauge, "Queen's Head"—	N.S.W.	1 ton	ton	22 15 7	Elder, Smith, & Co. Ltd.
2264	6' x 2' .. .. .		1 "	do.	22 15 7	
2265	6' x 3' .. .. .		8 "	do.	22 15 7	
2266	Sheet, Plain, 18 gauge, "Queen's Head"—	"	1 "	ton	22 15 7	
2267	6' x 2' .. .. .		1 "	do.	22 15 7	
2268	6' x 3' .. .. .		1 "	do.	22 15 7	
2269	Sheet, Plain, 16 gauge, "Queen's Head"—	"	6 "	do.	22 15 7	
2270	6' x 2' .. .. .		3 "	do.	22 15 7	
2271	6' x 3' .. .. .		15 "	do.	22 15 7	
2272 to 2275	Nil					

### PRINTING AND WRITING PAPERS, ETC.

The Printing Papers shall be equal in quality, weight, and colour to the samples furnished by the Contractor and accepted by the Corporation, and shall be cut to the true size ordered. Each ream shall contain 500 sheets, and shall be supplied flat (not folded). No creased or damaged paper will be accepted.

The Writing Papers shall be equal in quality, weight, and colour to the samples furnished by the Contractor and accepted by the Corporation, and shall be cut to the true size ordered. Each ream shall contain 480 sheets, and shall be supplied flat (not folded). No creased or damaged paper will be accepted.

As regards Item No. 2335, the Corporation undertakes to order during the contract period the full quantity shown opposite to this item, and delivery will be taken of the full quantity in one lot.

The rates for Items Nos. 2325-2330, 2333, 2350, 2354-2364, 2366-2383, 2390-2394, 2396, and 2398 include Telegraphic Transfer Exchange between Australia and London at 25½ per cent., and if this rate of Exchange be varied during the contract period, the difference calculated on 66½ per cent. of the contract rate shall be to the Corporation's account, and shall apply to any stores that may be ordered after the expiration of a period of two months from the date the amended rate of Telegraphic Transfer Exchange is effective as notified by the Commonwealth Bank. This applies to all items excepting No. 2345. Any variation in Exchange as regards Item No. 2345 will be adjusted on date of delivery.

The rates for paper of foreign manufacture are firm as regards conversion.

Delivery of Item No. 2345 will be taken in one lot and the Printing Officer will arrange to place order accordingly.

The Paper under Item No. 2345 will be consigned on the Bill of Lading to the Comptroller of Stores to enable the Corporation to obtain exemption of wharfage.

Copy of order to be supplied to the Shipping Clerk.

The rates for Items Nos. 2342, 2358, 2370, and 2375 to 2378 are based on current rates of Sea Freight, any alteration to be to Department's account. Contractor to produce evidence of amount included in Tender for freight.

<b>Printing Papers—</b>						
†2325	Quad. Crown, News, 44 lb. ..	U.K.	250 reams	ream	0 7 2	Spicers & Detmold Ltd.
†2326	" M.G. Litho., 70 lb. ..	Scand.	50 "	do.	1 2 3	
†2327	" Art, 72 lb., 500's, "Proven"	U.K.	100 "	do.	1 17 6	
†2328	" Art, 120 lb., 500's, "Proven"	"	7 "	do.	3 2 6	Wiggins, Teape & Alex. Pirie (Export) Ltd.
†2329	" White, 48 lb., "Sawku"	"	400 "	do.	0 13 0	
†2330	" Sup. Cal., 70 lb., "Ivoryine"	"	10 "	do.	1 0 3	Gordon & Gotch (A'sia.) Ltd.
†2331	Double Royal, Kraft Brown, 40 lb. ..	Vict.	500 "	do.	0 10 10	Australian Paper Manufacturers Ltd.
†2332	" Blue, 48 lb. ..	"	Nil	"	"	Nil
†2333	" Cerise, 48 lb. ..	Scand.	50 reams	ream	0 11 10	Gordon & Gotch (A'sia.) Ltd.
†2334	" Green, 48 lb. ..		90 "	do.	0 11 10	
†2335	" Red, 48 lb. ..		60 "	do.	0 12 9	
†2336	" Salmon, 48 lb. ..	"	150 "	do.	0 11 10	
†2337	" Yellow, 48 lb. ..	"	160 "	do.	0 11 10	
†2338	" Pink, 48 lb. ..	"	50 "	do.	0 11 10	Wiggins, Teape & Alex. Pirie (Export) Ltd.
†2339	" White, 40 lb., "Sawku"	U.K.	800 "	do.	0 10 10	
†2340	" White, 50 lb., "Sawku"	"	300 "	do.	0 13 6	
†2341	" News, 37 lb. ..	"	400 "	do.	0 6 1	Spicers & Detmold Ltd.
†2342	" M.G., 80 lb. ..	Sweden	12 "	do.	1 1 8	A. J. Wallace
†2343	" Art, 60 lb., 500's, "Proven"	U.K.	30 "	do.	1 11 3	Wiggins, Teape & Alex.
†2344	Quad. Foolscap, White, 37 lb., "Sawku"	"	750 "	do.	0 10 0	Pirie (Export) Ltd.
†2345	" Yellow, 40 lb. ..	Norway	250 "	do.	0 8 8½	Spicers & Detmold Ltd.



Item No.	Description.	Country of Manufacture.	Estimated Requirements.	Rate per—	Rate.	Name of Contractor.
					£ s. d.	
<b>PRINTING AND WRITING PAPERS—continued.</b>						
†2346	Double Medium, Cerise, 80 lb. . . . .	Austria	3 reams	ream	1 2 9	Alex. Cowan & Sons Ltd.
†2347	" Yellow, 80 lb. . . . .	"	2 "	do.	1 2 9	
†2348	" Salmon, 80 lb. . . . .	"	2 "	do.	1 2 9	
†2349	" Blue, 80 lb. . . . .	"	2 "	do.	1 2 9	
†2350	" Art, 56 lb., 500's . . . . .	U.K.	100 "	do.	1 7 3	Spicers & Detmold Ltd.
†2351	" Old Gold, 60 lb. . . . .	"	Nil	"	"	
†2352	Glazed Cap, 36" x 24", 45 lb. . . . .	N.S.W.	50 "	do.	0 16 0	Australian Paper Manufacturers Ltd.
†2353	Smooth Cartridge, 20" x 25", 40 lb. . . . .	Vict.	100 "	do.	0 18 4	
†2354	Double Demy, Yellow, 40 lb. . . . .	Scand.	80 "	do.	0 9 11	Gordon & Gotch (A'sia.) Ltd.
†2355	" Green, 40 lb. . . . .	"	20 "	do.	0 9 11	
†2356	" Pink, 40 lb. . . . .	"	40 "	do.	0 9 11	Nil
†2357	" Red, 40 lb. . . . .	"	10 "	do.	"	
†2358	" Salmon, 40 lb. . . . .	Scand.	10 "	do.	0 10 0	A. J. Wallace
†2359	" News, 28 lb. . . . .	U.K.	500 "	do.	0 4 9	
†2360	" White, 40 lb., "Sawku" . . . . .	"	200 "	do.	0 10 10	Spicers & Detmold Ltd.
†2361	Nil	"	Nil	"	"	
†2362		"	Nil	"	"	Wiggins, Teape & Alex. Pirie (Export) Ltd.
†2363	Demy, White, Gummed; 1st quality, 500's, non-curling, "Don" . . . . .	U.K.	8 reams	ream	1 3 9	
†2364	" " " 2nd quality, 500's, non-curling, "Dee" . . . . .	"	200 "	do.	0 17 6	Australian Paper Manufacturers Ltd.
†2365	Double Crown, Manilla, Carte, 20" x 30", 100 lb. . . . .	Vict.	100 reams	ream	1 19 7	
†2366	" White Cap., 7-8 lb. . . . .	"	300 "	"	"	Nil
†2367	" 19" x 29" Clear, Greaseproof, 15 to 17 lb. . . . .	Scand.	100 "	do.	0 4 7	
†2368	Paper, Striped Scaling or Brown Cap, 19" x 29", 8 lb. . . . .	"	8 "	do.	"	Nil
†2369	Lithographic Papers— 51" x 31", 160 lb. . . . .	U.K.	1½ ton	ton	33 10 6	Spicers & Detmold Ltd.
†2370	Writing Papers— Double Large Post, Bank, White, 22 lb., . . . . .	"	150 reams	ream	0 7 4	A. J. Wallace
†2371	" " Bank, White, 36 lb., . . . . .	Scand.	20 "	do.	0 12 8	
†2372	" " " "Snowflake" . . . . .	U.K.	70 "	do.	1 2 0	Wiggins, Teape & Alex. Pirie (Export) Ltd.
†2373	" " " "Inverdon" . . . . .	"	50 "	do.	1 2 0	
†2374	" " " "Azure, 46 lb., . . . . .	"	50 "	do.	1 2 0	Alex. Cowan & Sons Ltd.
†2375	" " " "Inverdon" . . . . .	Sweden	300 reams	ream	0 12 6	
†2376	" " " "Blue, 36 lb. . . . .	U.K.	15 "	do.	0 14 3	A. J. Wallace
†2377	" " " "Green, 36 lb. . . . .	"	10 "	do.	0 14 3	
†2378	" " " "Pink, 36 lb. . . . .	"	25 "	do.	0 14 3	Wiggins, Teape & Alex. Pirie (Export) Ltd.
†2379	" " " "Yellow, 36 lb. . . . .	"	25 "	do.	0 14 3	
†2380	" " " "Medium, Azure, 68 lb., "Hunting-tower" . . . . .	"	20 "	do.	2 2 4	Nil
†2381	Quad Foolscap, Bank, 15 lb. (Manifolding) . . . . .	U.K.	40 "	do.	1 17 4	
†2382	" " " "Azure Laid, 60 lb., "Hunting-tower" . . . . .	"	50 "	do.	1 2 11	Wiggins, Teape & Alex. Pirie (Export) Ltd.
†2383	" " " "White, 48 lb., Wove "Inverdon" . . . . .	"	900 "	do.	1 2 11	
†2384	" " " "Duplicating White, 48 lb., hard-sized . . . . .	Vict.	1000 "	do.	1 2 0	Australian Paper Manufacturers Ltd.
†2384A	" " " "Duplicating, 48 lb., hard-sized, assorted light tints . . . . .	"	50 "	"	"	
†2385	" " " "Bank, White, 28 lb. . . . .	Vict.	1500 reams	ream	0 12 3	Australian Paper Manufacturers Ltd.
†2386	" " " "Cerise, 28 lb. . . . .	"		do.	0 12 3	
†2387	" " " "Double Royal, Bank, White, 30 lb. . . . .	"		do.	0 13 1½	
†2388	" " " "Double Demy, Bank, White, 25 lb. . . . .	"		do.	0 10 11½	
†2389	" " " "Old Gold, 25 lb. . . . .	"	5 "	do.	0 10 11½	Gordon & Gotch (A'sia) Ltd.
†2390	" " " "Double Foolscap, Blue, 24 lb., "Strathmer-ton" . . . . .	U.K.		do.	0 16 0	
†2391	" " " "C.L., 28 lb., "Conqueror" . . . . .	"	90 "	do.	1 12 9	Wiggins, Teape & Alex. Pirie (Export) Ltd.
†2392	" " " "28 lb., "Abermill Bond" . . . . .	"	40 "	do.	1 2 10	
†2393	" " " "Double Demy, Azure, 48 lb., "Hunting-tower" . . . . .	"	18 "	do.	1 9 10	Australian Paper Manufacturers Ltd.
†2394	" " " "Royal Azure, 42 lb. "Standard" . . . . .	"	3 "	do.	1 13 3	
†2395	" " " "Azure Laid, 17½" x 40", guillotine trimmed all sides (Quad. Foolscap, Azure, 56 lb. substance) . . . . .	Vict.	500 "	do.	1 1 6	Australian Paper Manufacturers Ltd.

Item No.	Description.	Country of Manufacture.	Estimated Requirements.	Rate per—	Rate.	Name of Contractor.
					£ s. d.	
PRINTING AND WRITING PAPERS— <i>continued</i>						
†2396	27" x 41", White, 75 lb., 500's .. ..	U.K.	10 reams	ream	1 4 0	E. H. Cooper Pty. Ltd.
†2397	Blotting Paper— Demy, White, 36 lb. .. ..	Vict.	120 "	do.	0 18 0	Australian Paper Manufactures Ltd.
†2398	" " 48 lb., 1st quality, folded or flat, as ordered, "Quicksorb"	U.K.	10 "	do.	1 17 0	Wiggins, Teape & Alex. Pirie (Export) Ltd.
2399 to 2400	Nil.					

## SERGE AND TWILL.

(See Appendix "I" for Specification.)

Period 1st July, 1933, to 30th September, 1934.

†2785	Serge, 20 oz. per lineal yard, 58" wide ..	Vict.	5,000 l. yds.	lin. yd	0 6 11	} Federal Woollen Mills Pty. Ltd.
†2786	Twill, 18 oz. per lineal yard, 58" wide ..	"	1,500 "	do.	0 8 6	
†2787	Cloth, 24 oz. per lineal yard, 58" wide, for Overcoats	"	1,000 "	do.	0 6 9	

## OVERALLS FOR USE OF TYPISTES, ETC.

The sample exhibited by the Corporation shall be regarded as a sample for style and workmanship.

The Contractor shall attach a card to each Overall on which he shall insert the Order Number, Grade and Location of the Employee for whom the article was ordered, and the measurements furnished by the Corporation, to which the garment has been made.

The Contractor shall, with each delivery of the Overalls, furnish to the Receiving Officer :—

- (a) A delivery docket (in triplicate) on forms provided by the Corporation for that purpose ;
- (b) A list (prepared in triplicate) showing the Order Number, and Names, Grades and Locations of the Employees for whom the Overalls were ordered.

The Comptroller of Stores or the Receiving Officer shall have free access to all parts of the factory of the Contractor at all reasonable times. He shall be at liberty to inspect the material during the manufacture of the Overalls and to reject any material or Overall that does not conform to the contract, and notwithstanding that any Overall may have been inspected and passed at the factory of the Contractor, it shall be liable to rejection as provided in Clause 13 of the conditions of contract.

Any Overall rejected by the Comptroller of Stores or the Receiving Officer at the factory of the Contractor shall not be re-submitted for delivery without the approval of the Comptroller of Stores or the Receiving Officer.

## SPECIFICATION.

*Quality, Workmanship, &c.*—The Overalls supplied shall be in strict accordance with the Contract sample as regards style and workmanship and shall be manufactured from the material submitted by the Tenderer and accepted by the Corporation. They shall be subject to such examination and tests as the Comptroller of Stores may direct.

*Measurements.*—The Overalls shall be supplied in strict accordance with the measurements furnished with the order.

*Inspection.*—Final inspection of the Overalls will be made at the Uniform Room No. 28, 1st Floor, Railway Buildings, Flinders-street, Melbourne.

*Delivery.*—The Overalls shall be provisionally delivered at the Uniform Room, No. 28, 1st Floor, Railway Buildings, Flinders-street, Melbourne.

Name of Manufacturer—Myer Emporium Ltd.

*2790	Overalls—Fuji Silk with two detachable, white collars to sample exhibited and to measurements supplied by the Corporation	Vict. (partly)	200	each	0 15 0	The Myer Emporium Ltd.
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## APPENDIX "A"—continued.

## LOCOMOTIVE BEARING OIL, ETC.—continued.

Oils submitted under this Specification will be subjected to tests to determine the following properties:—

Specific Gravity, 15·5° C./15·0° C.,	Fire Point,
Viscosity at 70° F., dynes per sq. cm.,	Pour Point,
" at 100° F. " "	Syphon Test,
" 140° F. " "	Saponifiable Matter,
" 212° F. " "	

and consideration will be given to the results obtained in deciding the oil to be accepted.

*Constants obtained on Tests.*—In the event of the Tender being accepted, the results of the above tests as determined in the Departmental Laboratory shall be incorporated in the Contract, and all deliveries shall reasonably agree therewith.

*Information to be Supplied by Tenderer.*—The Tenderer shall supply the following information regarding the oils he tenders to supply:—

Specific Gravity 15·5° C./15·0° C.	..	..	..	..	..
Viscosity at 70° F. dynes per square cm.	..	..	..	..	..
" 100° F. " " " "	..	..	..	..	..
" 140° F. " " " "	..	..	..	..	..
" 212° F. " " " "	..	..	..	..	..
Fire Point, degrees Fah.	..	..	..	..	..
Pour " " " "	..	..	..	..	..
Syphon Test	..	..	..	..	..
Saponifiable matter, per cent.	..	..	..	..	..

*Sampling.*—A composite sample (at least 2 quarts) shall be taken from each delivery, drawn from at least five (5) containers, and in no case from less than ten (10) per cent. of the containers. Such sample shall be accepted as accurately representing the quality of the delivery.

*Testing.*—The sample shall be tested according to the methods described in "Circular of the Australian Railways: Testing of Lubricating, Illuminating, and Fuel Oils, &c."

## CAR AND WAGON OIL (BLACK OIL).—SPECIFICATION L.3.—Item 5.

*Scope.*—This Specification covers the grade of Petroleum Oil required for the lubrication of the Axle Journals of Railway Carriages and Wagons.

*Manufacture.*—The oil shall be a refined petroleum product, free from admixture with any compounding material whatsoever.

*Properties and Tests.*—The oil shall be free from mineral acid and alkali, and asphaltic, tarry, or suspended matter, and in other respects shall comply with the conditions mentioned hereunder:—

	Maximum.	Minimum.
Viscosity at 70° F. ..	10·5	8·3
Viscosity at 140° F., dynes per sq. cm. ..	0·62	0·48
Fire Point, degrees Fahr. ..	..	400
Pour Point, degrees Fahr. ..	25	..
Syphon Test, cubic centimetres at 140° F. ..	..	5·0

Oils submitted under this Specification will be subjected to tests to determine the following properties:—

Specific Gravity, 15·5° C./15·0° C.,	Fire Point,
Viscosity at 70° F., dynes per sq. cm.,	Pour Point,
" 100° F. " "	Syphon Test,
" 140° F. " "	Saponifiable Matter,

and consideration will be given to the results obtained in deciding the oil to be accepted.

*Constants obtained on Tests.*—In the event of the Tender being accepted, the results of the above tests as determined in the Departmental Laboratory shall be incorporated in the Contract, and all deliveries shall reasonably agree therewith.

*Information to be Supplied by Tenderer.*—The Tenderer shall supply the following information regarding the oils he tenders to supply:—

Specific Gravity 15·5° C./15·0° C.	..	..	..	..	..
Viscosity at 70° F. dynes per square cm.	..	..	..	..	..
" 100° F. " " " "	..	..	..	..	..
" 140° F. " " " "	..	..	..	..	..
Fire Point, degrees Fah.	..	..	..	..	..
Pour " " " "	..	..	..	..	..
Syphon Test	..	..	..	..	..

*Sampling.*—A composite sample (at least 2 quarts) shall be taken from each delivery, drawn from at least five (5) containers, and in no case from less than ten (10) per cent. of the containers. Such sample shall be accepted as accurately representing the quality of the delivery.

*Testing.*—The sample shall be tested according to the methods set out in "Circular of the Australian Railways: Testing of Lubricating, Illuminating, and Fuel Oils, &c."



## APPENDIX "B"—continued.

## MOTOR ENGINE OILS, ETC.—continued.

*Special Tests.*—The oils submitted under this Specification will be submitted to tests to determine the following properties :—

Specific Gravity, 15·5° C./15·0° C.,	Pour Point,
Viscosity at 70° F., dynes per sq. cm.,	Volatility,
" 100° F. "	Carbon Residue,
" 140° F. "	Ash,
Fire Point,	Organic Acidity,

and consideration will be given to the results obtained in deciding the oil to be accepted.

In the event of the tender being accepted, the results of the above tests as determined in the Departmental Laboratory shall be incorporated in the Contract, and all deliveries shall agree therewith.

*Information to be Supplied by Tenderer.*—Items Nos. 11 to 19.—The Tenderer shall supply the following information regarding the Oil he tenders to supply :—

Specific Gravity, 15·5° C./15·0° C.	..	..	..
Viscosity at 70° F., dynes per square cm.	..	..	..
" 100° F., " " " "	..	..	..
" 140° F., " " " "	..	..	..
" 200° F., " " " "	..	..	..
Fire Point, degrees F.	..	..	..
Pour Point, degrees F.	..	..	..
Volatility, 2 hours at 250° F., per cent.	..	..	..
Carbon Residue, per cent.	..	..	..
Ash, per cent.	..	..	..
Organic Acidity, per cent.	..	..	..

*Sampling and Testing.*—A composite sample (at least 2 quarts) shall be taken from each delivery, drawn from at least five (5) containers, and in no case from less than ten (10) per cent. of the containers. Such sample shall be accepted as accurately representing the quality of each delivery.

*Method of Testing.*—The sample shall be tested according to the methods described in "Circular of the Australian Railways: Testing of Lubricating, Illuminating, and Fuel Oils, &c."

## KEROSENE ENGINE OILS.—SPECIFICATION L.4A.—Item 20.

*Scope.*—This Specification covers the grade of petroleum oil required for the lubrication of Kerosene Engine Cylinders.

*Manufacture.*—The oil shall be a thoroughly refined, filtered petroleum oil with the addition of acidless animal oil.

*Properties and Tests.*—The oil shall be free from mineral acids and alkali, and asphaltic, tarry, or suspended matter, and in other respects shall comply with the conditions mentioned hereunder :—

Grade.	Viscosity at 140°.		Fire Point.	Sapon. Matter.	Pour Point.	Carbon Residue.
	Maximum.	Minimum.	Minimum.	Maximum.	Maximum.	Maximum.
Medium ..	0·35	0·28	390	8		

*Special Tests.*—The oils submitted under this Specification will be submitted to tests to determine the following properties :—

Specific Gravity, 15·5° C./15·0° C.,	Volatility,
Viscosity at 70° F., dynes per sq. cm.,	Carbon Residue,
" 100° F., " "	Ash,
" 140° F., " "	Organic Acidity,
Fire Point,	Saponifiable Matter
Pour Point,	

and consideration will be given to the results obtained in deciding the oil to be accepted.

In the event of the tender being accepted, the results of the above tests as determined in the Departmental Laboratory shall be incorporated in the Contract, and all deliveries shall agree therewith.

*Information to be Supplied by Tenderer.*—Item No. 20.—The Tenderer shall supply the following information regarding the Oil he tenders to supply :—

Specific Gravity, 15·5° C./15·0° C.	..	..	..
Viscosity at 70° F., dynes per square cm.	..	..	..
" 100° F., " " " "	..	..	..
" 140° F., " " " "	..	..	..
" 200° F., " " " "	..	..	..
Fire Point, degrees F.	..	..	..
Pour Point, degrees F.	..	..	..
Volatility, 2 hours at 200° F., per cent.	..	..	..
Carbon Residue, per cent.	..	..	..
Ash, per cent.	..	..	..
Organic Acidity, per cent.	..	..	..
Saponifiable Matter, per cent.	..	..	..

## APPENDIX "B"—continued.

## KEROSENE ENGINE OILS—continued.

**Sampling and Testing.**—A composite sample (at least 2 quarts) shall be taken from each delivery, drawn from at least five (5) containers, and in no case from less than ten (10) per cent. of the containers. Such sample shall be accepted as accurately representing the quality of each delivery.

**Method of Testing.**—The sample shall be tested according to the methods described in "Circular of the Australian Railways: Testing of Lubricating, Illuminating, and Fuel Oils, &c."

## MACHINERY OILS.—SPECIFICATION L.5.—Items 21 to 26.

**Scope.**—This Specification covers the grade of petroleum oil required for the lubrication of Bearings of Machinery. This oil is not to be used for steam cylinder lubrication.

Six grades are specified, known as extra light, light, medium, heavy, extra heavy, and extra heavy special.

**Manufacture.**—The oil shall be a refined petroleum oil, without the admixture of fatty oils, resins, soaps, or other compounds not derived from crude petroleum, and must be entirely free from fillers.

**Properties and Tests.**—The oil shall be free from mineral acid and alkali and asphaltic, tarry, or suspended matter, and in other respects shall comply with the conditions mentioned hereunder :—

	Viscosity at 140° F., dynes per sq. cm.		Fire Point, degrees Fahr.	Pour Point, degrees Fahr.
	Maximum.	Minimum.	Minimum.	Maximum.
Extra Light .. .. .	0.15	0.12	370	30
Light .. .. .	0.25	0.18	380	30
Medium .. .. .	0.35	0.28	390	30
Heavy .. .. .	0.50	0.38	400	30
Extra Heavy .. .. .	0.80	0.55	410	40
Extra Heavy Special .. .. .	1.50	0.85	450	40

**Special Tests.**—The oils submitted under this Specification will be subjected to tests to determine the following properties :—

Specific Gravity at 15.5° C./15.0° C.,	Fire Point,
Viscosity at 70° F., dynes per sq. cm.	Pour Point,
" 100° F. "	
" 140° F. "	

and consideration will be given to the results obtained in deciding the oil to be accepted.

In the event of the tender being accepted, the results of the above tests as determined in the Departmental Laboratory shall be incorporated in the Contract, and all deliveries shall agree therewith.

**Information to be Supplied by Tenderer.**—Items Nos. 21 to 26.—The Tenderer shall supply the following information regarding the Oil he tenders to supply :—

Specific Gravity, 15.5° C./15.0° C.	..	..	..	..
Viscosity at 70° F., dynes per square cm.	..	..	..	..
" 100° F., " " " "	..	..	..	..
" 140° F., " " " "	..	..	..	..
" 200° F., " " " "	..	..	..	..
Fire Point, degrees F.	..	..	..	..
Pour Point, degrees F.	..	..	..	..

**Sampling and Testing.**—A composite sample (at least 2 quarts) shall be taken from each delivery, drawn from at least five (5) containers, and in no case from less than ten (10) per cent. of the containers. Such sample shall be accepted as accurately representing the quality of each delivery.

**Method of Testing.**—The sample shall be tested according to the methods described in "Circular of the Australian Railways: Testing of Lubricating, Illuminating, and Fuel Oils, &c."

## SPECIFICATION L.5A.—Items 27 and 27A.

**Scope.**—This oil covers the grade of petroleum oil required for the lubrication of bearings of marine steam engines.

One grade known as light is specified.

**Manufacture.**—The oil shall be a refined petroleum product. The Tenderer shall state the amount of saponifiable matter which it contains.

**Properties and Tests.**—The oil shall be free from mineral acids and alkali and asphaltic, tarry, or suspended matter, and in other respects shall comply with the conditions mentioned hereunder :—

Viscosity in dynes per sq. cm. at 140° F.
Minimum, .24.
Maximum, .33.

**Special Tests.**—The oils submitted under this Specification will be subjected to tests to determine the following properties :—

Specific Gravity 15.5° C./15° C.
Viscosity at 70° F., dynes per sq. cm.
100° F., " "
140° F., " "
210° F., " "

Fire Point,  
Pour Point,  
Saponifiable matter,  
Emulsification,

and consideration will be given to the results obtained in deciding the oil to be accepted.

## APPENDIX "B"—continued.

## SPECIFICATION L.5A.—Items 27 and 27A.—continued.

*Information to be Supplied by Tenderer.*—The Tenderer shall supply the values of the above-mentioned properties of the oil he tenders to supply.

*Sampling and Testing.*—A composite sample (at least 2 quarts) shall be taken from each delivery drawn from at least five (5) containers, and in no case from less than ten (10) per cent. of the containers. Such sample shall be accepted as accurately representing the quality of each delivery.

*Method of Testing.*—The sample shall be tested according to the method described in "Circular of the Australian Railways: Testing of Lubricating, Illuminating, and Fuel Oils, &c."

## TURBINE AND COMPRESSOR OILS.—SPECIFICATION L.6.—Items 28 to 29A.

*Scope.*—This Specification covers the grade of petroleum oil required for the lubrication of Turbines, Air Compressors, and Machinery on which the circulating system of lubricating is employed.

*Manufacture.*—The oil shall be a thoroughly refined filtered petroleum oil, without the admixture of fatty oils, resins, soaps, and other compounds.

The Tenderer shall state what compounding matter has been used.

*Properties and Tests.*—The oil shall be free from mineral acid and alkali, and asphaltic, tarry, or suspended matter, and in other respects shall comply with the conditions mentioned hereunder:—

	Viscosity at 140° F., dynes per sq. cm.		Fire Point, degrees Fahr.	Pour Point, degrees Fahr.	Carbon Residue, per cent.
	Maximum.	Minimum.	Minimum.	Maximum.	Maximum.
Medium .. .. .	0.30	0.22	430	25	.30

*Special Tests.*—Oils submitted under this Specification will be subjected to tests to determine the following properties:—

Specific Gravity, 15.5° C./15.0° C.,  
Viscosity at 100° F., dynes per sq. cm.,  
" 140° F. "  
" 212° F. "

Pour Point,  
Volatility,  
Ash,  
Organic Acidity,  
Demulsibility,

Fire Point,

and consideration will be given to the results obtained in deciding the oil to be accepted.

In the event of the tender being accepted, the results of the above tests as determined in the Departmental Laboratory shall be incorporated in the Contract, and all deliveries shall agree therewith.

*Information to be Supplied by Tenderer.*—Items Nos. 28 to 29A.—The Tenderer shall supply the following information regarding the Oil he tenders to supply:—

Specific Gravity, 15.5° C./15.0° C.	..	..	..	..	..
Viscosity at 100° F., dynes per square cm.	..	..	..	..	..
" 140° F., " " " "	..	..	..	..	..
" 212° F., " " " "	..	..	..	..	..
Fire Point, degrees F.	..	..	..	..	..
Pour Point, degrees F.	..	..	..	..	..
Ash, per cent.	..	..	..	..	..
Organic Acidity, per cent.	..	..	..	..	..
Demulsibility	..	..	..	..	..

*Sampling and Testing.*—A composite sample (at least 2 quarts) shall be taken from each delivery, drawn from at least five (5) containers, and in no case from less than ten (10) per cent. of the containers. Such sample shall be accepted as accurately representing the quality of the delivery.

*Method of Testing.*—The sample shall be tested according to the methods described in "Circular of the Australian Railways: Testing of Lubricating, Illuminating, and Fuel Oils, &c," but in the case of Turbine Oils the Demulsibility Test shall be done in accordance with the Methods formulated by the "American Society for Testing Materials." Specification Serial Designation D. 157/28. If on Test the sample shows a Max. S.E. Number in excess of 175 then the whole of the delivery under consideration shall be liable to rejection.

## TRANSFORMER AND SWITCH OILS.—SPECIFICATION L.7.—Item 30.

*Scope.*—This Specification covers the grades of petroleum oil required for use in Transformers and Oil Switches.

Two grades are specified, the one for use in Transformers, the other for use in Oil Switches.

*Manufacture.*—The oil shall be a thoroughly refined, filtered petroleum oil, without the admixture of fatty oils, resins, soaps, or other compounds. It shall be light in colour.

*Properties and Tests.*—The oil shall be free from mineral acids and alkali, asphaltic, tarry, or suspended matter, and moisture or corrosive sulphur compounds, and in other respects shall comply with the conditions mentioned hereunder:—

	Transformer Oil.		Switch Oil.	
	Maximum.	Minimum.	Maximum.	Minimum.
Viscosity at 100° F., dynes per sq. cm.	0.18	..	0.20	..
Fire Point, degrees Fahr.	..	360	..	370
Pour Point, degrees Fahr.	25	..	25	..
Volatility, 8 hours at 212° F., per cent.	2.0	..	..	..



## APPENDIX "B"—continued.

## SPECIFICATION L.7.—Item 30.—continued.

*Special Tests.*—Oils submitted under this Specification will be subjected to tests to determine the following properties:—

Specific Gravity, 15·5° C./15·0° C.;	Pour Point,	Saponification Value,
Viscosity at 70° F., dynes per sq. cm.,	Volatility,	Ageing and Sludging,
" 100° F. "	Carbon Residue,	Corrosion,
" 140° F. "	Ash,	Dielectric Strength,
Fire Point,	Organic Acidity,	

and consideration will be given to the results obtained in deciding the oil to be accepted.

*Corrosion.*—A copper strip shall not appear discoloured when heated in the oil to 150° F.

*Ageing and Sludging.*—The oil when heated to and maintained at 300° F. in the presence of air and copper for 45 hours shall not show more than 0·1 per cent. of sludge in Transformer Oil.

*Dielectric Strength.*—When tested between spherical electrodes 0·5 in. diameter, 0·15 in. apart, the oil must withstand a pressure of 30,000 volts without breakdown.

In the event of the tender being accepted, the results of the above tests as determined in the Departmental Laboratory shall be incorporated in the Contract, and all deliveries shall agree therewith.

*Information to be Supplied by Tenderer.*—Item No. 30.—The Tenderer shall supply the following information regarding the Oil he tenders to supply:—

Specific Gravity, 15·5° C./15·0° C.	..	..	..	..	..
Viscosity at 70° F., dynes per square c.m.	..	..	..	..	..
" 100° F., " " " "	..	..	..	..	..
" 140° F., " " " "	..	..	..	..	..
" 200° F., " " " "	..	..	..	..	..
Fire Point, degrees F.	..	..	..	..	..
Pour Point, degrees F.	..	..	..	..	..
Volatility, 8 hours 212° F., per cent.	..	..	..	..	..
Carbon Residue, per cent.	..	..	..	..	..
Ash, per cent.	..	..	..	..	..
Organic Acidity, per cent.	..	..	..	..	..
Saponification Value, per cent.	..	..	..	..	..
Ageing and Sludging, per cent.	..	..	..	..	..
Corrosion	..	..	..	..	..
Dielectric Strength, volts	..	..	..	..	..

*Sampling and Testing.*—A composite sample (at least 2 quarts) shall be taken from each delivery, drawn from at least five (5) containers, and in no case from less than ten (10) per cent. of the containers. Such sample shall be accepted as accurately representing the quality of the delivery.

When sampling, scrupulous care must be taken to use only clean containers, &c., and to avoid any contamination of the sample.

*Method of Testing.*—With the exception of the volatility test, the sample shall be tested according to the methods described in "Circular of the Australian Railways: Testing of Lubricating, Illuminating, and Fuel Oils, &c."

## CASTOR OIL.—SPECIFICATION L.8.—Items 31 and 31A.

*Scope.*—This Specification covers Castor Oil required for use as a lubricant.

*Manufacture.*—The oil shall be a pure oil extracted from castor seed; refined and clarified by an approved process.

*Properties and Tests.*—The oil shall be clear and free from sediment and foots; and in other respects shall comply with the condition mentioned hereunder:—

Acidity, per cent. Oleic Acid, maximum	..	..	..	..	3·0
--	----	----	----	----	-----

*Sampling and Testing.*—A composite sample (at least 2 quarts) shall be taken from each delivery, drawn from at least five (5) containers, and in no case from less than ten (10) per cent. of the containers. Such sample shall be accepted as accurately representing the quality of the delivery.

*Method of Testing.*—The sample shall be tested according to the methods described in "Circular of the Australian Railways: Testing of Lubricating, Illuminating, and Fuel Oils, &c."

## APPENDIX "C."

## GREASES (SPECIFICATIONS.—SECTION M).

## GEAR GREASE.—SPECIFICATION M.1.—Item No. 41.

*Scope.*—This Specification covers the grade of grease required for the lubrication of Gears and Conveyors.

*Manufacture.*—The grease shall be a well-manufactured product, composed of a lime-soap made from high-grade animal or vegetable oils, or fatty acids, and a highly-refined mineral oil, or a mineral oil compounded with high-grade animal fat.

*Properties and Tests.*—The grease shall comply with the conditions mentioned hereunder:—

	Soap Content, per cent. approximate.	Ash, per cent.	Melting Point.	
			Soft.	Drop.
		Maximum.	Minimum.	Minimum.
Dark Gear Grease	18	7·0	148°	163°

## APPENDIX "C"—continued.

## SPECIFICATION M.1.—Item No. 41.—continued.

**Mineral Oil.**—When mineral oil alone is used for dissolving the soap, it shall be a well-refined mineral oil.

**Saponifiable Matter.**—When a compounded oil is used for dissolving the soap, it shall contain about 20 per cent. Saponifiable Matter.

**Free Alkali.**—The grease shall contain not more than 10 per cent. of free alkali.

**Moisture.**—The moisture present shall not be greater in quantity than one-half the dry soap content.

**Corrosion.**—A clean copper plate shall not be discoloured when submerged in the grease for 24 hours at room temperature.

**Special Tests.**—Greases submitted under this Specification will be subjected to tests to determine the following properties :—

Consistency,  
Melting and Dropping Points.

**Sampling and Testing.**—A composite sample shall be taken from each delivery. It shall be at least one (1) lb. in weight, and shall be drawn from at least five (5) per cent. of the containers. Such sample shall be accepted as accurately representing the quality of the delivery.

**Method of Testing.**—The sample shall be tested according to the methods described in "Circular of the Australian Railways—Testing of Lubricating, Illuminating, and Fuel Oils, &c."

## GREASE.—SPECIFICATION M.2.—Items Nos. 42 to 45.

**Scope.**—This Specification covers the grade of grease required for the lubrication of Road and Rail Motor Chassis parts, Gears, and of such parts of Motor Equipment and other Machinery as are lubricated by means of compression cups. Grease, Cup, No. 2, is suitable for ball bearings, grease packed or lubricated with grease gun. Grease, Cup, No. 3, is suitable for ball bearings lubricated with compression cups. Grade No. 4, to be used for pantograph collectors.

Four grades are specified, and the order shall state which grade is required and the purpose for which it is to be used.

**Manufacture.**—The grease shall be a well-manufactured product, composed of a calcium soap made from high-grade animal or vegetable oils, or fatty acids, and a highly-refined mineral oil.

**Properties and Tests.**—The grease shall be smooth and uniform, and, in other respects, shall comply with the conditions mentioned hereunder :—

	Soap Content, per cent. approximate.	Ash, per cent.	Melting Point.	
			Soft.	Drop.
		Maximum.	Minimum.	Minimum.
No. 2 Cup Grease .. .. .	15	2.5	—	—
No. 3 Cup Grease .. .. .	18	3.0	146°	165°
No. 4 Cup Grease .. .. .	23	3.5	170°	188°
No. 5 Cup Grease .. .. .	30	3.5	—	195° F.

**Mineral Oil.**—The mineral oil used in reducing the soaps shall be a straight, well-refined mineral oil.

**Consistency.**—The greases shall be similar in consistency to the approved trade standards for Nos. 2, 3, 4, and 5 grease.

**Moisture.**—The grease shall be a boiled grease, and shall contain a minimum of water when finished

**Corrosion.**—A clean copper plate shall not be discoloured when submerged in the grease for 24 hours at room temperature.

**Fillers.**—The grease shall contain no fillers, such as resin, resinous oils, soapstone, wax, talc, powdered mica or graphite, sulphur, clay, asbestos, or the like.

**Special Tests.**—Greases submitted under this Specification will be subjected to tests to determine the Melting and Dropping Points.

**Sampling and Testing.**—A composite sample shall be taken from each delivery. It shall be at least one (1) lb. in weight, and shall be drawn from at least five (5) per cent. of the containers. Such sample shall be accepted as accurately representing the quality of the delivery.

**Method of Testing.**—The sample shall be tested according to the methods described in "Circular of the Australian Railways—Testing of Lubricating, Illuminating, and Fuel Oils, &c."

## ANTI-FRICTION GREASE.—Specification M.3—Item No. 46.

**Scope.**—This Specification covers the grade of grease required for the lubrication of Rough Machinery, of Rails at Switches and Curves, and for other similar purposes.

**Manufacture.**—The grease shall be a well-manufactured product, composed of a calcium soap made from rosin oil, and mineral oil, or other oils.

**Properties and Tests.**—The grease shall be smooth and uniform, and, in other respects, shall comply with the conditions mentioned hereunder :—

Water .. .. .	Maximum
Ash .. .. .	6.5 per cent.
	8.0 per cent.

**Consistency.**—The grease shall be of such a consistency as to be suitable for the purpose for which it is required.

## APPENDIX "C"—continued.

## SPECIFICATION L.6.—Items 28 to 29A—continued.

*Sampling and Testing.*—A composite sample shall be taken from each delivery. It shall be at least one (1) lb. in weight, and shall be drawn from at least five (5) per cent. of the containers. Such sample shall be accepted as accurately representing the quality of the delivery.

*Method of Testing.*—The sample shall be tested according to the methods described in "Circular of the Australian Railways—Testing of Lubricating, Illuminating and Fuel Oils, etc."

## SPECIFICATION FOR Item No. 47.

*Specification.*—The grease shall be suitable for the lubrication of Westinghouse Brake Cylinders and Triple Valves.

The grease shall be a refined petroleum cylinder oil free from admixture with any compounding material whatever.

The grease shall be free from mineral acid, alkali, and asphaltic, tarry or suspended matter, and in other respects shall comply with the conditions mentioned hereunder:—

		Minimum.	Maximum.
Viscosity at 212° F. .. = Dynes per sq. c.m. ..		20	28
Flash Point (open test) = Degrees Fahrenheit ..		470° F.	—
Fire Point .. = " " ..		536° F.	—
Melting Point (soft) .. = " " ..		60° F.	—
Melting Point (drop) .. = " " ..		—	88° F.
Ash .. .. .		Nil	—

The Tenderer shall supply with his tender a sample of the lubricating grease he offers to supply. The sample shall be subject to tests to determine the following properties:—Volatility, ash, cold pour point, organic acidity, saponifiable matter. Consideration will be given to the results obtained in deciding the grease to be accepted.

A composite sample shall be taken from each delivery and shall be drawn from at least 5 per cent. of the containers. Such sample shall be accepted as accurately representing the quality of the delivery.

The sample shall be tested according to the methods described in "Circular of Australian Railways—Testing of Lubricating, Fuel, Oils, &c."

The grease shall be supplied in drums with the contents plainly marked on the outside.

Payment will be made on the specific gravity as disclosed by the Engineer of Tests.

## SPECIFICATION FOR Items Nos. 47A and 48.

The Grease tendered shall be suitable for the lubrication of—

Item No. 47A—Journals on locomotives provided with grease cellars.

Item No. 48.—Crank and Coupling Pins provided with High Pressure Grease Gun attachment.

It shall be of such a nature that it shall lubricate effectively at all loads and speeds, and shall be suitable for use throughout the year.

The Grease shall be a well manufactured product, and it shall be composed of a soda soap made of tallow, combined with a well-refined cylinder stock from crude petroleum oil. It shall be smooth and uniform, shall not crumble under pressure, and shall be free from grit.

The soap content shall be—

Item No. 47A.—Not less than 45 per cent.

Item No. 48.—Not less than 30 per cent.

The Tenderer shall submit with his tender a sample of not less than one (1) lb., also as many as possible of the following particulars of the Grease Compound he tenders to supply:—

- (a) Soft temperature.
- (b) Drop temperature.
- (c) Consistency.
- (d) Moisture content.
- (e) Free Alkali content.
- (f) Soap content.
- (g) Oil content.
- (h) Ash content.
- (i) Grit content.

The sample will be further tested by and at the cost of the Corporation, and all deliveries of Grease under this service shall show no appreciable variation from such sample.

The Grease shall be put up in moisture-proof barrels, drums or other approved containers with the net weight plainly marked on each.

## SPECIFICATION FOR PETROLEUM JELLY.—Item Nos. 50 and 50A.

The Petroleum Jelly shall be a purified mixture of semi-solid hydrocarbons of the very best quality obtained from petroleum, free from odour, mineral acid or alkali, fixed oils, fats, rosin, and other additions. It shall be completely soluble in Heavy Benzine.

The Petroleum Jelly shall have a melting point of not less than 100° F.

On incineration in a porcelain crucible, not more than 0.05 per cent. of mineral matter shall remain in the crucible.

The Tenderer shall indicate the specific gravity at 15.5° C.

The Tenderer shall supply a complete chemical and physical analysis of the grease or greases tendered for each item.

## APPENDIX "D."

## WIRE (IRON AND STEEL).

BLACK STEEL WIRE.—*Item No. 474.*

The Mild Steel Wire under Item 474 shall be of the best quality mild steel, and shall be free from rust and injurious defects of any kind.

A test piece of the Wire must withstand, without fracture, being doubled over, cold, until the internal radius is not greater than  $1\frac{1}{2}$  times the thickness of the test piece and the sides are parallel.

The Wire shall be supplied in coils.

The Wire shall be not more than 0.003 inches under, nor more than 0.003 inches over the specified diameter.

SPECIFICATION FOR GALVANIZED STEEL STRANDED WIRE.—*Item No. 475.*

*General Particulars.*—The stranded Wire shall be made up of (7) seven steel wires, each of 0.144-inch diameter. Each length of wire shall be free from splices, and should it be necessary to weld joints in individual wires, the welded joints shall be as strong as the rest of the wire; each wire shall be free from scale, inequalities, spills, splits and other defects. Each wire shall be smoothly galvanized, and the mechanical properties of the steel shall not be adversely affected by this process. The outer layer shall be wound in the direction as shown on Drawing No. F. 1586.

*Tests after Delivery.*—A sample piece of wire may be taken from each drum at the option of the receiving Officer and subjected to the undermentioned tests (a), (b), (c), and (d). In the event of a sample of the wire from any drum not passing these tests, a second and a third sample shall be taken from the same drum, and if one of these also fail under test the drum from which it is taken shall be rejected:—

- (a) *Tensile.*—The wires shall have a tensile breaking strength of not less than 45 tons per square inch and not more than 55 tons per square inch, with an elongation of not less than 3 per cent. in a length of 10 inches.
- (b) *Galvanizing.*—The quality of the galvanizing after stranding will be tested by immersing sample pieces of the wire in a freshly-made neutral solution of sulphate of copper saturated at 60 degrees F., and allowing them to remain in the solution for one minute, after which they will be withdrawn, plunged into clean water, and wiped clean. The galvanizing shall admit to this process being performed with each sample not less than three times without there being any signs of a reddish deposit of metallic copper on the wires. Not more than three pieces of wire are to be immersed in the solution at one and the same time.
- (c) Sample pieces of the galvanized wire shall bear winding round a bar  $1\frac{1}{4}$  inches in diameter without the galvanized surface showing signs of cracking.
- (d) Any individual wire of the galvanized steel strand shall bear winding round a rod of  $\frac{1}{2}$ -inch diameter without the steel wire showing signs of fracture.

*Contractor to be Given Notice of Tests.*—Any tests necessary to ascertain whether the wire supplied complies with this specification, will be carried out by the Receiving Officer. The Contractor will be notified at his Melbourne address of the intention to carry out such tests, and at what place they will be carried out, 24 hours previously, but should the Contractor or his representative fail to be present, the tests may be carried out in his absence at his risk.

*How Delivered.*—The stranded Wire shall be delivered on drums. The dimensions of the drums shall not exceed the figures given on Drawing No. "F." 678. An iron plate  $15" \times 15" \times \frac{1}{4}"$  thick is required to reinforce each side of the drum, and to which it must be bolted. A 3-in. clearance hole is to be made in both the drum and the plate to take a 3-in. square spindle. The gross and net weights, also number of feet on drum, are to be stenciled on the drum in figures which should not be less than  $1\frac{1}{2}$  inches high.

*Delivery.*—The delivery of the galvanized steel stranded Wire shall be given as directed, at the Corporation's Overhead Construction Storehouse, Batman-avenue.

*Information to be Supplied by Tenderer.*—The Tenderer shall state, where provided for below, the quality of galvanizing he will guarantee on the wire after stranding when subjected to the tests as detailed in clause 9 (b) of this specification.

- (a) Number of one (1) minute dips guaranteed is

No.

SPECIFICATION FOR GALVANIZED PLAIN FENCING WIRE.—*Item No. 476.*

The wire used in the manufacture of the whole of the above shall be of high-grade steel, uniformly galvanized, free from inequalities, flaws, splints, and other defects, uniformly true to gauge.

*How Delivered.*—The galvanized steel fencing wire shall be delivered in coils. Each coil of wire shall be provided with a suitable label on which shall be clearly stamped the net weight of wire in the coil.

*Delivery.*—The galvanized plain steel fencing wire shall be delivered where and as directed at either the General Storehouse, Spotswood, or the Metropolitan Receiving Depot, Spencer-street, Melbourne.

*Information to be supplied by Tenderer.*—The Tenderer shall furnish with his tender the following information:—

- (a) The British Imperial Standard Wire Gauge (I.S.W.G.) of each wire tendered.

.....

- (b) The tensile breaking strength in pounds of each wire tendered.

.....

## APPENDIX "D"—continued.

## SPECIFICATION FOR GALVANIZED BARBED WIRE.—Item No. 477.

*General Particulars.*—The wire used in the manufacture of the above Item shall be of high-grade steel, uniformly galvanized, free from flaws, splits and other defects, and uniformly true to gauge. The Barbs shall be of equal length, well shaped, with sharp points, and shall be securely fixed at regular pitches of  $3\frac{1}{2}$  inches.

A tolerance of  $\frac{1}{4}$  inch under and  $\frac{1}{4}$  inch over in  $3\frac{1}{2}$  inches is permissible.

*How Delivered.*—The galvanized barbed wire shall be delivered in reels. Each reel of wire shall be provided with a suitable label on which shall be clearly stamped the net weight of wire on the reel.

*Delivery.*—The galvanized Barbed Wire shall be delivered where and as directed at either the General Storehouse, Spotswood, or the Metropolitan Receiving Depot, Spencer-street, Melbourne.

*Information to be supplied by Tenderer.*—The Tenderer shall furnish with his tender the following information :—

- (a) The British Imperial Standard Wire Gauge (I.S.W.G.) of each wire tendered.

.....  
.....  
.....

- (b) The British Imperial Standard Wire Gauge (I.S.W.G.) of the wire used for the Barbs on each of the various Barbed Wires tendered.

.....  
.....  
.....

- (c) The tensile breaking strength in pounds of each single wire used in the manufacture of each Barbed Wire tendered.

.....  
.....  
.....

- (d) The tensile breaking strength in pounds of each grade of Barbed Wire after the Barbs are fixed in position.

.....  
.....  
.....

- (e) The number of Barb points in each set of barbs on each of the Barbed Wire tendered.

.....  
.....  
.....

- (f) The number of wires around which each set of Barbs are secured on each of the Barbed Wires tendered.

.....  
.....  
.....

## APPENDIX "E."

## ELECTRIC CABLES AND WIRES.

SPECIFICATION FOR COPPER TAPES AND BINDERS.—*Items Nos. 1069 and 1070.*

The tapes and binders shall be made of pure soft electrolytic copper wire of good quality.

The tapes and binders shall be of the dimensions given in Tables 1 and 2. The binders shall be flattened uniformly at each end.

After rolling, both tapes and binders shall be re-annealed soft and shall be free from scale. The ends of both tapes and binders shall be smooth and free from burrs.

The elongation test will be made by gripping a sample in an elongation machine and steadily elongating the sample until it breaks. The duration of the test shall be approximately 30 seconds. The elongation shall be measured after fracture, and shall comply with the figures given in Tables 1 and 2.

The tapes and binders shall be supplied in separate bundles of 100 each.

TABLE 1.  
*Tapes.—Item No. 1069.*

1.	2.	3.	4.	5.	6.	7.
Designation.	Approximate Weight per Mile of Wire used for Manufacture.	Length.	Width.	Thickness.	Minimum Elongation per cent. on 5 inches.	Approximate Number to the pound (lb.).
	lb.	inches.	inch.	inch.		
Tapes, Copper, No. 3 .. ..	150	9	$\frac{1}{4}$	0.026	25	53

TABLE 2.  
*Binders.—Item No. 1070.*

1.	2.	3.	4.	5.	6.	7.	8.
Designation.	Length.	Length of Middle Portion.	Diameter of Middle Portion Variation not to exceed 0.0002 inch.	Width of Flats.	Thickness of Flats.	Minimum Elongation per cent. on the middle 10 in.	Approximate Number to the pound (lb.).
	inches.	inches.	inch.	inch.	inch.		
Binder, Copper, No. 3 ..	20 $\frac{1}{2}$	7	0.112	$\frac{1}{8}$	0.056	20	17

## SPECIFICATION FOR STRANDED COPPER CABLE, DROPPER WIRE, AND CONTACT WIRE.—

*Items Nos. 1051 to 1063.*

(a) *Dropper Wire and Stranded Cables.*—Specifications of British Engineering Standards Association and Australian Commonwealth Engineering Standards Association apply except in regard to the dimensions of 7/0.036 (Item No. 1051) and 19/0.072 (Item No. 1057), and except in such other details as are definitely stated to the contrary. The A.C.E.S.A. Specification No. C. 41, 1927, shall apply to the copper dropper wire and stranded copper cables in this Contract as detailed in Items Nos. 1051 to 1061 and 1063, and the B.E.S.A. Specification No. 125, 1930, shall apply to Item No. 1062.

(b) *Inspecting, Testing, and Weighing at Works.*—All cables and wires will be weighed, and lengths checked as set out in clauses (k) and (l), and the contact wire shall also be inspected for defects as per clause (e) (2) and clause (f) by the Comptroller of Stores, or his representative, at the works of the Contractor.

The Stranded Copper Cable shall be tested before stranding in accordance with clause A by the Comptroller of Stores or his representative at the works of the Contractor. In the case of 37/.093 (Item No. 1060) stranded conductor of area 0.25 square inch, the outer layer of the wires of the stranded cable shall have a right hand lay.

For these purposes the Contractor shall give appropriate notice in writing of the readiness of the cables or wires for inspection, measurement, weighing, or tests at the works.

(c) *Testing after Delivery.*—The wire under Item No. 1062 shall be tested in accordance with clause (a), and the contact wire in accordance with clauses (e), (g), (h), and (i), by the Comptroller of Stores, or his representative, on delivery of the wire. The Contractor will be notified at his Melbourne address of the intention to carry out such tests, and at what place they will be carried out, 24 hours previously, but should he or his representative fail to be present the tests may be carried out at his risk in his absence.

(d) *Contact Wire General.*—(1) The hard drawn copper contact wire shall have a resistance of not more than .1570 ohm. per metregram at 20° C. (2) The wire shall be clean and smooth from the die, without roughness, seams, spills, scales, or scabs, and shall be delivered tightly wound on drums. (3) The section of the wire shall be in accordance with Drawing F. 1460.

(e) *Contact Wire Joints.*—The joints in the wire shall be carefully made with silver before the wire is drawn.

APPENDIX "E"—SPECIFICATION FOR STRANDED COPPER CABLE, ETC.—*continued.*

(f) *Contact Wire Tensile Test.*—Minimum breaking stress—20 tons per square inch.

*Elongation.*—The elongation at breaking load shall not be less than 4 per cent. on a test length of 10 inches.

*Elastic Limit.*—The elastic limit, as determined by stress and strain diagram, shall not be less than 60 per cent. of the breaking load.

(g) *Contact Wire Bending Test.*—The wire shall be fixed in a vice between clamps, bell-mouthed to a radius equal to the thickness of the wire where gripped, in such a way that the side touched by the pantograph and the side opposite are held in the clamps—90 degrees will be considered as a single bend. The first bend will be from a vertical position to the right, the second back to the original position, the third from the vertical to the left, and the fourth back into the original position. The wire shall be capable of standing as a minimum four bends without showing signs of fracture.

(h) *Contact Wire Torsion Test.*—The wire shall be capable of standing a single twist in a length of 10 inches without showing signs of fracture. One complete turn of 360 degrees from the axis shall be considered a single twist.

(i) *Samples for Test.*—A sample from each drum or coil may be taken of contact, dropper, or stranded wire for testing in accordance with clauses (c) and (d).

In the event of a sample of any drum or coil not passing these tests, a second or third sample from the same drum or coil shall be tested, and the average of these tests shall determine the acceptance or rejection of the drum or coil.

(j) *Weights.*—The method of weighing by the Comptroller of Stores, or his representative, at the works of the Contractor, will be as follows:—The empty drum will be weighed and the result noted. The cable or wire will then be wound on the drum for the specified length, the full drum will then be weighed and the result noted. The weight of the cable or wire to be supplied under this Contract will then be ascertained by subtracting the weight of the empty drum from the weight of the drum when filled. Each drum when packed and totally enclosed shall be stencilled with the gross, tare, and net weights in the presence of the Comptroller of Stores, or his representative.

All such weights so ascertained by the Comptroller of Stores, or his representative, will for all purposes be accepted by the parties to this Contract as correct and final and binding.

(k) *Measurements.*—The Comptroller of Stores, or his representative, shall measure the length of wire or cable on each drum at the works of the Contractor, and the Contractor shall have such lengths stencilled on the respective drums. These lengths will for all purposes be accepted by the parties to this Contract as final and binding.

(l) *How Delivered.*—The cable and wire shall be delivered on drums (the number which may be specified in the order). The dimensions of the drums shall not exceed the figures given on Drawing No. 4051—F. 678. An iron plate 15 inches by 15 inches by  $\frac{1}{4}$  inch thick is required to reinforce each side of the drum, to which it shall be bolted. A 3-in. clearance square hole shall be made in both the drum and the plate to take a 3-in. square spindle. The gross, tare, and net weight, also number of feet on the drum, shall be stencilled on the drum in figures which should not be less than  $1\frac{1}{2}$  inches high.

(m) *Delivery.*—The cable and wire shall be provisionally delivered, deposited where and as directed at the Corporation's Overhead Construction Storehouse, Laurens-street, North Melbourne, or at the Electric Light Storehouse at Spencer-street, as may be ordered, and delivery shall be deemed to be provisional until such time as the Comptroller of Stores shall certify that the whole of the service complies with this Specification and is in every respect to his satisfaction, and no such provisional acceptance shall prevent the operation of the "Rejection" clause of the annexed conditions of Contract.

SPECIFICATION FOR COPPER CABLE.—*Items Nos. 1064.*

*Method of Stranding.*—Concentric lay cables shall be formed as follows:—All wires in the cable must be stranded in the same direction, i.e., the lay of all strands must be the same throughout each cable.

*Electrical Resistance.*—Pure electrolytic copper shall be used; resistance shall not exceed 10.565 ohms per mil. foot at 20° C.

Actual capacity of the cable shall not vary from nominal capacity by more than plus or minus 2 per cent.

The length of the lay shall not exceed ten times the diameter of the cable.

Elongation shall not be less than 25 per cent., nor the tensile strength more than 38,500 lb. per square inch.

SPECIFICATION FOR HARD DRAWN COPPER WIRE FOR TELEGRAPH AND TELEPHONE PURPOSES.—  
*Items Nos. 1065 and 1066.*

The wire shall be hard-drawn copper wire—weight, 150 and 200 lb. per mile respectively. The wire shall be in accordance with the Australian Commonwealth Engineering Standards Association Specification No. C. 3, and the wire shall be packed in coils of 75 to 140 lb.

SPECIFICATION FOR COPPER JOINTING SLEEVES.—*Items Nos. 1067 and 1068.*

The sleeves shall be made of pure soft electrolytic copper.

The sleeves shall conform to the particulars given in the Table.

The sleeves shall be solid drawn, annealed, clean, and bright inside, and the ends shall be free from burrs.

Two copper wires of the maximum size shown in Column 2 of the Table will be inserted through the whole length of the sleeve. The sleeve and wire will then be fixed in two close-fitting joining clamps  $\frac{3}{8}$  inch wide, the outer edges of which shall be flush with the ends of the sleeve. These clamps will be revolved in opposite directions, and the sleeves shall withstand without cracking or breaking the specified number of twists, shown in Column 6 of the Table.

APPENDIX "E"—SPECIFICATION FOR COPPER JOINTING SLEEVES—*continued*.

The Contractor, if required, shall submit not less than ten sleeves of each size for approval before the bulk of the order is proceeded with.

The sleeves shall be supplied neatly packed in boxes, each containing 100 sleeves. Each box shall be labelled to show the quantity and description of the contents.

TABLE 3.

1.	2.		3.	4.	5.		6.
Designation.	Diameter of Wire for which Sleeve is Required.		Length of Sleeve.	Thickness of Metal.	Minimum Internal Dimensions.		Number of Twists.
	Minimum.	Maximum.			Major Axis.	Minor Axis.	
Sleeves, Copper—	inch.	inch.	inch.	inch.	inch.	inch.	
No. 5 (long) for 200-lb. Wire	·111	·113	5	·026	·234	·116	6
No. 6 (long) for 150-lb. Wire	·096	·098	4½	·022	·204	·101	6

The tests set out in the Australian Commonwealth Engineering Standards Association Specification Nos. C. 3-11, 1925, will be carried out by the Corporation at its Testing Laboratory in Melbourne, and the Contractor will be notified in sufficient time of the intention to carry out such test to enable him, or his representative, to be present if he so desire.

## SPECIFICATIONS FOR RESISTANCE WIRES.

*Nickel Copper Alloys.—Items Nos. 1071 to 1076.*

Tenderer shall state—

- (1) Trade name of product—
- (2) Specific resistance— microhms per cm. 3.
- (3) Temperature co-efficient—

*Nickel Chromium Alloys.—Items Nos. 1077 to 1093.*

All Nickel Chromium Wire shall be suitable for continuous service at 1100° C.

Tenderer shall state :—

- (1) Trade name of product—
- (2) Specific resistance— microhms per cm. 3.
- (3) Temperature co-efficient—20° to 500° C.

## APPENDIX "F."

## VARNISHES.

CARRIAGE VARNISH.—SPECIFICATION D.1.—*Items Nos. 1502 and 1503.*

The Varnish shall conform to the Tentative Australian Standards Specification for No. 1 Hard Drying Carriage Varnish No. K.14/1927 T., and No. 2 Durable Body Varnish No. K.15/1927 T.

COPAL VARNISH.—SPECIFICATION D.2.—*Item No. 1504.*

The Varnish shall conform to the Tentative Australian Standards Specification for No. 2 Hard Copal Varnish No. K.14/1927 T.

OAK VARNISH.—SPECIFICATION D.3.—*Item No. 1506.*

The Varnish shall conform to the Tentative Australian Standards Specification for No. 3 Oak Varnish No. K.14/1927 T.

GOLD SIZE.—SPECIFICATION D.4.—*Item No. 1507.*

## I.—SCOPE.

This Specification covers the varnish known as Japanners' Gold Size or Japan Gold Size.

## II.—MANUFACTURE.

The gold size shall be made from the best grades of hard varnish gums, pure linseed oil, and volatile thinners, with suitable driers.

## III.—PROPERTIES AND TESTS.

The gold size shall be clear and transparent and free from suspended matter and adulterants. It shall contain no added rosin.

The gold size shall conform to the following requirements :—

The volatile thinner shall consist of Genuine Turpentine or Mineral Turpentine, or a mixture of both.

Drying Test.—Shall set to touch in from 15 to 30 minutes when maintained at 70° F. in dust-free atmosphere.

## IV.—SAMPLING AND TESTING.

One unopened package shall be taken at random from each delivery.

The gold size shall be tested according to the methods described in "Circular of the Australian Railways—Testing of Paint Materials."



APPENDIX "F."—*continued.*JAPAN BLACK.—SPECIFICATION D.5.—*Item No. 1508.*

## I.—SCOPE.

This Specification covers the varnish known as Japan Black.

## II.—MANUFACTURE.

The japan shall be made from pure, best quality asphaltum, pure linseed oil, and volatile thinners, with suitable driers.

## III.—PROPERTIES AND TESTS.

The japan shall be free from adulterants, and shall contain no added rosin.

The japan shall conform to the following requirements:—

The volatile thinner shall consist of Genuine Turpentine or Mineral Turpentine, or a mixture of both.

Drying.—Shall set to touch in from 1½ to 2½ hours and shall dry hard in less than 20 hours when maintained at 70° F. in dust-free atmosphere. The film must be perfectly smooth and of full body.

Toughness.—Film on metal must stand rapid bending over a rod 3 mm. (⅜ inch) in diameter.

Stoving.—When stoved at 400° F. the japan shall show no signs of discolouration, burning, blistering, or cracking, and the film shall be sufficiently elastic to allow of being bent at right angles without cracking.

When rubbed vigorously with the ball of the finger the film shall show no signs of "Rubbing" or "Dusting."

Working Properties.—The japan must have good brushing, flowing, covering, and levelling properties.

## IV.—SAMPLING AND TESTING.

One unopened package shall be taken at random from each delivery.

The japan shall be tested according to the methods described in "Circular of the Australian Railways—Testing of Paint Materials."

LIQUID JAPAN DRIER.—SPECIFICATION D.6.—*Item No. 1509.*

## I.—SCOPE.

This Specification covers the Liquid Japan Drier (containing gums) known as Terebine.

## II.—MANUFACTURE.

The drier shall be composed of lead, manganese or cobalt, or a mixture of any of these elements combined with a suitable fatty oil, varnish gums, and mineral spirits or turpentine or a mixture of these solvents.

## III.—PROPERTIES AND TESTS.

The drier shall be clear and free from suspended matter and sediment.

It shall conform to the following requirements:—

Colour.—When mixed with eight parts by volume of raw linseed oil the resulting mixture shall be no darker than a solution of 6 grm. potassium dichromate in 100 c.c. of pure sulphuric acid of specific gravity 1·84.

The volatile thinner shall consist of Genuine Turpentine or Mineral Turpentine, or a mixture of both.

Mixing with Linseed Oil.—It shall mix with pure raw linseed oil in the proportion of 1 volume of drier to 19 volumes of oil without curdling.

Drying.—When mixed with 19 parts of raw linseed oil and flowed on glass, the film shall dry hard in not more than 18 hours, when maintained at 70° F. in dust-free atmosphere.

Baking.—When flowed on metal and baked for two hours at 100° C. (212° F.) the drier shall leave an elastic film.

## IV.—SAMPLING AND TESTING.

One unopened package shall be taken at random from each delivery.

The drier shall be tested according to the methods described in "Circular of the Australian Railways—Testing of Paint Materials."

PAPER VARNISH.—SPECIFICATION D.7.—*Item No. 1510.*

## I.—SCOPE.

This Specification covers the spirit varnish known as Paper Varnish, used for varnishing maps and similar purposes.

## II.—MANUFACTURE.

The varnish shall be made from the best quality Damar or other gums, digested cold in a suitable solvent. It shall be thoroughly settled.

## III.—PROPERTIES AND TESTS.

The varnish shall be clear and free from suspended matter, and shall contain no rosin, mineral matter or other adulterants.

APPENDIX "F."—PAPER VARNISH—*continued.*

It shall conform to the following requirements :—

Colour.—Water white.

Drying.—Shall set to touch in not more than 30 minutes, and shall dry hard and elastic when maintained at 70° F. in dust-free atmosphere.

Toughness.—Film on metal must stand rapid bending over a rod 3 mm. ( $\frac{1}{8}$  inch) in diameter.

Working Properties.—Varnish must have good brushing, flowing, covering, and levelling properties.

## IV.—SAMPLING AND TESTING.

One unopened package shall be taken at random from each delivery.

The varnish shall be tested according to the methods described in "Circular of the Australian Railways—Testing of Paint Materials."

SPIRIT VARNISH.—SPECIFICATION D.8.—*Item No. 1511.*

## I.—SCOPE.

This Specification covers varnishes known as Spirit Varnishes, both Brown and White.

## II.—MANUFACTURES.

Spirit Varnish shall be made from hard varnish gums, digested cold in methylated spirits.

The order shall state whether White or Brown Varnish is required.

## III.—PROPERTIES AND TESTS.

The varnish shall be clear and of satisfactory colour. It shall be free from suspended matter or sediment, and shall contain no rosin or other adulterants.

The varnish shall conform to the following requirements :—

Methylated Spirits.—Shall be at least 64 overproof.

Drying Test.—Shall set to touch in not more than 30 minutes, when maintained at 70° F. in a dust-free atmosphere.

## IV.—TESTING AND SAMPLING.

One unopened package shall be taken at random from each delivery.

The varnish shall be tested according to the methods described in "Circular of the Australian Railways—Testing of Paint Materials."

KNOTTING VARNISH.—SPECIFICATION D.9.—*Item No. 1512.*

## I.—SCOPE.

This Specification covers the Spirit Varnish known as Knotting Varnish.

## II.—MANUFACTURE.

Knotting Varnish shall be made of pure shellac, digested cold in methylated spirits.

## III.—PROPERTIES AND TESTS.

The varnish shall be clear and free from suspended matter and sediment. It shall contain no added rosin or other adulterants.

The varnish shall conform to the following requirements :—

Methylated Spirits.—Shall be at least 64 overproof.

Drying Test.—Shall dry to touch in not more than 20 minutes when maintained at 70° F. in dust-free atmosphere.

## IV.—SAMPLING AND TESTING.

One unopened package shall be taken at random from each delivery.

The varnish shall be tested according to the methods described in "Circular of the Australian Railways—Testing of Paint Materials."

FRENCH POLISH.—*Item No. 1513.*

To consist of pure orange shellac and 64 O.P. methylated spirits.

FRENCH POLISH, WHITE.—*Item No. 1514.*

To consist of finest bleached shellac and 64 O.P. methylated spirits.

SPECIFICATION FOR BLACK AIRDRYING VARNISH.—*Item No. 1515.*

*General Particulars.*—The varnish will be used for general work during the manufacture and repair of electrical machines and for the treatment of coils on parts too large to be baked.

*Quality.*—It shall be of the highest quality and manufactured from the best grades of varnish gums or asphaltum, pure linseed or tung oil, incorporated with suitable driers and thinners.

*Properties and Tests.*—It shall possess high penetrative power and yield a good body when applied with a brush or with a spray. The dried varnish should have a good mechanical strength and long life under unfavorable atmospheric conditions.

*Drying Time and Flexibility.*—A film of varnish on Japanese paper of 1 mil thickness shall set to touch in from three to six hours at a temperature of 20° C. When dry the film shall remain flexible and may be bent back on itself without cracking.

APPENDIX "F."—BLACK AIRDRYING VARNISH—*continued.*

*Dielectric Strength.*—A film of varnish covering Japanese paper 1 mil to a thickness of 4 to 5 mils shall have when dry a dielectric strength of not less than 1,000 volts per mil.

*Resistivity.*—The varnish applied shall have a high resistance to the effects of water, oil, acids, and alkalis; and shall contain no free acids.

The Tenderer shall supply the following information :—

Specific gravity  
Recommended thinning medium  
Percentage of thinning medium  
Dielectric strength  
Drying period at 20° C.

*Size of Containers.*—Delivery shall be made in either four (4) or one (1) gallon containers as required.

*Samples.*—The Tenderer shall submit a sample of not less than half a gallon of the varnish which he proposes to supply. The Corporation may test samples selected at random to ascertain to what extent the material supplied complies with this Specification or with the Tenderer's Specification.

VARNISH, INSULATING, QUICK AIRDRYING CLEAR.—To SPECIFICATION.—*Item No. 1516.*

*General Particulars.*—The varnish shall be suitable for the treatment of coils of oil immersed transformers and other electric apparatus which are not capable of being baked.

*Quality.*—It shall be of the highest quality and be manufactured from the best varnish gums and pure linseed oil together with suitable driers and thinners.

*Properties and Tests.*—It shall possess high penetrative power and yield a good body when applied with a brush or spray.

*Drying Time and Flexibility.*—A film of varnish on Japanese paper 1 mil in thickness shall set to the touch in from four to eight hours at a temperature of 20° C. When dry the film shall remain flexible and may be bent back on itself without cracking.

*Dielectric Strength.*—A film of varnish covering Japanese paper 1 mil in thickness to a total thickness of 4 to 5 mils shall have, when dry, a dielectric strength of not less than 1,000 volts per mil.

*Resistivity.*—The varnish shall have a high resistance to the effects of water, oil, acids, and alkalis and shall contain no free acid. Its resistance to the effect of hot transformer oil shall be determined by the length of time required for a film of varnish on a treated coil immersed in transformer oil at a temperature of 115° to 120° C. to show signs of sludging and disintegrating.

## INFORMATION TO BE SUPPLIED.

The Tenderer shall supply the following information :—

Specific gravity  
Recommended thinning medium  
Percentage of thinning medium  
Dielectric strength  
Drying time at 20° C.

*Size of Container.*—The delivery shall be made in one (1) gallon containers.

*Samples.*—The Tenderer shall submit a sample of not less than half a gallon of the varnish which he proposes to supply. The Corporation may test samples selected at random to ascertain to what extent the material complies with this Specification or with the Tenderer's Specification.

INSULATING STOVING BLACK.—To SPECIFICATION (IN 4-GALLON TINS).—*Item No. 1517.*

*General Particulars.*—The varnish must be entirely suitable for the impregnation and insulation of armature and field coils of all types of motors, including traction motors with operating voltages up to 1,500 volts.

*Quality.*—It shall be of the highest baking quality and manufactured from the best grades of varnish gums or asphaltum, pure linseed oil or tung oil, incorporated with suitable driers and thinners.

*Properties.*—It shall possess penetrative power when applied with a brush or in conjunction with a vacuum impregnating plant. The varnish shall have a long life when maintained at an operating temperature of 90° C., and shall exhibit no sign of softening at temperatures under 110° C.

*Drying Time.*—A film of varnish on Japanese paper of 1 mil thickness shall set to the touch in from six to fifteen hours when stoved at a temperature of 90° to 95° C. When dry the film shall remain flexible and may be bent back on itself without cracking.

*Dielectric Strength.*—A film of varnish when covering Japanese paper 1 mil thick to a thickness of 4 to 5 mils shall have when dry a dielectric strength of not less than 1,000 volts per mil.

*Resistivity.*—The varnish supplied shall have a high resistance to the effects of water, oils, acid and alkalis, and shall contain no free acid.

The Tenderer shall furnish the following information :—

Specific gravity  
Percentage of thinning medium  
Recommended thinning medium  
Dielectric strength  
Baking period at 90° C.  
Life when baked continuously at 90 degrees C.

*Size of Containers.*—Delivery shall be made in four (4) gallon containers.

*Samples.*—The Tenderer shall submit a sample of not less than half a gallon of the varnish which he proposes to supply. The Corporation may test samples selected at random to ascertain to what extent the material supplied complies with this Specification or with the Tenderer's Specification.

## APPENDIX "F"—continued.

## VARNISH, CORE-PLATE, QUICK DRYING IN AIR.—Item No. 1519.—SPECIFICATION.

(a) *General Particulars.*—The Varnish will be used for treatment of core-plates prior to assembly of same in Transformers, the cores of which may be oil-immersed.

(b) *Quality.*—The quality of the Varnish shall be of the best, and suitable for use under the conditions of clause (a).

(c) *Drying Time and Flexibility.*—A film of Varnish on Japanese paper 1 mil in thickness, shall set to the touch within 30 minutes of application at a temperature of 20° C. When applied to the core-plate the film, when dry, shall be flexible enough to permit of the bending common to the general handling received during treatment and assembly of the plates. The film shall not crack or flake during this bending.

(d) *The Properties.*—The Varnish shall be suitable for application with a brush and shall dry with a good film and surface.

(e) *Tests.*—Tests shall be made on samples from each delivery to ascertain whether the Varnish complies with this Specification.

## INFORMATION TO BE SUPPLIED BY THE TENDERER.

Specific gravity

Recommended thinning medium

Percentage of thinning medium

Drying time in air at 20° C.

*Size of Container.*—The delivery shall be made in 1 gallon containers.

## APPENDIX "G."

## COPPER PRODUCTS.

## SPECIFICATION FOR COPPER TUBING.—Items Nos. 1639 to 1666.

*Particulars.*—The copper tubing as set opposite Items Nos. 1639 to 1666, shall be in accordance with Australian Standard Specification No. E.—12—1925 T. (except where shown otherwise in this Specification).

*Inspection and Tests.*—All inspections and tests will be conducted by and at the cost of the Corporation at the Rolling Stock Workshops, Newport. (Hydraulic test excepted, which shall be conducted by and at the cost of the manufacturer at his works.) Each tube shall be subjected to an hydraulic internal test pressure of not less than 500 lb. per square inch, and the Contractor shall supply (with each delivery of the tubes) documentary evidence of such hydraulic test having taken place on each tube.

*Rejection.*—Should any copper tube or test piece taken from any tube in a delivery fail to comply in any particular with this Specification, the whole of the lot represented by the tube or test piece shall be liable to rejection.

*Defects Showing During Fabrication.*—Should any portion of a copper tube show injurious defects in course of fabrication by the Corporation, the Contractor shall be notified and provided the copper tube has been properly treated by the Corporation, the Contractor shall at his own expense and at the discretion of the Comptroller of Stores replace or make good the defective copper tube.

*Packing.*—The copper tubes shall be delivered packed in cases, crates, or other suitable means to prevent them from being damaged in transit.

## SPECIFICATION FOR PHOSPHOR COPPER.—Item No. 1667.

*Particulars.*—The phosphor copper shall be suitable for use for the production of phosphor bronze. It shall be supplied in the form of notched slabs weighing from 15 lb. to 20 lb. each. It shall be brittle and show on fracture a silvery-white colour.

*Freedom from Defects.*—The phosphor copper shall be clean, uniform in quality, and free from all injurious defects.

*Chemical Analysis.*—The phosphor copper shall show on analysis:—

Phosphorus	..	..	..	Minimum 15·00 per cent.
Phosphorus and copper combined	..	..	..	Minimum 99·85 per cent.
Impurities	..	..	..	Maximum 0·15 per cent.

*Branding.*—The Manufacturer's name or trade mark and the cast number shall be cast or otherwise legibly and durably marked on each slab.

*Inspections and Tests.*—All inspections and tests will be conducted by and at the cost of the Corporation at its premises. One slab of each cast in each delivery will be selected for testing and shall be taken as representing the lot from which it was selected. Should any slab fail to comply in any particular with this Specification the whole of the lot which it represents shall be liable to rejection.

SPECIFICATION FOR COPPER ROD (ELECTROLYTIC).—Items Nos. 1668 to 1670; AND  
COPPER SHEET.—Items Nos. 1679 and 1680.

*Particulars.*—The copper rod shall be clean and smooth, free from piping, surface, and all other defects.

The copper sheet shall be clean and smooth, uniform in thickness, and free from all surface and injurious defects.

## APPENDIX "G"—continued.

*Limit of Tolerance.*—No copper rod shall be more than 0·005" under nor more than 0·010" over the ordered diameter.

No copper sheet shall be more than  $\frac{1}{2}$  a Birmingham Sheet Gauge over or under the ordered thickness.

*Inspection and Tests.*—All inspections and tests will be conducted by and at the cost of the Corporation at its premises.

*Defects Showing During Fabrication.*—Should any portion of a copper rod or sheet show injurious defects in course of fabrication by the Corporation, the Contractor shall be notified and provided the copper rod or sheet has been properly treated by the Corporation, the Contractor shall at his own expense and at the discretion of the Comptroller of Stores, replace or make good the defective copper rod or sheet.

## SPECIFICATION FOR COPPER ROD.—Items Nos. 1671 to 1678.

*Particulars.*—The copper rod shall be in accordance with Australian Standard Specification, No. E. 9—1925 T. (except where shown otherwise in this Specification).

*Chemical Analysis.*—The copper rods shall contain not less than 0·3 per cent. nor more than 0·50 per cent. of arsenic, and not more than 0·03 per cent. of oxygen, and the balance shall be copper. The Contractor shall supply an analysis with each delivery of the copper rod. The Corporation shall have the right to make a check analysis if it so desires, and the result shall conform to that shown above.

*Limits of Tolerance.*—No copper rod shall be more than 0·005" under nor more than 0·010" over the specified diameter, and not more than 0·010" out of round.

*Inspection and Tests.*—All inspection and tests will be conducted by and at the cost of the Corporation at its premises.

*Rejection.*—Should a copper rod or test piece taken from any rod fail to comply in any particular with this Specification, the whole of the lot represented by the rod or test piece shall be liable to rejection.

*Defects Showing During Fabrication.*—Should any portion of a copper rod show injurious defects in course of fabrication by the Corporation, the Contractor shall be notified, and provided the copper rod has been properly treated by the Corporation, the Contractor shall at his own expense and at the discretion of the Comptroller of Stores, replace or make good the defective copper rod.

## SPECIFICATION FOR HARD DRAWN COPPER STRIP.—Item Nos. 1681 and 1682.

*Particulars.*—The copper strip shall be commercially pure hard drawn, and shall be clean and smooth from die, without roughness, seams, or scales.

*Tests.*—The copper strip shall have a Brinell hardness of not less than 75.

The copper strip shall withstand bending through an angle of 180 degrees over a bar  $\frac{3}{8}$ " diameter without showing signs of cracks or flaws of any description.

*Testing.*—The Corporation may carry out any tests to determine whether the service complies with this Specification. The successful tenderer will be notified at his Melbourne address of the intention to carry out such tests at least 24 hours previously, but should he or his representative fail to be present, the tests may be carried out in his or his representative's absence and at his risk.

## HARD DRAWN COPPER STRIP (HALF MOON SECTION).—Item No. 1683.

*Particulars.*—The copper strip shall be made from best quality commercial copper, to Drawing No. F. 1131, and to be to the satisfaction of the Comptroller of Stores. It shall be hard drawn, clean and smooth from the die, without roughness, seams or scales.

*Tests.*—The copper strip shall withstand bending through an angle of 180 degrees over a bar  $\frac{1}{2}$  inch diameter, without showing any signs of cracks or flaws of any description.

The successful Tenderer will be notified at his Melbourne address of the intention to carry out tests as laid down in this Specification at least 24 hours previously, but should he or his representative fail to be present, the tests may be carried out in his or his representative's absence, and at his risk.

## SOFT ARSENICAL COPPER TUBE.—Item No. 1685.

*Particulars.*—The tube shall be soft annealed, and shall contain not less than 99·25 per cent. of copper, and not more than 0·45 per cent. arsenic.

*Dimensions.*—The tubes shall have an internal diameter of 1·143 inches and a thickness of No. 13 s.w.g. This allowable tolerance on the internal diameter shall be plus or minus 0·008 inch. In no case shall the thickness be less than 0·034 inch. The tubes shall be delivered in 15-ft. lengths or alternatively in lengths of 14 $\frac{3}{8}$  inches.

*Freedom from Defects.*—The tubes shall be clean, smooth and free from surface defects or longitudinal grooving, both internally and externally, and the ends shall be clean and square. The tubes shall be straight and cylindrical, of uniform thickness, concentric and of uniform internal diameter throughout.

*Tests.*—The tubes shall stand drifting without showing crack or flaw until the diameter of the drifted end measures at least 25 per cent. greater than the original diameter of the tube. The tubes must be capable of withstanding the following tests both cold and at red heat without showing cracks or flaws.

A piece of tube shall be flattened down until the interior surfaces of the tube meet, and then be doubled over on itself, i.e., bent through an angle of 180 degrees, the bend being at right angles to the direction of the length of tube.

*Seamless Copper Tube.*—Item No. 1686.

*General.*—The tubes shall be of seamless copper, and in all respects shall be to the A.C.E.S.A. No. e12-1925T Specification.

APPENDIX "G"—COPPER TUBE.—*continued.*

*Dimensions.*—The tubes shall have an internal diameter of 1.143 inch and a thickness of wall of No. 13 S.W.G. Tubes shall be supplied in 15 ft. lengths.

*Standard Specifications.*—The A.C.E.S.A. Specification No. e12-1925T shall apply to all tubing supplied. (Note.—Clause 9, of A.C.E.S.A. No. e12-1925T, "Hydraulic Test," will not be applied.)

*Tests.*—Any tests to ascertain whether the delivered tubing agrees with this Specification may be applied by the Corporation on delivery.

*Delivery.*—The delivery shall be made at the Corporation's Electrical Depot Storehouse, Spencer-street, Melbourne.

COPPER STRIP FOR PANTOGRAPHS.—*Item No. 1686A.*

*Particulars.*—The strip shall be of hard drawn or hard rolled electrolytic copper, of straight, smooth finish and free from any defects such as flaws, cracks, &c. It shall be cut true to the length and angle, and bent as shown in Drawing No. F. 690B, and shall be free from burrs.

*Hardness.*—The copper strip shall have a hardness of between 90 and 100 as measured by the Brinell Hardness Test.

*Tests.*—The Corporation will carry out any tests necessary to ascertain whether the copper strips delivered comply with this Specification. Should more than 10 per cent. of any lot or package fail to comply with the Specification, the whole of the copper strip in such lot or package will be liable to rejection.

*Weights.*—All weights shall be ascertained by weighing the copper strip on the weighbridge scales or other weighing machines of the Corporation, at the Jolimont Workshops, and all such weights so ascertained by the Comptroller of Stores shall for all purposes be accepted by the parties as correct and final and binding.

## APPENDIX "H."

## METALS—ALUMINIUM, ANTIMONY, BRASS, LEAD, AND ZINC.

SPECIFICATION FOR ALUMINIUM INGOTS (*Item No. 1687*), ANTIMONY INGOTS (*Item No. 1688*).

*Particulars.*—(a) Aluminium. The Aluminium Ingots shall contain not less than 98 per cent. of virgin aluminium.

(b) Antimony. The Regulus of Antimony Ingots shall contain not less than 99.5 per cent. of antimony.

The materials shall be free from all injurious defects and shall be of uniform quality.

*Branding.*—The manufacturer's name or trade mark and a brand indicating that the materials are of the quality specified shall be cast, stamped or otherwise durably and legibly marked on each ingot of Aluminium and Antimony.

*Samples.*—The tenderer shall submit with his tender a sample ingot of the Aluminium and Antimony he tenders to supply; such samples shall be tested by the Corporation and all deliveries of Aluminium and Antimony under this contract shall show no appreciable variation from such sample.

*Inspection and Tests.*—All inspections and tests will be conducted by and at the cost of the Corporation at its premises. At least one ingot from each delivery of Aluminium and Antimony will be tested and held as representing the lot from which it was taken.

*Rejection.*—In the event of the material failing to comply in any particular with this Specification it shall be liable to rejection.

SPECIFICATION FOR BRASS ROD—*Items Nos. 1689-1741.*

*Particulars.*—The Brass Rods shall be in accordance with specification No. 218-1925 of the British Engineering Standards Association (except where shown otherwise in this Specification).

*Chemical Analysis.*—The Brass Rods shall show on analysis—

Copper	..	..	..	Min. 58 per cent., Max. 63 per cent.
Lead	..	..	..	Min. 1.5 per cent., Max. 2 per cent.
Zinc	..	..	..	The remainder
Total impurities	..	..	..	Not more than 0.75 per cent.

*Limits of Tolerance.*—The Brass Rod shall be true to the ordered dimensions within the following limits of tolerance :—

(a) Round or Square Rods (*Items Nos. 1712 to 1741*).

Diameter or Width Across Flats.	Rolled Rod.		Extruded or Drawn Rod.	
	Plus.	Minus.	Plus.	Minus.
Under $\frac{1}{4}$ inch	..	..	0.002"	0.002"
$\frac{1}{4}$ " to $\frac{7}{16}$ "	..	..	0.002"	0.002"
$\frac{7}{16}$ " to $\frac{1}{2}$ "	..	..	0.003"	0.003"
$\frac{1}{2}$ " to $\frac{3}{4}$ "	..	..	0.004"	0.004"
$\frac{3}{4}$ " to $1\frac{1}{4}$ "	..	..	0.004"	0.004"
$1\frac{1}{4}$ " to $1\frac{3}{4}$ "	..	..	0.005"	0.005"
$1\frac{3}{4}$ " to $3$ "	..	..	0.006"	0.006"

(b) *Hexagon Rod* (*Items Nos. 1689 to 1711*), shall be within the limits of tolerance shown opposite the various items in the schedule.

## APPENDIX "H"—continued.

*Inspection and Tests.*—All inspection and tests will be conducted by and at the cost of the Corporation at its premises.

*Rejection.*—Should the Brass Rod fail to comply in any particular with this Specification it shall be liable to rejection.

*Defects Showing During Fabrication.*—Should any portion of a Brass Rod show injurious defects in course of fabrication by the Corporation the Contractor shall be notified, and provided the Brass Rod has been properly treated by the Corporation, the Contractor shall at his own expense and at the discretion of the Comptroller of Stores replace or make good the defective Brass Rod.

## SPECIFICATION FOR BRASS SHEET—Items 1742 to 1749 "C."

*Particulars.*—The Brass Sheet shall be in accordance with British Standard Specification No. 266-1928, for 65/35 Brass Sheet, except where shown otherwise in this Specification.

*Inspection and Tests.*—All inspections and tests will be conducted by and at the cost of the Corporation at its premises.

*Rejection.*—Should the Brass Sheet fail to comply in any particular with this Specification it shall be liable to rejection.

*Defects Showing During Fabrication.*—Should any portion of a Brass Sheet show injurious defects in course of fabrication by the Corporation the Contractor shall be notified, and provided the Brass Sheet has been properly treated by the Corporation, the Contractor shall at his own expense and at the discretion of the Comptroller of Stores replace or make good the defective Brass Sheet.

## SPECIFICATION FOR BRASS TUBING—Items Nos. 1750-1763.

*Chemical Analysis.*—The tubes shall consist of an alloy of copper and zinc and shall contain not less than 60 per cent. of metallic copper and not more than a total of 0.75 per cent. of materials other than copper and zinc.

*Freedom from Defects.*—The tubes shall be clean, smooth and free from surface defects or longitudinal grooving both internally and externally, and the ends shall be clean and square.

*Limits of Tolerance.*—The tubes shall be of the dimensions specified in the order subject to the working margins given below. They shall be straight and cylindrical, of uniform thickness, concentric, and of uniform external diameter throughout.

The working margins shall be as follows:—

*On Length—*

Tubes 10 feet in length and under, plus or minus 1/16 inch.

Tubes over 10 feet in length, plus or minus 1/8 inch.

*On External Diameter—*

Tubes 2-inch diameter and under, plus or minus .008 inch.

*On Thickness—*

Plus or minus half a standard wire gauge.

The thickness of each tube shall at all points be as close as possible to that ordered. Local variations from this thickness shall be limited in number and extent, and in no such case shall the thickness be more than .008 inch below that ordered.

*Flattening and Doubling Over Test.*—All test material shall be annealed before testing and shall comply with the following mechanical test without further annealing.

The test piece shall stand the following test when cold without showing either crack or flaw:—The test piece shall be flattened out until the interior surfaces of the tube meet and then be doubled over on itself, i.e., bent through an angle of 180 degrees, the bend being at right angles to the direction of the length of the tube.

*Inspection and Tests.*—All inspections and tests will be conducted by and at the cost of the Corporation at its premises.

*Rejection.*—Should the material fail to comply in any particular with the Specification it will be liable to rejection.

*Defects Showing During Fabrication.*—Should any portion of Brass Tube show injurious defects in course of fabrication by the Corporation, the Contractor shall be notified, and provided the Brass Tube has been properly treated by the Corporation, the Contractor shall at his own expense and at the discretion of the Comptroller of Stores replace or make good the defective Brass Tube.

## SPECIFICATION FOR PIG LEAD—Items Nos. 1764 and 1765, AND LEAD SHEET—Item No. 1766.

*Particulars.*—(a) Pig Lead (remelted), Item 1764.

The Pig Lead as set opposite Item No. 1764 shall be manufactured from reworked lead and shall be free from injurious defects and shall be of uniform quality.

(b) Pig Lead (produced from raw material)—Item 1765.

The Pig Lead as set opposite Item 1765 shall be manufactured from ore or similar raw materials, by processes of reduction and refining, and shall not be produced from reworked material. It shall be free from injurious defects and shall be of uniform quality.

(c) Lead Sheet—Item 1766.

The Lead Sheet shall be manufactured from pig produced from raw materials; it shall be of even thickness throughout, smooth and free from all injurious defects.

## APPENDIX "H"—continued.

*Samples.*—The tenderer shall submit with his tender a sample of the pig lead (remelted), pig lead (produced from raw material), and the sheet lead he tenders to supply. Such samples shall be tested by the Corporation and all deliveries of lead under this contract shall show no appreciable variation from such sample.

*Branding.*—The manufacturer's name or trade mark and a brand indicating that the material is of the quality specified shall be cast or otherwise durably and legibly marked on each pig and marked on each sheet.

*Inspection and Tests.*—All inspections and tests will be conducted by and at the cost of the Corporation at its premises. One pig and one sheet shall be taken from each ton in each delivery of the lead, and shall be tested and held as representing the lot from which it was taken.

*Rejection.*—In the event of the material failing to comply in any particular with this Specification, it shall be liable to rejection.

## SPECIFICATION FOR ANTIMONIAL LEAD STRIP.—Items Nos. 1767–1769.

*Particulars.*—The antimonial lead strip shall be extruded, and shall be clean and smooth from the die, without roughness, seams or scales.

*Chemical Analysis.*—The material used in the manufacture of the strip shall consist of 98.9 to 99 per cent. commercially pure lead, and 1 to 1.1 per cent. antimony.

*Tests.*—A sample of the strip may be analysed by the Corporation after delivery. Failure to comply with the Specification will render the strip liable to rejection.

*How Delivered.*—The strip shall be delivered in rolls of about 56 lb. weight.

## SPECIFICATION FOR ELECTROLYTIC ZINC INGOTS—Item No. 1770, AND ZINC SHEET—Items Nos. 1771 and 1772.

*Particulars.*—(a) Electrolytic Zinc Ingots shall contain not less than 99.9 per cent. of Zinc. They shall be free from all injurious defects and of a uniform quality.

(b) Zinc Sheets.—The zinc sheets shall be of the best quality and of even thickness, smooth and free from all injurious defects.

*Samples.*—The tenderer shall submit with his tender a sample of the Zinc Ingots and Sheets he tenders to supply; such samples shall be tested, and all deliveries of Zinc under this contract shall show no variation to such sample.

*Branding.*—The manufacturer's name or trade mark shall be cast, or otherwise durably and legibly marked on each ingot and marked on each sheet.

*Inspection and Tests.*—All inspections and tests will be conducted by and at the cost of the Corporation on its premises. At least one ingot and one sheet from each delivery will be tested and held as representing the lot from which it was taken.

*Defects Showing During Fabrication.*—Should any portion of a Zinc Sheet show injurious defects in course of fabrication by the Corporation, the Contractor shall be notified, and provided the zinc sheet has been properly treated by the Corporation, the Contractor shall at his own expense and at the discretion of the Comptroller of Stores, replace or make good the defective Zinc Sheet.

## APPENDIX "I."

## SERGE AND TWILL.

*Samples.*—Samples of Items Nos. 2784, 2785 and 2787 are exhibited at the office of the Comptroller of Stores, which will indicate generally the quality of Cloth required. The tenderer shall submit a sample of at least one yard of each of the materials which he tenders to supply, and in the event of the tender being accepted, such sample shall become the contract sample, and all deliveries shall conform thereto in every respect.

*Quality.*—Only new, good, sound wool shall be used.

*Finish.*—All materials shall be of good appearance, durable and free from faults, and shall correspond to the contract sample in thickness, colour, weight, nature and closeness of the texture of the fabric, raising and shearing on both sides. All material shall be delivered thoroughly dried and clean, scoured free from grease, soap, or other admixture which may be used to give fictitious weight or substance to the goods, and thoroughly shrunk. It shall be free from grass seeds, burrs, and all other imperfections.

*Dyeing and Colour.*—All material shall be dyed dark blue with indigo dye. The colour shall correspond with that of the contract sample, and shall be thoroughly fast and not liable to rub off freely. A portion of the material may be tested by lengthened exposure to the weather or otherwise to determine whether the colour is fast.

The material shall be all Wool, Dark Blue, 58 inches wide, exclusive of selvages.

*Selvages and Identification Threads.*—Every piece of material shall have two selvages of not less than three-eighths of an inch in width. There shall be woven into the selvages and also in the full width of the heading and end of each piece of material one thread of pale blue.

*Threads per Inch.*—The number of warp and weft threads per square inch shall not be less than that set out under clause 22 of this specification.



## APPENDIX "I"—continued.

**Width and Folding.**—All material shall be 58 inches wide without selvages, and shall be correctly folded down the middle with the selvages straight and even. For the purpose of this specification the width shall be measured exclusive of selvages; a variation of one quarter of an inch either way will be accepted.

**Weight.**—The weight per yard shall not be less than specified in the schedule. The weight shall be determined by dividing the total weight of each or any piece by the full length of the piece.

**Marking.**—Each and every piece of material shall bear the mill number stencilled or marked into the end, and in addition shall have a ticket attached showing the class of cloth, weight, length and piece number.

**Inspection during Manufacture.**—The Comptroller of Stores or the Receiving Officer shall have free access to the works of the manufacturer at all reasonable times. He shall be at liberty to inspect the manufacture at any stage, and to reject any material that does not conform to the terms of this Specification.

**Tests.**—The material shall be subjected to such tests as may be deemed necessary to ascertain whether it complies with this Specification. For the purpose of such tests the Comptroller of Stores shall be entitled to cut off and destroy a portion not exceeding eighteen inches in length from the end of as many pieces as may be considered necessary, and shall be further entitled to wash and dry any piece of material supplied under this Specification. In the event of rejection as the results of such tests, the manufacturer shall not be entitled to any payment or compensation for material destroyed or damaged in making the tests. Tensile tests shall be carried out as described in clause 19.

**Tensile Strength and Stretch.**—Four specimens shall be cut from each portion of material reserved for test as described in clause 18. Two specimens shall be cut in the direction of the warp, and two in the direction of the weft, in such a manner that no two specimens cut in the same direction shall contain the same longitudinal threads.

The test specimens shall be  $6\frac{1}{2}$  inches wide and the threads shall be frayed out from each side so as to reduce the test width to 6 inches. They shall then be placed evenly in the jaws of a suitable testing machine so that the unstretched length of the fabric between the jaws is 7 inches, and shall be broken without delay. The load shall be applied at the rate of 150 lb. per inch width per minute. If a specimen breaks in the jaws at a load much lower than that required, a duplicate test shall be made on another test piece, including the same threads.

**Flaws and Deductions.**—All damage or flaws must be clearly marked on each piece of material, and for each and every damage or flaw a deduction of not less than one quarter yard shall be made by the Comptroller of Stores, and the ticket attached in accordance with clause 16 shall be clearly marked with the total amount deducted and the yardage to be paid for. The number of faults in any one piece of material shall not exceed one in every 10 yards.

**Rejection.**—Should any portion of a delivery fail to satisfy the requirements of this specification, the whole or portion of the delivery may be rejected. Each and every piece of material so rejected shall have the heading removed, and no piece of material from which the heading has been removed will be accepted.

The tenderer shall insert hereunder the following additional particulars of the Cloth tendered:—

		Item No. 2784.	Item No. 2785.	Item No. 2786.	Item No. 2787.
Strength, lb. per inch width, warp	lb. ....	.....	.....	.....	.....
Strength, lb. per inch width, weft	lb. ....	.....	.....	.....	.....
Stretch, inches, warp	.. .. inches	.....	.....	.....	.....
Stretch, inches, weft	.. .. inches	.....	.....	.....	.....
Warp threads, per square inch	.. No. ....	.....	.....	.....	.....
Weft, threads, per square inch	.. No. ....	.....	.....	.....	.....

The samples submitted will be tested to confirm the information inserted above, and if the tender be accepted, all deliveries shall be in accordance therewith.

