

AUGUST 2023

**REVISIONS TO THE LOOSE-LEAF RULEBOOK
OF THE LONDON METAL EXCHANGE**

Release No 124

Enclosed are replacement pages of the LME Rulebook affected by recent revisions.

Updates comprise:-

Part 6 – Replace the whole of Part 6

Details of the substantive changes are below:

23/087	UPDATE TO THE LMEPASSPORT ENHANCED ECOA TIMELINE
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Ref: R124 (2023/4)

PART 6

SPECIAL CONTRACT RULES FOR HIGH GRADE PRIMARY ALUMINIUM

1. QUALITY

The aluminium delivered under this contract must:

- (a) be:
 - (i) Primary aluminium with impurities no greater than in the registered designation P1020A in the North American and International Registration Record entitled "International Designations and Chemical Composition Limits for Unalloyed Aluminum" (revised January 2018), or
 - (ii) Primary aluminium that conforms to the registered designation A199.70 in the GB/T 1196-2018 Standard entitled "Unalloyed aluminium ingots for remelting", or
 - (iii) For warrants created up to and including 31 December 2009 primary aluminium of minimum 99.70% purity with maximum permissible iron content 0.20% and maximum permissible silicon content 0.10%.
- (b) be in the shape of ingots each weighing not less than 9 kilos and not more than 26 kilos and T-bars or sows weighing not more than 788 kilos.
- (c) be of brands listed in the LME approved list.

2. SIZE OF LOT

25 tonnes (2% either more or less).

3. WARRANTS

3.1 Warrants shall be for 25 tonnes (2% either more or less).

3.2 The aluminium in each Warrant shall consist of one brand which is listed as being good delivery, and of one shape and dimension, subject, in the case of ingots, to the necessity of including different shapes and dimensions at the bottom of each bundle for the purpose of stability and must be in bundles not exceeding 2.0 tonnes securely strapped for safe handling and transport without bundle distortion and breakage.

3.3 Each Warrant shall state:

- (a) the name of the brand;
- (b) the country / region of origin;
- (c) the shape;
- (d) the date(s) and reference number(s) of the certificate(s) of analysis lodged with the Warehouse;

- (e) the weight;
- (f) the number of bundles of ingots or the number of T-bars or sows making up each lot.

3.4 Each Warrant must bear the following clause;

WARNING: the buyer is advised that this metal may contain crevices and hidden recesses holding entrapped moisture. The metal should be handled and processed with this possibility in mind. Entrapped moisture may cause an explosion if the metal is introduced into a melting furnace without proper drying.

4. **CERTIFICATES OF ANALYSIS**

Requirement for eCOA to place metal on Warrant

- 4.1 Each delivery of a Lot of aluminium to a Warehouse for placing on Warrant must be accompanied by an eCOA in order for the Warehouse to be able to place such metal on Warrant.
- 4.2 Where the aluminium comprising the relevant Lot was produced on or after a date to be specified by the Exchange by way of Notice, in order for such Lot to be warrantable, the Lot of aluminium must be accompanied by an Enhanced eCOA.
- 4.3 With effect from the date specified by way of Notice pursuant to Special Contract Rule 4.2 above, where a Warehouse is unable to identify the production date of a Lot of aluminium and the relevant Lot is not accompanied by an eCOA, the Warehouse is permitted to produce a Basic eCOA pursuant to the terms of any agreements between the Exchange and the relevant Warehouse. In such circumstances, the Warehouse may place such Lot on Warrant following the creation of such Basic eCOA.

Voluntary creation of an eCOA (metal produced before the date specified by way of Notice pursuant to Special Contract Rule 4.2 above)

- 4.4 For metal produced before the date specified by way of Notice pursuant to Special Contract Rule 4.2 above and where an Enhanced eCOA has not been created in respect of the underlying metal by its producer, a Basic eCOA may be produced by one of the following:
 - (a) Members, pursuant to Special Contract Rule 4.7 below;
 - (b) Warehouses, pursuant to the terms of any agreements between the Exchange and the relevant Warehouse (including but not limited to the Warehouse Agreement);
 - (c) the producer of the underlying metal; or
 - (d) any other categories of persons or entities as the Exchange may specify from time to time.

For these purposes, each of the above shall be able to upload Paper COAs into the eCOA System for the purposes of producing the Basic eCOA.

Requirements for Production of an eCOA

- 4.5 In order to be a valid eCOA, any eCOA that is produced in respect of aluminium must demonstrate compliance with one of the relevant standard and grades listed in Special Contract

Rule 1(a)(i) or (ii) by illustrating the detected level of impurity for each element. Warrants created up to and including 31 December 2009, may additionally demonstrate compliance with the standard and grade listed in Special Contract Rule 1(a)(iii). In all cases, it must be possible to cross-reference the production cast reference on the metal to identical numbers on the eCOA.

4.6 An Enhanced eCOA for a Lot of aluminium may only be created by the producer of the metal. Any eCOA created by a producer of metal which is produced on or after the date specified by way of Notice pursuant to Special Contract Rule 4.2 above must be an Enhanced eCOA.

4.7 Where a Member (or any other person) elects to produce a Basic eCOA, it must:

- (a) upload the complete and correct Paper COA relating to the underlying metal;
- (b) enter the correct information into the eCOA System as requested by the eCOA System for the purposes of creating the Basic eCOA and as specified by the Exchange from time to time; and
- (c) use all reasonable skill, care and attention when using the eCOA System.

5. **ADDITIONAL REQUIREMENTS FOR ALUMINIUM WARRANTS**

5.1 The listed brand name and/or brand identifiable logo must be indelibly marked on each ingot within a bundle or on each T-bar or sow.

5.2 In the case of ingots, the production cast reference must be indelibly marked on each ingot within the bundle or on the surface of the bundle or on a durable bundle label. In the case of T-bars and sows, the production cast reference must be marked on each T-bar or sow either indelibly or by a durable bundle label.

5.3 If a Warrant relates to metal, in respect of which an eCOA has not been produced, the Warehouse is obliged to submit to the identified holder of any Warrant the Certificate(s) of Analysis or copies thereof, on request.

5.4 All documentation for placing aluminium on Warrant must include the English language.

5.5 Straps replaced by a Warehouse must be of corrosion resistant material and in compliance with LME strapping standards.

6. **MAJOR CURRENCY**

US dollars

7. **TESTING OF WARRANTED METAL**

If the Chief Executive, or those empowered by him for this purpose, believe that the conditions at (a) and (b) below are satisfied, he or they may instruct an LSA to undertake such tests as are necessary to form a reasonable opinion on whether or not metal on Warrant conforms with these rules. Where the Chief Executive, or those empowered by him for this purpose, reasonably believes that the situation requires it, those tests may be conducted without the prior consent of the Warrant holder. The tests will be at the LME's cost.

The conditions referred to above are: -

- (a) There are reasonable grounds to suspect that metal on Warrant does not comply with these rules.
- (b) There is a risk of disruption to the LME's market.

SPECIAL CONTRACT RULES FOR ALUMINIUM ALLOY

1. QUALITY

The aluminium alloy delivered under this contract must be:

- (a) Aluminium alloy conforming to one of the specifications listed below:
- (1) **A380.1** produced in conformity with The Aluminum Association Inc. specification (2015);
- (2) **226** produced in conformity with LME 226 as described below:

Elements	Composition, % (m/m)
Cu	2.0 – 3.5
Si	8.0 –11.0
Mg	0.1 – 0.5
Zn	1.2 max
Fe	1.0 max
Mn	0.1 – 0.4
Ni	0.3 max
Sn	0.1 max
Ti	0.15 max
Pb	0.2 max
Others	0.05 max each
Al	Remainder
The sum of 'others' 0.15% max	

- (3) **AD12.1** produced in conformity with JIS H2118-2006, Class 12: (Note: this specification to be read in conjunction with the provision that there be an allowance as follows: Others, total 0.50% max, Al remainder).
- (b) In the shape of ingot, small sows (four way entry sows), large sows (low profile sows) and T-bars.
- (c) Of brands listed in the LME-approved list of aluminium alloy brands.

2. SIZE OF LOT

20 tonnes (2% either more or less).

3. WARRANTIES

- 3.1 Warrants shall be for 20 tonnes each (2% either more or less).
- 3.2 The aluminium alloy in each Warrant shall consist of one brand which is listed as being good delivery and of one shape and dimension.
- 3.3 Each lot shall contain aluminium alloy derived from no more than five production batches, and, in the case of ingots, each bundle shall contain aluminium alloy from only one production batch.
- 3.4 Each Warrant shall state:
- (a) the name of the brand;
 - (b) the country / region of origin;
 - (c) the shape;
 - (d) the date(s) and reference number(s) of the certificate(s) of analysis lodged with the Warehouse;
 - (e) the weight;
 - (f) the number of bundles of ingots, small sows, large sows or T-bars making up each lot;
 - (g) each Warrant must bear the following clause;

WARNING: the buyer is advised that this metal may contain crevices and hidden recesses holding entrapped moisture. The metal should be handled and processed with this possibility in mind. Entrapped moisture may cause an explosion if the metal is introduced into a melting furnace without proper drying.

4. **CERTIFICATES OF ANALYSIS**

Requirement for eCOA to place metal on Warrant

- 4.1 Each delivery of a Lot of aluminium alloy to a Warehouse for placing on Warrant must be accompanied by an eCOA in order for the Warehouse to be able to place such metal on Warrant.
- 4.2 Where the aluminium alloy comprising the relevant Lot was produced on or after a date to be specified by the Exchange by way of Notice, in order for such Lot to be warrantable, the Lot of aluminium alloy must be accompanied by an Enhanced eCOA.
- 4.3 With effect from the date specified by way of Notice pursuant to Special Contract Rule 4.2 above, where a Warehouse is unable to identify the production date of a Lot of aluminium alloy and the relevant Lot is not accompanied by an eCOA, the Warehouse is permitted to produce a Basic eCOA pursuant to the terms of any agreements between the Exchange and the relevant Warehouse. In such circumstances, the Warehouse may place such Lot on Warrant following the creation of such Basic eCOA.

Voluntary creation of an eCOA (metal produced before the date specified by way of Notice pursuant to Special Contract Rule 4.2 above):

- 4.4 For metal produced before the date specified by way of Notice pursuant to Special Contract Rule 4.2 above and where an Enhanced eCOA has not been created in respect of the underlying metal by its producer, a Basic eCOA may be produced by one of the following:
- (a) Members, pursuant to Special Contract Rule 4.7 below;
 - (b) Warehouses, pursuant to the terms of any agreements between the Exchange and the relevant Warehouse (including but not limited to the Warehouse Agreement);
 - (c) the producer of the underlying metal; or
 - (d) any other categories of persons or entities as the Exchange may specify from time to time.

For these purposes, each of the above shall be able to upload Paper COAs into the eCOA System for the purposes of producing the Basic eCOA.

Requirements for Production of an eCOA:

- 4.5 In order to be a valid eCOA, any eCOA that is produced in respect of aluminium alloy must demonstrate compliance with one of the relevant standards and grades listed in Special Contract Rule 1(a) (1), (2) or (3) by illustrating the detected level of impurity for each element. In all cases, it must be possible to cross-reference the production cast reference on the metal to identical numbers on the eCOA.
- 4.6 An Enhanced eCOA for a Lot of aluminium alloy may only be created by the producer of the metal. Any eCOA created by a producer of metal which is produced on or after the date specified by way of Notice pursuant to Special Contract Rule 4.2 above must be an Enhanced eCOA.
- 4.7 Where a Member (or any other person) elects to produce a Basic eCOA, it must:
- (a) upload the complete and correct Paper COA relating to the underlying metal;
 - (b) enter the correct information into the eCOA System as requested by the eCOA System for the purposes of creating the Basic eCOA and as specified by the Exchange from time to time; and
 - (c) use all reasonable skill, care and attention when using the eCOA System.

5. ADDITIONAL REQUIREMENTS FOR ALUMINIUM ALLOY WARRANTS

- 5.1 The listed brand name must be indelibly marked on each ingot, sow and T-bar.
- 5.2 The production cast reference and alloy grade reference must be indelibly marked on each ingot within the bundle or on the top surface of the bundle or on a durable bundle label and on each sow and T-bar.
- 5.3 If a Warrant relates to metal, in respect of which an eCOA has not been produced, the Warehouse is obliged to submit to the identified holder of any Warrant the Certificate(s) of Analysis or copies thereof, on request.
- 5.4 All ingots and sows shall be produced by a single pouring process. "Multi-pour" or "capping" the surface with additional metal after the ingot or sow is formed is not permitted.

- 5.5 All ingots, T-bars and sows delivered under the contract shall be flat in order to permit safe stacking and handling using forklifts.
- 5.6 Metal surfaces shall be smooth and free of open shrinkage, porosity, layers and seams.
- 5.7 The metal must be free of the visible presence of foreign substances.
- 5.8 The edges and surfaces of metal shall be free of sharp edges, spurs and flashings that might present safety hazards in handling.
- 5.9 All documentation for placing aluminium alloy on Warrant must include the English language.
- 5.10 Straps replaced by a Warehouse must be of corrosion resistant material and in compliance with LME strapping standards.

6. SHAPES, WEIGHTS AND DIMENSIONS

(a) Ingots

Ingots shall weigh not less than 4 kilos and not more than 25 kilos. Each ingot in each bundle and lot shall be of the same weight and dimensions but not exceed 800mm in length; the only exception to be the cast feet for the purpose of bundle stability.

Bundles shall weigh not less than 500 kilos and not more than 1000 kilos of equal weight and dimension in each lot suitable for stacking. One makeweight bundle in any one lot is permissible. Bundles must be securely strapped for safe handling and transport without bundle distortion and breakage.

(b) Small sows (four-way entry sows)

Small sows shall weigh not less than 408 kilos and not more than 590 kilos. Each small sow in each lot shall be of the same weight and dimensions.

Dimensions shall be within the permitted range detailed as follows:

Top	Length and width shall be the same, between 837mm - 990mm.
Bottom	Length and width shall be the same, between 406mm - 559mm.
Height	Between 304mm – 432mm.
Shape	The tapering of all four sides should include an indentation to allow for the safe and easy handling by forklift trucks.

(c) Large sows (low profile sows)

Large sows shall weigh not less than 300 kilos and not more than 726 kilos. Each large sow in each lot shall be of the same weight and dimensions.

Dimensions shall be within the permitted range detailed as follows:

Top	Length shall be between 1015mm – 1320mm.
	Width shall be between 812mm – 1142mm.

Bottom	Length shall be between 900mm – 1320mm. Width shall be between 406mm – 520mm.
Height	Between 200mm – 305mm.
Shape	The tapering of the long sides should include an indentation to allow for the safe and easy handling by forklift trucks.

(d) T-bars

T-bars shall weigh not less than 408 kilos and not more than 726 kilos. Each T-bar in each lot shall be of the same weight and dimensions.

Top	Length shall be between 837mm – 1320mm. Width shall be between 760mm – 1015mm.
Bottom	Length shall be between 837mm – 1320mm. Width shall be between 406mm – 634mm.
Height	Overall between 254mm – 432mm. To shoulder minimum 76mm.
Shape	The indentation of the shoulder on the long sides should be a minimum of 101mm (4 inches) on each side and allow for the safe and easy handling by forklift trucks.

7. **MAJOR CURRENCY**

US dollars

8. **TESTING OF WARRANTED METAL**

If the Chief Executive, or those empowered by him for this purpose, believe that the conditions at (a) and (b) below are satisfied, he or they may instruct an LSA to undertake such tests as are necessary to form a reasonable opinion on whether or not metal on Warrant conforms with these rules. Where the Chief Executive, or those empowered by him for this purpose, reasonably believes that the situation requires it, those tests may be conducted without the prior consent of the Warrant holder. The tests will be at the LME's cost.

The conditions referred to above are:

- (a) There are reasonable grounds to suspect that metal on Warrant does not comply with these rules.
- (b) There is a risk of disruption to the LME's market.

SPECIAL CONTRACT RULES FOR COPPER - GRADE A

1. QUALITY

The copper delivered under this contract must be:

- (a) Refined electrolytic copper conforming to the chemical composition of one of the following Standards:
 - (i) BS EN 1978:2022 (cathode grade designation Cu-CATH-1).
 - (ii) GB/T 467-2010 (high purity Copper Cathode (Cu-CATH-1)).
 - (iii) ASTM B115-10 (2021) (cathode Grade 1).
- (b) In the shape of full plate cathodes;
- (c) Of brands listed in the LME approved list.

2. SIZE OF LOT

25 tonnes (2% either more or less).

3. WARRANTS

3.1 Warrants must be for 25 tonnes (2% either more or less).

3.2 The copper in each Warrant shall consist of one brand which is listed as being good delivery and must be in bundles not exceeding 4.0 tonnes securely strapped for safe handling and transport without bundle distortion and breakage.

3.3 Each Warrant must state:

- (a) the name of the brand;
- (b) the country of origin;
- (c) the shape;
- (d) the weight;
- (e) the number of bundles making up each lot.

4. ADDITIONAL REQUIREMENTS FOR COPPER WARRANTS

4.1 The LME listed brand name must be indelibly marked on clips attached to the producer's bundle strapping or marked continuously on the strapping.

4.2 No opening of producer bundles with producer markings is permitted by a Warehouse upon receipt except as follows:

- (a) Where packaging is damaged such that it may cause a hazard in subsequent handling and storage in which case the Warehouse must repack and label if necessary in accordance with (b) and (c) below;

- (b) Where to create a Warrant lot it is necessary to break one or more bundles provided that with such adjustment at least 80% of the bundles in the Warrant have the original producer's clips or straps showing the brand name. The remaining bundles in the Warrant must have a durable label provided by the Warehouse attached to the top cathode in a bundle showing the brand name;
- (c) Straps replaced by a Warehouse must be of corrosion resistant materials and in compliance with LME strap standards.

5. **MAJOR CURRENCY**

US dollars.

6. **TESTING OF WARRANTED METAL**

If the Chief Executive, or those empowered by him for this purpose, believe that the conditions at (a) and (b) below are satisfied, he or they may instruct an LME Listed Sampler and Assayer (LSA) to undertake such tests as are necessary to form a reasonable opinion on whether or not metal on Warrant conforms with these rules. Where the Chief Executive, or those empowered by him for this purpose, reasonably believes that the situation requires it, those tests may be conducted without the prior consent of the Warrant holder. The LME will bear the costs of such tests.

The conditions referred to above are that:-

- (a) there are reasonable grounds to suspect that copper on Warrant does not comply with these rules;
- (b) there is a risk of disruption to the LME's market.

SPECIAL CONTRACT RULES FOR LEAD

1. QUALITY

The lead delivered under this contract must be:

- (a) Refined lead of a minimum 99.970% purity conforming to one of the following Standards and specific grades:
 - (i) BS EN 12659:1999 Standard entitled "Lead and Lead Alloys – Lead". Permitted grades: Material Numbers PB970R, PB985R and PB990R.
 - (ii) GB/T 469/2013 Standard entitled "Lead Ingots". Permitted Grades: 99.970%, 99.985%, 99.990% and 99.994%.
 - (iii) ASTM B29-19 Standard entitled "Standard Specification for Refined Lead". Permitted grades: 99.97% and 99.995%.
- (b) In the shape of ingots weighing not more than 55kgs.
- (c) Of brands listed in the LME approved list.

2. SIZE OF LOT

25 tonnes (2% either more or less).

3. WARRANTS

3.1 Warrants shall be for 25 tonnes (2% either more or less).

3.2 The lead in each Warrant shall consist of one brand which is listed as being good delivery, and of one shape and dimension, subject to the necessity of including different shapes and dimensions at the bottom of each bundle for the purpose of stability and must be in bundles not exceeding 1.5 tonnes securely strapped for safe handling and transport without bundle distortion and breakage.

3.3 Each Warrant shall state:

- (a) the name of the brand;
- (b) the country / region of origin;
- (c) the shape;
- (d) the date(s) and reference number(s) of the certificate(s) of analysis lodged with the Warehouse;
- (e) the weight;
- (f) the number of bundles making up each lot.

4. CERTIFICATES OF ANALYSIS

Requirement for eCOA to place metal on Warrant

- 4.1 Each delivery of a Lot of lead to a Warehouse for placing on Warrant must be accompanied by an eCOA in order for the Warehouse to be able to place such metal on Warrant.
- 4.2 Where the lead comprising the relevant Lot was produced on or after a date to be specified by the Exchange by way of Notice, in order for such Lot to be warrantable, the Lot of lead must be accompanied by an Enhanced eCOA.
- 4.3 With effect from the date specified by way of Notice pursuant to Special Contract Rule 4.2 above, where a Warehouse is unable to identify the production date of a Lot of lead and the relevant Lot is not accompanied by an eCOA, the Warehouse is permitted to produce a Basic eCOA pursuant to the terms of any agreements between the Exchange and the relevant Warehouse. In such circumstances, the Warehouse may place such Lot on Warrant following the creation of such Basic eCOA.

Voluntary creation of an eCOA (metal produced before the date specified by way of Notice pursuant to Special Contract Rule 4.2 above):

- 4.4 For metal produced before the date specified by way of Notice pursuant to Special Contract Rule 4.2 above and where an Enhanced eCOA has not been created in respect of the underlying metal by its producer, a Basic eCOA may be produced by one of the following:
- (a) Members, pursuant to Special Contract Rule 4.6 below;
 - (b) Warehouses, pursuant to the terms of any agreements between the Exchange and the relevant Warehouse (including but not limited to the Warehouse Agreement);
 - (c) the producer of the underlying metal; or
 - (d) any other categories of persons or entities as the Exchange may specify from time to time.

For these purposes, each of the above shall be able to upload Paper COAs into the eCOA System for the purposes of producing the Basic eCOA.

Requirements for Production of an eCOA:

- 4.5 In order to be a valid eCOA, any eCOA that is produced in respect of lead must demonstrate compliance with one of the relevant standards and grades listed in Special Contract Rule 1(a) (i), (ii) or (iii) by illustrating the detected level of impurity for each element. In all cases, it must be possible to cross-reference the production cast reference on the metal to identical numbers on the eCOA.
- 4.6 An Enhanced eCOA for a Lot of lead may only be created by the producer of the metal. Any eCOA created by a producer of metal which is produced on or after the date specified by way of Notice pursuant to Special Contract Rule 4.2 above must be an Enhanced eCOA.
- 4.7 Where a Member (or any other person) elects to produce a Basic eCOA, it must:
- (a) upload the complete and correct Paper COA relating to the underlying metal;

- (b) enter the correct information into the eCOA System as requested by the eCOA System for the purposes of creating the Basic eCOA and as specified by the Exchange from time to time; and
- (c) use all reasonable skill, care and attention when using the eCOA System.

5. **ADDITIONAL REQUIREMENTS FOR LEAD WARRANTS**

- 5.1 The listed brand name must be indelibly marked on each ingot within a bundle.
- 5.2 The production cast reference must be indelibly marked on each ingot within the bundle or on the top surface of the bundle or on a durable label.
- 5.3 If a Warrant relates to metal in respect of which an eCOA has not been produced, the Warehouse is obliged to submit to the identified holder of any Warrant the Certificate(s) of Analysis or copies thereof, on request.
- 5.4 All documentation for placing lead on Warrant must include the English language.
- 5.5 Straps replaced by a Warehouse must be of corrosion resistant material and in compliance with LME strap standards.

6. **MAJOR CURRENCY**

US dollars

7. **TESTING OF WARRANTED METAL**

If the Chief Executive, or those empowered by him for this purpose, believe that the conditions at (a) and (b) below are satisfied, he or they may instruct an LSA to undertake such tests as are necessary to form a reasonable opinion on whether or not metal on Warrant conforms with these rules. Where the Chief Executive, or those empowered by him for this purpose, reasonably believes that the situation requires it, those tests may be conducted without the prior consent of the Warrant holder. The tests will be at the LME's cost.

The conditions referred to above are:

- (a) There are reasonable grounds to suspect that metal on Warrant does not comply with these rules, and
- (b) There is a risk of disruption to the LME's market.

SPECIAL CONTRACT RULES FOR PRIMARY NICKEL

1. QUALITY

The nickel delivered under this contract must be:

- (a) Primary Nickel that conforms to either the ASTM specification B39-79 (2023) – min 99.80% purity or the GB/T specification 6516-2010 – Ni9990 grade;
- (b) In the shape of cathodes (full plate or cut), briquettes, pellets or rounds; and
- (c) Of brands listed in the LME approved list.

2. SIZE OF LOT

6 tonnes (2% either more or less).

3. WARRANTS

3.1 Warrants shall be for 6 tonnes (2% more or less).

3.2 The nickel in each Warrant shall consist of one brand which is listed as being good delivery and of one shape and size.

3.3 Each Warrant shall state:-

- (a) the name of the brand;
- (b) the country / region of origin;
- (c) the shape;
- (d) the date(s) and identification reference of the certificates of analysis lodged with the Warehouse¹;
- (e) the total gross and net weights; and
- (f) the number of steel drums or bags or bundles making up each lot.

3.4 Each Warrant for drummed and bagged nickel shall bear the following legend:

'WARNING The buyer is advised that steel drums or bags (as applicable) may contain water and nickel should be handled and processed with this possibility in mind. Water contained in steel drums or bags (as applicable) may cause an explosion if the nickel is introduced into a melting-furnace without proper procedures being followed'.

3.5 Each Warrant for full plate cathode nickel shall bear the following legend:

'WARNING The buyer is advised that full plate nickel cathode edges may pose a handling risk and proper procedures for handling should be following'.

¹ For full plate nickel cathodes placed on Warrant on or before 10 January 2011, a certificate of conformity in lieu of a certificate of analysis is permissible.

4. SHAPES AND WEIGHTS

4.1 Nickel delivered under this contract shall be packed according to shape as follows:

- (a) Cut cathodes of either 100mm x 100mm (4" x 4"), 50mm x 50mm (2" x 2") or 25mm x 25mm (1" x 1"), shall be packed in sound steel drums of uniform size and even net weight (+/- 2% more or less) of 200kgs or 250kgs or 400kgs or 500kgs each with the production batch reference, gross and net weights and brand name indelibly marked on each individual steel drum. Part filled drums are not permitted.
- (b) Briquettes, pellets and rounds shall be packed in steel drums, sizes as 4.1 (a) above, or in 2000kgs (+/- 2% more or less) bags and marked in the same manner as cut cathodes in 4.1 (a) above. Part filled bags are not permitted.
- (c) Full plate cathodes up to 1000mm x 1400mm maximum with a thickness range of 2mm to 17mm, shall be packed in bundles not exceeding 2000kgs, strapped in two dimensions with corrosion resistant material to permit safe handling and transport without bundle distortion and breakage on steel or wooden skids (pallets not permitted) with a minimum ground clearance of 75mm with the production batch reference and gross and net weights indelibly marked on the top cathode of each bundle. The brand name must be marked indelibly either a) on clips attached to the bundle strapping, or b) on the producer strapping, or c) on each cathode within each bundle.

5. CERTIFICATE OF ANALYSIS

Requirement for eCOA to place metal on Warrant

- 5.1 Each delivery of a Lot of nickel to a Warehouse for placing on Warrant must be accompanied by an eCOA in order for the Warehouse to be able to place such metal on Warrant.
- 5.2 Where the nickel comprising the relevant Lot was produced on or after a date to be specified by the Exchange by way of Notice, in order for such Lot to be warrantable, the Lot of nickel must be accompanied by an Enhanced eCOA.
- 5.3 With effect from the date specified by way of Notice pursuant to Special Contract Rule 5.2 above, where a Warehouse is unable to identify the production date of a Lot of nickel and the relevant Lot is not accompanied by an eCOA, the Warehouse is permitted to produce a Basic eCOA pursuant to the terms of any agreements between the Exchange and the relevant Warehouse. In such circumstances, the Warehouse may place such Lot on Warrant following the creation of such Basic eCOA.

Voluntary creation of an eCOA (metal produced before the date specified by way of Notice pursuant to Special Contract Rule 5.2 above):

- 5.4 For metal produced before the date specified by way of Notice pursuant to Special Contract Rule 5.2 above and where an Enhanced eCOA has not been created in respect of the underlying metal by its producer, a Basic eCOA may be produced by one of the following:
 - (a) Members, pursuant to Special Contract Rule 5.7 below;

- (b) Warehouses, pursuant to the terms of any agreements between the Exchange and the relevant Warehouse (including but not limited to the Warehouse Agreement);
- (c) the producer of the underlying metal; or
- (d) any other categories of persons or entities as the Exchange may specify from time to time.

For these purposes, each of the above shall be able to upload Paper COAs into the eCOA System for the purposes of producing the Basic eCOA.

Requirements for Production of an eCOA:

- 5.5 In order to be a valid eCOA, any eCOA that is produced in respect of nickel must demonstrate compliance with one of the relevant specifications listed in Special Contract Rule 1(a) by illustrating the detected level of impurity for each element. In all cases, it must be possible to cross-reference the production cast reference on the metal, drums or bags to identical numbers on the eCOA.
- 5.6 An Enhanced eCOA for a Lot of nickel may only be created by the producer of the metal. Any eCOA created by a producer of metal which is produced on or after the date specified by way of Notice pursuant to Special Contract Rule 5.2 above must be an Enhanced eCOA.
- 5.7 Where a Member (or any other person) elects to produce a Basic eCOA, it must:
 - (a) upload the complete and correct Paper COA relating to the underlying metal;
 - (b) enter the correct information into the eCOA System as requested by the eCOA System for the purposes of creating the Basic eCOA and as specified by the Exchange from time to time; and
 - (c) use all reasonable skill, care and attention when using the eCOA System.

6. REQUIREMENTS FOR NICKEL WARRANTS

- 6.1 Nickel may be placed on Warrant provided that:
 - (a) Drummed nickel is in original sound producer steel drums with producer listed markings and with ring sealing and tamper proof producer seals intact.
 - (b) For drummed nickel received in original but unsound producer steel drums with broken/damaged producer seals or damaged while stored in the warehouse from an unintended incident, the Warehouse must, without exception, open every such drum and inspect the contents for conformance with the producer listed product and weight before re-packing in sound steel drums of capacity of 200kgs or 250kgs or 400kgs or 500kgs using the sizing of drums initially supplied and with ring sealing system and with unique Warehouse tamper proof numbered seals. All replacement steel drums must be marked with the original producer batch reference, listed brand and Warehouse established gross and net weights.
 - (c) Bagged nickel is in original sound producer bags with producer listed markings and with tamper proof seals intact.

- (d) For bagged nickel received in original but unsound producer bags with broken/damaged producer seals or damaged while stored in the warehouse from an unintended incident, the Warehouse must, without exception, open every such bag and inspect the contents for conformance with the producer listed product and weight before re-packing in replacement bags supplied by the producer or in new bags in compliance with ISO 21898:2004 (or National equivalent) with unique Warehouse tamper proof numbered seals. All replacement bags must be marked with the original producer batch reference, listed brand and Warehouse established gross and net weight.
- (e) For both drummed and bagged nickel producer approved third party packaging is permitted provided sealing methods are as per 5.1 (a) and 5.1 (c) above, using unique tamper proof numbered seals.
- (f) For full plate bundled nickel received in original sound producer bundles with producer listed markings no opening of bundles is permitted except as follows:
 - (i) Where it is necessary to break bundles in order to ensure nickel is placed on acceptable skids.
 - (ii) Where packaging is damaged such that it may cause a hazard in subsequent handling and storage.
 - (iii) Where to create a Warrant lot it is necessary to break one or more bundles from a single shipment quantity. Note that only two bundles in a lot may be constructed by a Warehouse, all other bundles must be original producer bundles. The Warehouse must indelibly mark each replacement strap with the brand name.

6.2 Straps replaced by a Warehouse must be of corrosion resistant material to permit safe handling and transport without bundle distortion and breakage and in compliance with LME strap Standards. The Warehouse must mark the top cathode of any new/reconstructed bundles with the producer production batch reference together with the gross and net weights.

7. **ADDITIONAL REQUIREMENTS FOR NICKEL WARRANTS**

7.1 All drummed nickel must be securely stored in warehouses on pallets.

7.2 The Warehouse must keep a record of all seals by number and date cross reference to each Warrant.

7.3 Drummed or bagged nickel previously on Warrant which has been supplied to another Warehouse may be placed back on Warrant provided that any drum or bag opened by the previous Warehouse is re-opened and their seal(s) replaced by the new Warehouse unique tamper proof seal(s). This rule does not apply to original sound producer drums or bags with producer listed markings and with tamper proof producer seals intact and to producer third party packaging where listed by the LME or for such packaging supported by an LME Listed Sampler and Assayer (LSA) certificate of analysis and having LSAs seals.

7.4 Drummed or bagged nickel previously on Warrant which has been returned to the same Warehouse may be placed back on Warrant without the need to open any packaging provided that all seals at the time of original warranting remain intact.

- 7.5 All markings on packaging and information on supporting documentation required for placing nickel on Warrant must include the English language.
- 7.6 If a Warrant relates to metal in respect of which an eCOA has not been produced, the Warehouse is obliged to submit to the identified holder of any Warrant the Certificate(s) of Analysis or copies thereof, on request.

8. **MAJOR CURRENCY**

US dollars

9. **TESTING OF WARRANTED METAL**

If the Chief Executive, or those empowered by him for this purpose, believe that the conditions at (a) and (b) below are satisfied, he or they may instruct an LSA to undertake such tests as are necessary to form a reasonable opinion on whether or not metal on Warrant conforms with these rules. Where the Chief Executive, or those empowered by him for this purpose, reasonably believes that the situation requires it, those tests may be conducted without the prior consent of the Warrant holder. The tests will be at the LME's cost.

The conditions referred to above are: -

- (a) that there are reasonable grounds to suspect that metal on Warrant does not comply with these rules, and
- (b) that there is a risk of disruption to the LME's market.

SPECIAL CONTRACT RULES FOR NORTH AMERICAN SPECIAL ALUMINIUM ALLOY

1. QUALITY

The aluminium alloy delivered under this contract must be:

- (a) Aluminium alloy conforming to the "LME NA380.1" specification (an LME modification of The Aluminum Association Inc. A380.1 specification (1989)), produced in conformity with the following specification:

Element	Minimum	Maximum
Copper	3.00	3.50
Silicon	8.50	9.50
Iron	0.80	1.00
Magnesium	-	0.10
Zinc	-	3.00
Manganese	-	0.45
Nickel	-	0.50
Tin	-	0.10
Lead	-	0.10
Titanium	-	0.10
Chrome (chromium)	-	0.10
Others – each	-	0.10
Others – total	-	0.50
Sludge = Fe + 2Mn + 3Cr		1.80

Production must be filtered.

- (b) In the shape of ingots, small sows (four way entry sows), large sows (low profile sows) and T-bars.
- (c) Of brands listed in the LME-approved.

2. SIZE OF LOT

20 tonnes (2% either more or less).

3. WARRANTIES

- 3.1 Warrants must be for 20 tonnes (2% either more or less).

- 3.2 The aluminium alloy in each Warrant must consist of one brand which is listed as being good delivery and of one shape and dimension.
- 3.3 Each lot must contain aluminium alloy derived from no more than five production batches, and, in the case of ingots, each bundle must contain aluminium alloy from only one production batch.
- 3.4 Each Warrant must state:
- (a) the name of the brand;
 - (b) the country / region of origin;
 - (c) the shape;
 - (d) the date(s) and reference number(s) of the certificate(s) of analysis lodged with the Warehouse;
 - (e) the weight;
 - (f) the number of bundles of ingots, small sows, large sows or T-bars making up each lot.
- 3.5 Each Warrant must bear the following clause;

WARNING: The buyer is advised that this metal may contain crevices and hidden recesses holding entrapped moisture. The metal should be handled and processed with this possibility in mind. Entrapped moisture may cause an explosion if the metal is introduced into a melting-furnace without proper drying.

4. **CERTIFICATES OF ANALYSIS**

Requirement for eCOA to place metal on Warrant

- 4.1 Each delivery of a Lot of aluminium alloy to a Warehouse for placing on Warrant must be accompanied by an eCOA in order for the Warehouse to be able to place such metal on Warrant.
- 4.2 Where the aluminium alloy comprising the relevant Lot was produced on or after a date to be specified by the Exchange by way of Notice, in order for such Lot to be warrantable, the Lot of aluminium alloy must be accompanied by an Enhanced eCOA.
- 4.3 With effect from the date specified by way of Notice pursuant to Special Contract Rule 4.2 above, where a Warehouse is unable to identify the production date of a Lot of aluminium alloy and the relevant Lot is not accompanied by an eCOA, the Warehouse is permitted to produce a Basic eCOA pursuant to the terms of any agreements between the Exchange and the relevant Warehouse. In such circumstances, the Warehouse may place such Lot on Warrant following the creation of such Basic eCOA.

Voluntary creation of an eCOA (metal produced before the date specified by way of Notice pursuant to Special Contract Rule 4.2 above):

- 4.4 For metal produced before the date specified by way of Notice pursuant to Special Contract Rule 4.2 above and where an Enhanced eCOA has not been created in respect of the underlying metal by its producer, a Basic eCOA may be produced by one of the following:

- (a) Members, pursuant to Special Contract Rule 4.7 below;
- (b) Warehouses, pursuant to the terms of any agreements between the Exchange and the relevant Warehouse (including but not limited to the Warehouse Agreement);
- (c) the producer of the underlying metal; or
- (d) any other categories of persons or entities as the Exchange may specify from time to time.

For these purposes, each of the above shall be able to upload Paper COAs into the eCOA System for the purposes of producing the Basic eCOA.

Requirements for Production of an eCOA:

- 4.5 In order to be a valid eCOA, any eCOA that is produced in respect of aluminium alloy must demonstrate compliance with the specification listed in Special Contract Rule 1(a) by illustrating the detected level of impurity for each element. In all cases, it must be possible to cross-reference the production cast reference on the metal to identical numbers on the eCOA.
- 4.6 An Enhanced eCOA for a Lot of aluminium alloy may only be created by the producer of the metal. Any eCOA created by a producer of metal which is produced on or after the date specified by way of Notice pursuant to Special Contract Rule 4.2 above must be an Enhanced eCOA.
- 4.7 Where a Member (or any other person) elects to produce a Basic eCOA, it must:
 - (a) upload the complete and correct Paper COA relating to the underlying metal;
 - (b) enter the correct information into the eCOA System as requested by the eCOA System for the purposes of creating the Basic eCOA and as specified by the Exchange from time to time; and
 - (c) use all reasonable skill, care and attention when using the eCOA System.

5. ADDITIONAL REQUIREMENTS FOR NASAAC WARRANTS

- 5.1 The LME listed brand name must be indelibly marked on each ingot, sow and T-bar.
- 5.2 For ingots, the production cast reference and alloy grade reference must be indelibly marked on each ingot within a bundle or on the top surface of a bundle or on a durable label attached to the bundle. For sows and T-bars the production cast reference and alloy grade reference must be indelibly marked either directly on the surface or on a durable label attached to the metal.
- 5.3 If a Warrant relates to metal in respect of which an eCOA has not been produced, the Warehouse is obliged to submit to the identified holder of any Warrant the Certificate(s) of Analysis or copies thereof, on request.
- 5.4 All ingots and sows must be produced by a single pouring process. "Multi-pour" or "capping" the surface with additional metal after the ingot or sow is formed is not permitted.
- 5.5 All ingots, sows and T-bars delivered under this contract must be flat in order to permit safe stacking and handling using forklifts.

- 5.6 Metal surfaces must be smooth and free of open shrinkage, porosity, layers and seams.
- 5.7 The metal must be free of the visible presence of foreign substances.
- 5.8 The edges and surfaces of metal must be free of sharp edges, spurs and flashings that might present safety hazards in handling.
- 5.9 All documentation for placing aluminium alloy on Warrant must include the English language.
- 5.10 Straps replaced by a Warehouse must be of corrosion resistant material and in compliance with LME strap standards.

6. SHAPES, WEIGHTS AND DIMENSIONS

(a) Ingots

Ingots must weigh not less than 4 kilos (9lbs) and not more than 17.3 kilos (38lbs). Each ingot in each bundle and lot must be of the same weight and dimensions but not exceed 800mm (35 inches) in length; the only exception to be the cast feet for the purpose of bundle stability.

Bundles must weigh not less than 500 kilos (1100lbs) and not more than 1000 kilos (2200lbs) of equal weight and dimension in each lot suitable for stacking. One makeweight bundle in any one lot will be permissible. Bundles must be securely strapped for safe handling and transport without bundle distortion and breakage.

(b) Small sows (four-way entry sows)

Small sows must weigh not less than 408 kilos (900lbs) and not more than 590 kilos (1300lbs). Each small sow in each lot must be of the same weight and dimensions.

Dimensions shall be within the permitted range detailed as follows:

Top	Length and width must be the same, between 837mm – 990mm (33 – 39 inches).
Bottom	Length and width must be the same, between 406mm – 559mm (16 – 22 inches).
Height	Between 304mm – 432mm (12 – 17 inches).
Shape	The tapering of all four sides must include an indentation to allow for the safe and easy handling by forklift trucks.

(c) Large sows (low profile sows)

Large sows must weigh not less than 500 kilos (1100lbs) and not more than 726 kilos (1600lbs). Each large sow in each lot must be of the same weight and dimensions.

Dimensions shall be within the permitted range detailed as follows:

Top	Length must be between 1015mm – 1320mm (40 – 52 inches). Width must be between 812mm – 1142mm (32 – 45 inches).
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Bottom	Length must be between 1015mm – 1320mm (40 – 52 inches). Width must be between 406mm – 533mm (16 – 21 inches).
Height	Between 216mm – 305mm (8.5 – 12 inches).
Shape	The tapering of the long sides should include an indentation to allow for the safe and easy handling by forklift trucks.

(d) T-bars

T-bars shall weight not less than 408 kilos (900lbs) and not more than 726 kilos (1600lbs). Each T-bar in each lot shall be one of the same weight and dimensions.

Dimensions shall be within the permitted range detailed as follows:

Top	Length must be between 837mm – 1320mm (33 – 52 inches). Width must be between 760mm – 1015mm (30 – 40 inches).
Bottom	Length must be between 837mm – 1320mm (33 - 52 inches). Width must be between 406mm – 634mm (16 – 25 inches).
Height	Overall between 254mm – 432mm (10 – 17 inches). To shoulder minimum 76mm (3 inches).

7. **MAJOR CURRENCY**

US dollars

8. **TESTING OF WARRANTED METAL**

If the Chief Executive, or those empowered by him for this purpose, believe that the conditions at (a) and (b) below are satisfied, he or they may instruct an LSA to undertake such tests as are necessary to form a reasonable opinion on whether or not metal on Warrant conforms with these rules. Where the Chief Executive, or those empowered by him for this purpose, reasonably believes that the situation requires it, those tests may be conducted without the prior consent of the Warrant holder. The tests will be at the LME's cost.

The conditions referred to above are:

- (a) There are reasonable grounds to suspect that metal on Warrant does not comply with these rules.
- (b) There is a risk of disruption to the LME's market.

SPECIAL CONTRACT RULES FOR TIN

1. QUALITY

The tin delivered under this contract must be:

- (a) Refined tin of minimum 99.85% purity conforming to BS EN 610:1996.
- (b) In the shape of ingots each weighing not less than 12 kilos and not more than 30 kilos.
- (c) Of brands listed in the LME approved list.

2. SIZE OF LOT

5 tonnes (2% either more or less).

3. WARRANTS

3.1 Warrants shall be for 5 tonnes (2% either more or less).

3.2 The tin in each Warrant shall consist of one brand which is listed as being good delivery, and of one shape and dimension, subject to the necessity of including different shapes and dimensions at the bottom of each bundle for the purpose of stability and must be in bundles not exceeding 1.2 tonnes securely strapped for safe handling and transport without bundle distortion and breakage.

3.3 Each Warrant shall state:

- (a) the name of the brand;
- (b) the country / region of origin;
- (c) the shape;
- (d) the date(s) and reference number(s) of the certificate(s) of analysis lodged with the Warehouse;
- (e) the weight;
- (f) the number of bundles making up each lot.

3.4 Each Warrant must be made up of not more than two cast batches.

4. CERTIFICATES OF ANALYSIS

Requirement for eCOA to place metal on Warrant

4.1 Each delivery of a Lot of tin to a Warehouse for placing on Warrant must be accompanied by an eCOA in order for the Warehouse to be able to place such metal on Warrant.

4.2 Where the tin comprising the relevant Lot was produced on or after a date to be specified by the Exchange by way of Notice, in order for such Lot to be warrantable, the Lot of tin must be accompanied by an Enhanced eCOA.

4.3 With effect from the date specified by way of Notice pursuant to Special Contract Rule 4.2 above, where a Warehouse is unable to identify the production date of a Lot of tin and the

relevant Lot is not accompanied by an eCOA, the Warehouse is permitted to produce a Basic eCOA pursuant to the terms of any agreements between the Exchange and the relevant Warehouse. In such circumstances, the Warehouse may place such Lot on Warrant following the creation of such Basic eCOA.

Voluntary creation of an eCOA (metal produced before the date specified by way of Notice pursuant to Special Contract Rule 4.2 above):

- 4.4 For metal produced before the date specified by way of Notice pursuant to Special Contract Rule 4.2 above and where an Enhanced eCOA has not been created in respect of the underlying metal by its producer, a Basic eCOA may be produced by one of the following:
- (a) Members, pursuant to Special Contract Rule 4.7 below;
 - (b) Warehouses, pursuant to the terms of any agreements between the Exchange and the relevant Warehouse (including but not limited to the Warehouse Agreement);
 - (c) the producer of the underlying metal; or
 - (d) any other categories of persons or entities as the Exchange may specify from time to time.

For these purposes, each of the above shall be able to upload Paper COAs into the eCOA System for the purposes of producing the Basic eCOA.

Requirements for Production of an eCOA:

- 4.5 In order to be a valid eCOA, any eCOA that is produced in respect of tin must demonstrate compliance with the specification listed in Special Contract Rule 1(a) by illustrating the detected level of impurity. In all cases, it must be possible to cross-reference the production cast reference on the metal to identical numbers on the eCOA.
- 4.6 An Enhanced eCOA for a Lot of tin may only be created by the producer of the metal. Any eCOA created by a producer of metal which is produced on or after the date specified by way of Notice pursuant to Special Contract Rule 4.2 above must be an Enhanced eCOA.
- 4.7 Where a Member (or any other person) elects to produce a Basic eCOA, it must:
- (a) upload the complete and correct Paper COA relating to the underlying metal;
 - (b) enter the correct information into the eCOA System as requested by the eCOA System for the purposes of creating the Basic eCOA and as specified by the Exchange from time to time; and
 - (c) use all reasonable skill, care and attention when using the eCOA System.

5. ADDITIONAL REQUIREMENTS FOR TIN WARRANTS

- 5.1 The listed brand name must be indelibly marked on each ingot within a bundle.
- 5.2 The production cast reference must be indelibly marked on each ingot within the bundle.
- 5.3 If a Warrant relates to metal in respect of which an eCOA has not been produced, the Warehouse is obliged to submit to the identified holder of any Warrant the Certificate(s) of Analysis or copies thereof, on request.

- 5.4 All documentation for placing tin on Warrant must include the English language.
- 5.5 Straps replaced by a Warehouse must be of corrosion resistant material and in compliance with LME strap standards.

6. **MAJOR CURRENCY**

US dollars

7. **TESTING OF WARRANTED METAL**

If the Chief Executive, or those empowered by him for this purpose, believe that the conditions at (a) and (b) below are satisfied, he or they may instruct an LSA to undertake such tests as are necessary to form a reasonable opinion on whether or not metal on Warrant conforms with these rules. Where the Chief Executive, or those empowered by him for this purpose, reasonably believes that the situation requires it, those tests may be conducted without the prior consent of the Warrant holder. The tests will be at the Exchange's cost.

The conditions referred to above are:

- (a) There are reasonable grounds to suspect that metal on Warrant does not comply with these rules.
- (b) There is a risk of disruption to the LME's market.

SPECIAL CONTRACT RULES FOR SPECIAL HIGH GRADE ZINC

1. QUALITY

The zinc delivered under this contract must be:

- (a) Refined zinc of minimum 99.995% purity conforming to one of the following Standards and specific grades:
 - (i) BS EN 1179:2003 Standard entitled "Zinc and Zinc Alloys – Primary Zinc", 99.995% grade
 - (ii) ISO 752:2004 entitled "Zinc ingots", ZN-1 grade
 - (iii) ASTM B6-23 entitled "Standard Specification for Zinc", LME grade
 - (iv) GB/T 470-2008 entitled "Zinc ingots", Zn99.995 grade
- (b) In the shape of ingots weighing not more than 30 kilos.
- (c) Of brands in the LME approved list.

2. SIZE OF LOT

25 tonnes (2% either more or less).

3. WARRANTS

3.1 Warrants shall be for 25 tonnes (2% either more or less).

3.2 The zinc in each warrant shall consist of one brand which is listed as being good delivery, and of one shape and dimension, subject to the necessity of including different shapes and dimensions at the bottom of each bundle for the purpose of stability and must be in bundles not exceeding 1.5 tonnes securely strapped for safe handling and transport without bundle distortion and breakage.

3.3 Each Warrant shall state:

- (a) the name of the brand;
- (b) the country / region of origin;
- (c) the shape;
- (d) the date(s) and reference number(s) of the certificate(s) of analysis lodged with the Warehouse;
- (e) the weight;
- (f) the number of bundles making up each lot.

4. CERTIFICATES OF ANALYSIS

Requirement for eCOA to place metal on Warrant

- 4.1 Each delivery of a Lot of zinc to a Warehouse for placing on Warrant must be accompanied by an eCOA in order for the Warehouse to be able to place such metal on Warrant.
- 4.2 Where the zinc comprising the relevant Lot was produced on or after a date to be specified by the Exchange by way of Notice, in order for such Lot to be warrantable, the Lot of zinc must be accompanied by an Enhanced eCOA.
- 4.3 With effect from the date specified by way of Notice pursuant to Special Contract Rule 4.2 above, where a Warehouse is unable to identify the production date of a Lot of zinc and the relevant Lot is not accompanied by an eCOA, the Warehouse is permitted to produce a Basic eCOA pursuant to the terms of any agreements between the Exchange and the relevant Warehouse. In such circumstances, the Warehouse may place such Lot on Warrant following the creation of such Basic eCOA.

Voluntary creation of an eCOA (metal produced before the date specified by way of Notice pursuant to Special Contract Rule 4.2 above):

- 4.4 For metal produced before the date specified by way of Notice pursuant to Special Contract Rule 4.2 above and where an Enhanced eCOA has not been created in respect of the underlying metal by its producer, a Basic eCOA may be produced by one of the following:
- (a) Members, pursuant to Special Contract Rule 4.6 below;
 - (b) Warehouses, pursuant to the terms of any agreements between the Exchange and the relevant Warehouse (including but not limited to the Warehouse Agreement);
 - (c) the producer of the underlying metal; or
 - (d) any other categories of persons or entities as the Exchange may specify from time to time.

For these purposes, each of the above shall be able to upload Paper COAs into the eCOA System for the purposes of producing the Basic eCOA.

Requirements for Production of an eCOA:

- 4.5 In order to be a valid eCOA, any eCOA that is produced in respect of zinc must demonstrate compliance with one of the relevant standards and grades listed in Special Contract Rule 1(a) (i), (ii), (iii) or (iv) by illustrating the detected level of impurity for each element. In all cases, it must be possible to cross-reference the production cast reference on the metal to identical numbers on the eCOA.
- 4.6 An Enhanced eCOA for a Lot of zinc may only be created by the producer of the metal. Any eCOA created by a producer of metal which is produced on or after the date specified by way of Notice pursuant to Special Contract Rule 4.2 above must be an Enhanced eCOA.
- 4.7 Where a Member (or any other person) elects to produce a Basic eCOA, it must:
- (a) upload the complete and correct Paper COA relating to the underlying metal;
 - (b) enter the correct information into the eCOA System as requested by the eCOA System for the purposes of creating the Basic eCOA and as specified by the Exchange from time to time; and

- (c) use all reasonable skill, care and attention when using the eCOA System.

5. **ADDITIONAL REQUIREMENTS FOR ZINC WARRANTS**

- 5.1 The listed brand name must be indelibly marked on each ingot within a bundle.
- 5.2 The production cast reference must be indelibly marked on each ingot within a bundle or on the top surface of the bundle or on a durable label.
- 5.3 If a Warrant relates to metal in respect of which an eCOA has not been produced, the Warehouse is obliged to submit to the identified holder of any Warrant the Certificate(s) of Analysis or copies thereof, on request.
- 5.4 All documentation for placing zinc on Warrant must include the English language.
- 5.5 Straps replaced by a Warehouse must be of corrosion resistant material and in compliance with LME strap standards.

6. **MAJOR CURRENCY**

US dollars

7. **TESTING OF WARRANTED METAL**

If the Chief Executive, or those empowered by him for this purpose, believe that the conditions at (a) and (b) below are satisfied, he or they may instruct an LSA to undertake such tests as are necessary to form a reasonable opinion on whether or not metal on Warrant conforms with these rules. Where the Chief Executive, or those empowered by him for this purpose, reasonably believes that the situation requires it, those tests may be conducted without the prior consent of the Warrant holder. The tests will be at the LME's cost.

The conditions referred to above are:

- (a) There are reasonable grounds to suspect that metal on Warrant does not comply with these rules.
- (b) There is a risk of disruption to the LME's market.

SPECIAL CONTRACT RULES FOR STEEL BILLET

[CONTRACT NOT CURRENTLY AVAILABLE]

1. QUALITY

The steel billet deliverable under this contract shall be:

(a) steel billet conforming to one of the specifications listed below:

LME Grade	C	Si	Mn	S	P	Cu	Ni	Cr	N	CEV*	LME Grade
1	0.08-0.13	0.10-0.30	0.30-0.60	0.050	0.040	0.40	0.20	0.20	0.012	-	1
2	0.10-0.15	0.15-0.30	0.50-0.80	0.045	0.045	0.40	0.20	0.20	0.009**	-	2
3	0.14-0.22	0.05-0.15	0.40-0.65	0.05	0.04	0.40	0.30	0.30	0.012	-	3
4	0.14-0.22	0.15-0.30	0.40-0.65	0.05	0.04	0.40	0.30	0.30	0.012	-	4
5	0.15-0.22	0.15-0.30	0.60-1.00	0.05	0.05	0.50	0.20	0.20	0.012	0.50	5
6	0.17-0.25	0.40-0.80	1.20-1.60	0.045	0.045	0.50	0.20	0.20	-	0.52	6
7	0.28-0.37	0.05-0.15	0.50-0.80	0.05	0.04	0.40	0.30	0.30	0.012	-	7
8	0.28-0.37	0.15-0.30	0.50-0.80	0.05	0.04	0.40	0.30	0.30	0.012	-	8
9	0.36-0.42	0.15-0.30	1.00-1.40	0.05	0.05	0.50	0.20	0.20	-	-	9

All limits are max unless otherwise indicated.

* $CEV = \%C + \%Mn/6 + (\%Cr + \%Mo + \%V)/5 + (\%Cu + \%Ni)/15$

** %N max may increase by 0.001% for every 0.005% reduction in %P

An allowable tolerance of analysis taken on products made from the above casting grades is permitted as follows:-

C, +0.02%; Cr, +0.05%; Cu, +0.05%; Mn, +/- 0.10%; N, +0.002%; Ni, +0.05%; S, 0.005%; Si, +/- 0.02%; P, 0.005%; CEV + 0.02%.

(b) of brands listed in the LME-approved list of steel billet brands.

2. DIMENSIONS

Steel delivered must be in the form of billets and conform to one of the following dimensions:-

Length	Metric	Imperial
100 S or 100 L	100 x 100mm	4" x 4"
120 S or 120 L	120 x 120mm	4¾ " x 4¾ "
125 S or 125 L	125 x 125mm	5" x 5"
130 S or 130 L	130 x 130mm	5¼ " x 5¼ "
140 S or 140 L	140 x 140mm	5½ " x 5½ "
150 S or 150 L	150 x 150mm	6" x 6"

All metric section dimensions are subject to a +/- 3mm tolerance.

All imperial section dimensions are subject to +/- one-eighth of an inch tolerance.

All metric S lengths are to be nominally 5,800 – 6000mm in 100mm increments. Each nominal length is subject to a +/- 100mm tolerance.

All imperial S lengths are 19' 8" with a tolerance of +/- 4".

All metric L lengths are to be nominally 11,700mm – 12,000mm in 100mm increments. Each nominal length is subject to a +/- 100mm tolerance.

All imperial L lengths are 39' 4" with a tolerance of +/- 4".

3. SIZE OF LOT

65 tonnes

4. WARRANTS

4.1 Warrants shall be for 65 tonnes each (3.5% either more or less).

4.2 Each parcel particularised in each warrant shall lie at one facility, be of one brand and shall consist of billets of one dimension and one specification.

5. MAJOR CURRENCY

US dollars

6. TESTING OF WARRANTED METAL

If the Chief Executive, or those empowered by him for this purpose, believe that the conditions at (a) and (b) below are satisfied, he or they may instruct an LME approved Sampler and Assayer to undertake such tests as are necessary to form a reasonable opinion on whether or not metal on Warrant conforms with these rules. Where the Chief Executive, or those empowered by him for this purpose, reasonably believes that the situation requires it, those

tests may be conducted without the prior consent of the Warrant holder. The tests will be at the Exchange's cost.

The conditions referred to above are: -

- (a) that there are reasonable grounds to suspect that metal on Warrant does not comply with these rules, and
- (b) that there is a risk of disruption to the LME's market.

SPECIAL RULES GOVERNING THE PLACING OF STEEL BILLET ON WARRANT

1. Each Delivery of billet for placing on warrant shall be accompanied by a Certificate of Origin and a producer's Mill Test Certificate or certificate of Analysis, both of which must be lodged with the warehouseman. The Mill Test Certificate/Certificate of Analysis must be within the quality specification set out in Special Contract Rule 1 and must show the full chemical analysis per heat number. Additionally the Mill Test Certificate/Certificate of Analysis must be on the applicable producers headed paper stating the plant and/or brand name. Bulk certificates or a copy thereof is acceptable.
2. Each warrant shall state the total weight of the parcel particularised thereon, its country / region of origin, brand, no of billets making up each parcel and the date(s) and reference number(s) of the Mill Test Certificate/Certificate of Analysis lodged with the warehouseman. The warehouse company is required to keep a record of the date and reference number of the Certificate of Origin.
3. The Warehouse Company is required to inform the LME of the name of the party that requests the warrant to be issued.
4. On request, the warehouseman is obliged to submit to the holder of the Warrant the Certificates of Origin, plus Analysis or Mill Test Certificate, or copies thereof if the 65 tonne parcel forms part of a larger delivery covered by bulk certificates.
5. All documentation required for placing material on warrant must be in English.

SPECIAL CONTRACT RULES FOR COBALT

1. QUALITY

The cobalt delivered under this contract must be:-

- (a) Of a minimum 99.80% purity. Other elements are as specified by producers of each brand in the LME-approved list.
- (b) In the form of cathodes (broken or cut, cut cathodes must be of uniform sizes no greater than 50mm and offcuts are not permitted), rounds, briquettes or coarse grain powder (must be <0.01% of a respirable size fraction).
- (c) Of brands listed in the LME approved list.

2. SIZE OF LOT

1 tonne (2% either more or less).

3. WARRANTS

3.1 Warrants shall be for 1 tonne (2% either more or less).

3.2 The cobalt in each Warrant shall consist of one brand which is listed as being good delivery, of one shape and size and from not more than two production batches.

3.3 Each Warrant shall state:

- (a) the name of the brand;
- (b) the country / region of origin;
- (c) the shape;
- (d) the date(s) and reference number(s) of the certificates of analysis lodged with the Warehouse;
- (e) the gross and net weights; and
- (f) the number of steel drums making up each lot.

3.4 Each Warrant shall bear the following legend:

'WARNING The buyer is advised that drums may contain water and cobalt should be handled and processed with this possibility in mind. Water contained in drums may cause an explosion if the cobalt is introduced into a melting-furnace without proper procedures being followed'.

4. DRUMMING REQUIREMENTS

4.1 All cobalt delivered under this contract shall be packed in sound steel drums of uniform size and weight of 200kgs, 250kgs or 500kgs (+/-2%). Part filled steel drums are not permitted.

4.2 Each drum shall be indelibly marked with production batch reference, gross and net weights and brand name.

- 4.3 Only drums that are original sound producer or producer approved third party steel drums with the producer or approved third party ring closing system and with tamper proof seals intact may be put on Warrant.
- 4.4 Warehouses are not permitted to place on Warrant cobalt supplied in unsound producer or producer approved third party steel drums with broken seals.

5. **CERTIFICATES OF ANALYSIS**

Requirement for eCOA to place metal on Warrant

- 5.1 Each delivery of a Lot of cobalt to a Warehouse for placing on Warrant must be accompanied by an eCOA in order for the Warehouse to be able to place such metal on Warrant.
- 5.2 Where the cobalt comprising the relevant Lot was produced on or after a date to be specified by the Exchange by way of Notice, in order for such Lot to be warrantable, the Lot of cobalt must be accompanied by an Enhanced eCOA.
- 5.3 With effect from the date specified by way of Notice pursuant to Special Contract Rule 5.2 above, where a Warehouse is unable to identify the production date of a Lot of cobalt and the relevant Lot is not accompanied by an eCOA, the Warehouse is permitted to produce a Basic eCOA pursuant to the terms of any agreements between the Exchange and the relevant Warehouse. In such circumstances, the Warehouse may place such Lot on Warrant following the creation of such Basic eCOA.

Voluntary creation of an eCOA (metal produced before the date specified by way of Notice pursuant to Special Contract Rule 5.2 above):

- 5.4 For metal produced before the date specified by way of Notice pursuant to Special Contract Rule 5.2 above and where an Enhanced eCOA has not been created in respect of the underlying metal by its producer, a Basic eCOA may be produced by one of the following:
- (a) Members, pursuant to Special Contract Rule 5.7 below;
 - (b) Warehouses, pursuant to the terms of any agreements between the Exchange and the relevant Warehouse (including but not limited to the Warehouse Agreement);
 - (c) the producer of the underlying metal; or
 - (d) any other categories of persons or entities as the Exchange may specify from time to time.

For these purposes, each of the above shall be able to upload Paper COAs into the eCOA System for the purposes of producing the Basic eCOA.

Requirements for Production of an eCOA:

- 5.5 In order to be a valid eCOA, any eCOA that is produced in respect of cobalt must demonstrate compliance with the purity listed in Special Contract Rule 1(a) and illustrate the detected level of impurity for all elements specified by the producer for the relevant brand. In all cases, it must be possible to cross-reference the production cast reference on the drum to identical numbers on the eCOA.

5.6 An Enhanced eCOA for a Lot of cobalt may only be created by the producer of the metal. Any eCOA created by a producer of metal which is produced on or after the date specified by way of Notice pursuant to Special Contract Rule 5.2 above must be an Enhanced eCOA.

5.7 Where a Member (or any other person) elects to produce a Basic eCOA, it must:

- (a) upload the complete and correct Paper COA relating to the underlying metal;
- (b) enter the correct information into the eCOA System as requested by the eCOA System for the purposes of creating the Basic eCOA and as specified by the Exchange from time to time; and
- (c) use all reasonable skill, care and attention when using the eCOA System.

6. **ADDITIONAL REQUIREMENTS FOR ALL COBALT WARRANTS**

6.1 All cobalt Warrants require a packing list cross referenced to the Certificate(s) of Analysis and individual producer drum seal numbers in English. Bulk Certificates of Analysis are permitted.

6.2 If a Warrant relates to metal in respect of which an eCOA has not been produced, the Warehouse is obliged to submit to the holder of the Warrant the Certificate(s) of Analysis and packing list or copies thereof if the Warrant lot forms part of a larger batch, on request.

7. **MAJOR CURRENCY**

US dollars

8. **TESTING OF WARRANTED METAL**

8.1 If the Chief Executive, or those empowered by him for this purpose, believe that the conditions at rule 7.2(a) and (b) below are satisfied, he or they may instruct an LME Listed Sampler and Assayer (LSA) to undertake such tests as are necessary to form a reasonable opinion on whether or not metal on Warrant conforms with these rules. Where the Chief Executive, or those empowered by him for this purpose, reasonably believes that the situation requires it, those tests may be conducted without the prior consent of the Warrant holder. The LME will bear the costs of such tests.

8.2 The conditions referred to above are that:-

- (a) there are reasonable grounds to suspect that cobalt on Warrant does not comply with these rules; and
- (b) there is a risk of disruption to the LME's market

SPECIAL CONTRACT RULES FOR ROASTED MOLYBDENUM CONCENTRATE

[CONTRACT NOT CURRENTLY AVAILABLE]

1. QUALITY

The roasted molybdenum concentrate ("RMC") delivered under this contract shall be:

- (a) between 57 and 63% molybdenum purity with maximum permissible impurities of Cu 0.50%; P 0.05%; Pb 0.05%; S 0.10%; C 0.10%; Moisture 0.1%.
- (b) in the form of powder packed in drums, of which only 5% of the powder can comprise particles in excess of 4mm and 0% in excess of 10mm.
- (c) of brands listed in the LME approved list.

2. SIZE OF LOT

6 tonnes molybdenum (+/-5%) contained in RMC.

3. WARRANTS

3.1 Warrants shall be for 10 tonnes of RMC.

3.2 The RMC in each Warrant shall be of one production batch and brand and shall lie in one warehouse.

3.3 Each Warrant shall state:

- (a) the name of the brand;
- (b) the country / region of origin;
- (c) the date and reference number of the certificate of analysis lodged with the warehouseman;
- (d) the gross and net weights of RMC together with the net weight contained of molybdenum; and
- (e) the number of steel drums making up each Warrant.

3.4 Each Warrant shall bear the following legend:

'WARNING The buyer is advised that drums may contain water and RMC should be handled and processed with this possibility in mind. Water contained in drums may cause an explosion if the RMC is introduced into a melting-furnace without proper procedures being followed.'

4. WEIGHTS

4.1 All RMC delivered under this contract shall be packed in sound steel drums of uniform size and of exact net weight of 200 or 250 kilos. Part filled steel drums are not permitted.

- 4.2 Each steel drum shall have the gross and net weights, brand name, origin and batch reference clearly and indelibly marked or stamped on the outside of the drum.

5. **DRUMMED RMC REQUIREMENTS**

- 5.1 RMC contained in drums may be placed on Warrant provided that:

- (a) the steel drums are original sound producer drums with a ring closing system and tamper proof producer seals intact;
- (b) the Warehouse opens every steel drum in a Warrant quantity of a single producer batch in the presence of an LME Listed Sampler and Assayer (LSA) for the purpose of taking samples and establishing an independent Certificate of Analysis specific to each Warrant lot. The Warehouse shall be responsible for resealing all steel drums using their own unique tamper proof numbered seals using a ring closing system and identifying the warehouse of storage after sampling is complete and still in the presence of the LSA. All costs incurred will be for account of the party instructing the warehouse to place the material on warrant; and
- (c) all markings on steel drums conform to those of the listed brand.

- 5.2 Warehouses are not permitted to place on Warrant any RMC supplied in unsound producer steel drums or steel drums with broken seals.

6. **CERTIFICATES OF ANALYSIS**

- 6.1 A Certificate of Analysis shall be issued for each Warrant lot by an LSA in accordance with the following:

- (a) LSAs will sample and analyse each lot for LME warranting in accordance with LME specified procedures ensuring that any one lot comes from a single producer batch; and
- (b) LSA Certificates of Analysis shall be cross-referenced to the listed producer brand, batch number and Warehouse seal numbers.

- 6.2 Any party cancelling Warrants should note that the LSA Certificate of Analysis is subject to a variation tolerance of Mo content of +/- 0.5%. If any additional sampling and analysis is required this must be done in accordance with LME procedures within 15 working days after cancelling the Warrant at the warehouse of storage in the presence of the LSA who issued the original Certificate of Analysis. Any disputes about analysis shall be settled in accordance with LME procedures. All costs for any analysis taken at time of cancellation of warrants are for the account of the party cancelling Warrants

7. **ADDITIONAL REQUIREMENTS FOR ALL RMC WARRANTS**

- 7.1 Note that in order to create RMC warrants a producer weight certificate and analysis certificate covering all elements of the Contract specification in 1(a) above is to be supplied with all deliveries to a warehouse.
- 7.2 All RMC Warrants require as supporting documentation a certificate of origin and a LSA certificate of analysis in English.

7.3 On request the Warehouse is obliged to submit to the holder of the Warrant the certificate of origin and analysis or a copy thereof.

7.4 The Warehouse Company is required to inform the LME of the name of the party that requests the warrant to be issued.

8. **MAJOR CURRENCY**

US dollars

9. **TESTING OF WARRANTED METAL**

9.1 If the Chief Executive, or those empowered by him for this purpose, believe that the conditions at rule 9.2(a) and (b) below are satisfied, he or they may instruct an LME Listed Sampler and Assayer to undertake such tests as are necessary to form a reasonable opinion of whether or not metal on Warrant conforms with these Rules. Where the Chief Executive, or those empowered by him for this purpose, reasonably believes that the situation requires it, those tests may be conducted without the prior consent of the Warrant holder. The LME will bear the costs of such tests.

9.2 The conditions referred to above are that:-

- (a) there are reasonable grounds to suspect that RMC on Warrant does not comply with these rules, and
- (b) there is a risk of disruption to the LME's market.

