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ALCOA - RIGID PACKAGING DIVISION

SPECIFICATION FOR PURCHASE OF RECLAIMED SCRAP INGOT (RSI) INGOT/SOW

I. SCOPE

This specification covers procedures and requirements for the procurement of RSI ingot/sow for the Rigid Packaging Division (RPD) of Alcoa, Inc. It must be referenced on all Alcoa - RPD purchase orders for RSI from sources outside Alcoa. Master purchasing agreements will be arranged through Alcoa Material Management, Knoxville, Tennessee, and administered by RPD.

II. SHIPPING

A. Manifest

1. The shipping manifest and paperwork relating to the purchase order, including product identification, composition, supplier, and weights, are to accompany the shipment.
2. Composition data must be faxed to the receiving location prior to delivery. Tennessee and Warrick must approve each load prior to scheduling.
3. Orders must be delivered within the specified contract validity dates. Late shipments may be cancelled at the buyer's discretion.

B. Weights

1. Trucks must be weighted prior to and after unloading. Weighing should be performed on certified scales. Piece count may be used at the option of the receiving location.
2. If the deviation from stated weight is greater than 0.5% but less than 2%, the vendor will be notified as soon as practical. If a discrepancy of 2% or more is encountered, the vendor will be notified immediately.
3. The receiving plant's weights will govern in the case of a discrepancy.

C. Truck Shipments

Shipments are to be made in flat bed trucks that are clean and in good condition (as specified by the receiving locations). Flat beds must be side loaded only. Vans may be turned away at the shipper's expense.

D. Rail Shipments

Specific requirements for rail cars will be established by the receiving plant locations. Rail cars are to be clean and in good condition. Loading should facilitate safe unloading by fork trucks unless other arrangements are made with the receiving plant. Should there be a weight discrepancy greater than

2%, the vendor will be notified and rail weights will be obtained for reference.

III. PHYSICAL CONDITION

Each shipment shall be subject to inspection by the receiving location. Failure to satisfy specification requirements will result in rejection.

A. Surface

1. Ingot must be skimmed and free of:
   a. Surface contaminates (skim /dross residue, salt cake, oxidation, corrosion)
   b. Entrained salts
   c. Seams and folds caused by pouring temperature and / or oxide levels
   d. Seams and folds caused by double or multiple pours.
2. Top edge of the ingot / sow shall **not** have a rim more than one inch high.

B. Internal

Ingots shall not have open shrinkage cavities / internal voids, which connect to the surface.

C. Melting Technology

RSI produced from induction furnaces is not acceptable to RPD melting locations.

D. Identification

Each sow will clearly display the appropriate alloy designator, heat number, name or identification of the producer, and the predominant RSI source (e.g. skim, UBC, scrap, etc.). Alloy markings should be in black paint, 4" to 6" high, on both ends of each sow.

E. Contamination

Evidence of contamination by foreign materials, surface or imbedded, such as discreet non-aluminum fragments, iron, oxide flakes, rust, entrained salts, and material such as fertilizers, nitrates, oxidizers and hydroscopic scales will result in rejection.

F. Size / Shape / Aspect Ratio

1. Each sow shall be low profile and have an aspect ratio greater than or equal to 3.0, with a ratio of 3.5 preferred. This ratio is defined as the smallest dimension measured across the top surface of the ingot divided by the height of the ingot.
2. Minimum weight shall be 1500 pounds per piece.
3. Bottom of ingot/sow shall be smooth: no pronged "feet".

IV. COMPOSITION

Each shipment must include chemical analysis data and sample buttons for each heat, with the appropriate identification. Chemical composition requirements for RSI by

type are attached. Chemical analysis that exceeds the specified limits shall be considered off-analysis and subject to rejection.

V. BASIS OF ACCEPTANCE

The results of physical inspection and/or discrepancies in composition are cause for rejection. Physical unloading does not imply acceptance. More thorough examination of material after receipt may also result in rejection. Failure of the shipment to meet the conditions stated in prior sections may result in the rejection of the entire shipment. The receiving locations may refuse to unload, or may assess extra handling charges with the vendor's approval on shipments not loaded or supplied in accordance with this specification.

VI. CONTACT INFORMATION

A. **Contract Administration**: Phyllis Sloan
Alcoa – Rigid Packaging
North Administration Bldg.
2300 Wright Road
Alcoa, TN 37701

Phone: (865) 977-3918
FAX: (865) 977-3602

Includes all correspondence for RPD purchases, such as contract confirmations, weight discrepancies, payment issues, etc. No invoices required. Payments will be initiated upon receipt of shipment.

B. **Plant Information:**

	CONTACT	APPOINTMENTS	SHIP TO ADDRESS
Warrick	Kim Bowen Ph: (812) 853-4293 Fx: (812) 853-4226	Kim Bowen Ph: (812) 853-4293 Fx: (812) 853-4226	Alcoa-Rigid Packaging Warrick Operations U.S. Highway 66 Newburgh, IN 47629
Tennessee	Nelson, Martin Ph: (865) 977-3686 Fx: (865) 977-3655	Metal Center Ph: (865) 977-2052 Fx: (865) 977-3602	Alcoa-Rigid Packaging South Plant 300 N. Hall Road Alcoa, TN 37701

C. **Buyers:**

CONTACT	PHONE	FAX
Rich Markiewicz	(865) 594-4470	(865) 594-4970
Nick Badgett	(865) 594-4776	(865) 594-4970
Robert Gately	(865) 594-4966	(865) 594-4970
Cindy Thompson	(865) 594-4992	(865) 594-4970

D. **Scrap Specifications Online:**

All RPD specifications may be accessed at http://www.alcoa.com/rigid_packaging/. Look for the **Scrap Information** heading, and click on "go".

ALCOA - RIGID PACKAGING RSI SUMMARY SHEET

Maximum Limits	**3004 Alcoa** (UBC)	**3105 Alcoa** (Tennessee)		**3xxx Alcoa** (Warrick)	**5xxx Alcoa** (Class 2)
Si	**.21**	**.60**		**.50**	**.20**
Fe	**.45**	**.70**		**.60**	**.30**
Cu	**.25**	**.30**		**.30**	**.10**
Mn	**.5 - 1.2**	**.3 - 1.5**		**.5 - 1.5**	**.40**
Mg	**.7 - 1.5**	**.2 - 1.5**		**.4 - 1.5**	**2.5 - 5.5**
Cr	**.030**	**.120**		**.090**	**.050**
Pb	**.0100**	**.0140**		**.0120**	**.0100**
Ni	**.02**	**.05**		**.04**	**.02**
Zn	**.15**	**.40**		**.30**	**.150**
Ti	**.02**	**.10**		**.06**	**.05**
B	**.0020**	**.0020**		**.0020**	**.0020**
Be	**.0001**	**.0001**		**.0001**	**.0001**
Bi	**.01**	**.01**		**.01**	**.01**
Ca	**.02**	**—**		**—**	**.02**
Cd	**.0002**	**.0002**		**.0002**	**.0002**
Li	**.0005**	**.0005**		**.0005**	**.0005**
Sb	**.0050**	**.0050**		**.0050**	**.0050**
V	**.030**	**.030**		**.030**	**.030**
As	**.0050**	**.0050**		**.0050**	**.0050**
Each	**.03**	**.05**		**.03**	**.03**
Total	**.10**	**.15**		**.10**	**.10**

- **RSI must be *low profile.* The shortest dimension across the top divided by the total height must be 3.0 or more. Preferred ratio is 3.5 or higher.**
- ***Induction* furnace material is *not acceptable* for any RSI type.**
- **All specifications are on a per piece basis unless negotiated otherwise. For *average loads*** (Tennessee only)**, the maximum limit per piece is *two times* the limits indicated above.**
- **All sow must be *marked on both ends* with the appropriate alloy designator** (i.e. 3004, 3xxx, 3105, 5xxx, etc...)
- **Additional RSI types similar those detailed above will be considered.**