

1.0 1.0 SCOPE

This specification defines supplier requirements for aluminum alloy scrap used as a raw material for producing aluminum alloys.

2.0 2.0 ASSOCIATED DOCUMENT

The documents listed below form a part of the requirements of this specification. Unless otherwise specified, the current revision to these documents shall apply.

2.1 2.1 Registration Record of International Alloy Designations and Chemical Composition Limits for Wrought Aluminum and Wrought Aluminum Alloys.

2.2 2.2 Guidelines for Aluminum Scrap Receiving and Inspection Based on Safety and Health Considerations.

3.0 3.0 REQUIREMENTS AND CHARACTERISTICS

3.1 3.1 Chemical Composition

3.1.1 3.1.1 All scrap shall be segregated by alloy. Alloy combinations maybe allowed and must be negotiated at the time purchased order is approved. Allowable combination will be specified on the Purchase Order.

3.1.2 3.1.2 Alloy designation and chemical composition limits per Aluminum Association (see 2.1 reference documents), unless otherwise specified in the purchase order.

3.2 3.2 Product Dimensions for Packaged Aluminum Alloy Scrap

3.2.1 3.2.1 Package weight -Maximum 6000 lbs., excluding round or rectangular shaped ingots

3.2.2 3.2.2 Material gauge - Minimum .040 in.

3.2.3 3.2.3 Punchings / Stampings: Minimum dimension - 1.0 square inch in area with no dimension less than 0.040 inches.

3.2.4 3.2.4 Box scrap package (incl. -Maximum size 52 inch L x 52 inch W x 48 inch H pallet). Industry nomenclature is "Gaylord Boxes".

3.2.5 3.2.5 Straight lengths - Maximum length 16 ft. also applies to maximum length of any bundle of straight lengths.

3.2.6 3.2.6 Bale/Bundle: Maximum size 72 inch L x 48 inch W x 40 inch H

3.2.7 3.2.7 Sheet plate package -Maximum size 144 inch L x 60 inch W x 18 inch H

- 3.2.8 3.2.8 Coiled sheet: Maximum 54 inches wide with a minimum of 3 OD bands and must not be loosely banded.
- 3.2.9 3.2.9 All bales, bundles, boxes or other packages must be on a pallet or in the case of sheet plate package, must have 3 inch x 3 inch runners to facilitate fork truck handling.
- 3.3 3.3 Product Dimensions for Aluminum Alloy Scrap Delivered Loose.
- 3.3.1 3.3.1 Material length -Maximum length of any piece 36 inches
- 3.3.2 3.3.2 Material gauge-Minimum .040 inches.
- 3.3.3 3.3.3 Punchings/Stampings -Minimum dimension 1.0 square inch in area with no dimension less than 0.040 inches are acceptable up to 5% of a loose load.
- 3.4 3.4 Quality Characteristics
- 3.4.1 3.4.1 All scrap including packaging shall be dry. Moisture is not acceptable.
- 3.4.2 3.4.2 All scrap shall be clean and free of non-aluminum materials including, but not limited to:
- • Copper, iron, stainless steel, chrome, other non-aluminum metallics
 - • Vinyl, rubber, plastics, concrete coatings
 - • In some cases the combination of aluminum parts and rubber coatings may be considered acceptable based on experience and controls and may be negotiated on an individual basis and noted on the Purchase Order.
- 3.4.3 3.4.3 Residual cutting, lubrication oils, and grease cannot exceed 1.0% by weight.
- • Oil that drips off of parts or out of a truck is considered excessive and unacceptable.
- 3.4.4 3.4.4 Painted scrap is not allowed. All loads, boxes, bundles, bales or other packages containing more than 2% of the pieces painted will be rejected.
- 3.4.5 3.4.5 Heavily oxidized scrap is not acceptable.
- 3.4.6 3.4.6 All scrap shall be free of all chemical contamination that could possibly cause an explosion.
- • Examples of this type of contamination include, but are not limited to, fertilizer or components thereof, such as nitrate, nitrate compounds, bromides, sulfates, etc.

3.4.7 3.4.7 Scrap shall be free of any material that could possibly trap and retain moisture and cause an explosion when charged into a melting furnace.

- • Examples of this type of material include, but are not limited to, beverage cans, bottles, closed end containers, closed or crimped pipe, canisters, fire extinguisher bottles or other tanks, and cylinders.
- • Closed end cylinders or canisters, example scuba tanks, can be accepted when they are cut in two pieces at the largest diameter.

3.4.8 3.4.8 Additional materials that are not acceptable: aluminum/ lithium alloys, plated aluminum, aluminum composites, laminated materials, aluminum powder metallurgy materials, aluminum treated with potentially hazardous materials or elements.

3.4.9 3.4.9 Scrap shall be free of radioactive material and shall not be shipped in containers used for radioactive materials.

3.4.10 3.4.10 Aluminum Clad Products, as a general rule, are not acceptable.

- • In some cases the combination of the core and the cladding may be useful for some alloys and may be negotiated on an individual basis and noted on the Purchase Order.

4.0 4.0 PACKAGING, PROVISIONS FOR HANDLING AND DELIVERY

4.1 4.1 Packaging Requirements

4.1.1 4.1.1 Generally scrap is purchased as one alloy per truck. When more than one alloy is purchased for one shipment, each alloy is to be identified on the purchase order.

4.1.2 4.1.2 All scrap shall be shipped by truck in closed vans or tarped trailers. Scrap shall arrive on the plant site in a moisture free condition.

4.1.3 4.1.3 Loose shipments of scrap shall be shipped in a dump truck, unless otherwise specified.

4.1.4 4.1.4 Trailers shall be loaded in such a manner that they can be unloaded using a forklift truck.

- • Shipments that require hand unloading are not acceptable.
- • Material shall not be stacked within 18 inch of the top of a van.

- • Limit 1 package per pallet, or skid.
- • Straight lengths, sheet plate shall be delivered on a flatbed truck, with removable sides for side unloading.
- • Sheet plate shall be banded on skids, pallets, or runners and positioned on truck for forklift unloading.
- • Straight lengths shall be securely banded, placed on runners and positioned on truck for forklift unloading.
- • Corrugated boxes ("Gaylord") shall be securely attached to pallets.
- • Wood or metal boxes/drums are not acceptable.
- • Bands on bales, straight lengths, sheet plate packages shall be parallel to forklift entry to avoid breaking.
- • Coils (eye to the sky) shall be stacked less than 48" high, banded to pallets.

4.1.5 4.1.5 Kaiser Aluminum scale weights and inspection govern.

- • All trucks must weigh in and out on the Kaiser scale.
- • Supplier accepts responsibility for any discrepancy.

4.1.6 4.1.6 Trucks requiring rear unloading must be a van or have sides on trailer.

- • Trucks shall be clean and in good condition, free of holes or other damage, which could jeopardize unloading operations, cause material to spill, or cause damage to equipment.
- • Trucks that are not clean or able to support a forklift truck will not be unloaded.

4.1.7 4.1.7 Materials shall be loaded and secured to prevent load shifting or damage to the package during transit.

- • Loads that arrive with unstable, shifted, or spilled materials that may cause additional problems including; trailer damage, equipment damage, material spilling, or pose a safety hazard will not be unloaded.

4.2 4.2 Appointment Requirements

4.2.1 4.2.1 Shipments will be unloaded by appointment only.

4.2.2 4.2.2 Loads that arrive without an appointment will not be received.

4.2.3 4.2.3 Schedule an appointment (see purchase order for name and telephone number) as soon as possible, at least 24 hours in advance and up to two weeks in advance.

5.0 5.0 IDENTIFICATION AND CERTIFICATION

5.1 5.1 Identification Requirements

5.1.1 5.1.1 Each unit or package shall be identified with a minimum of the aluminum alloy designation.

- • The gross weight, tare weight and net weight identification on each package is desired.

5.1.2 5.1.2 Two copies of the bill of lading must accompany each shipment.

5.1.3 5.1.3 The bill of lading contents must match the Kaiser Aluminum purchase order and shall include:

- • Kaiser P.O. number
- • Aluminum Alloy Designation
- • Description of Material
- • Total Gross, Tare, and Net Weight of Shipment.

5.1.4 5.1.4 A packing list must accompany each shipment and shall include:

- • Kaiser P.O Number
- • Package count of shipment
- ⇒ ⇒ Not required for loose scrap shipments
- • Name of shipping company
- • Name of carrier company
- • Gross, Tare, and Net Weight of each unit or package is desired.

6.0 6.0 SUPPLIER QUALIFICATION

6.1 6.1 The Purchasing Department of Kaiser Aluminum - Newark Works maintains a list of qualified suppliers.

6.2 6.2 A supplier may qualify by demonstration of their product's fitness for use through trials and ongoing order performance.

6.3 6.3 It is expected that suppliers adhere to the Safety and Health Guidelines issued by the Aluminum Association entitled "Guidelines for Aluminum Scrap Receiving and Inspection Based on Safety and Health Considerations".

7.0 7.0 ACCEPTANCE AND REJECTION

- 7.1 7.1 Kaiser Aluminum reserves the right to reject all material which does not conform to the specification and/or purchase order, to charge the seller for any expenses attributable to poor loading, mixed or unidentified scrap material, material which is contaminated, and material that is wet. Deviations may be requested through the Kaiser - Newark Purchasing Department.
- 7.2 7.2 The seller shall indemnify, save harmless, and defend purchaser from and against any and all claim demands, damages, costs, and expenses of any kind, including without limitation; loss of production and reasonable attorneys fees and expenses arising out of or in connection with any personal injury (including death) or property damage caused or occasioned by the failure of the seller to strictly comply with the provisions of this purchase specification and purchase order.
- 7.3 7.3 This purchase specification and above stated conditions shall apply to all material delivered to the Kaiser Aluminum - Newark Works facility. Amendments or changes can only be made in writing and must be signed by both parties. Any variation from the purchase specification or purchase order must have prior written approval of the Kaiser Aluminum Purchasing Department.
- 7.4 7.4 Kaiser Aluminum's failure to insist upon strict performance in any given instance shall not be construed as a waiver or relinquishment for the future of any of the terms, covenants, and conditions contained in the purchase specification and purchase order.

Revision Log:

<u>Page</u>	<u>Date</u>	<u>Description of Change</u>
1 - 6	2/26/96	<ul style="list-style-type: none">• • General Revision and formatting
1 - 6	3/21/96	<ul style="list-style-type: none">• • Renumbered with 9890 to include with other raw materials
2,3,5	5/12/97	<ul style="list-style-type: none">• • Added section 3.2.7 to add requirements for coiled sheet scrap.• • Revised 5.1.1 to include only alloy designation as a requirement to match actual practice.• • Also revised 5.1.4 to state that gross, net and tare weights of packaged scrap is desired (not required).• • Section 3.4.2; Deleted Interleave Paper. Also added that some rubber coatings may be considered acceptable based on experience and controls and added that negotiations had to be noted on P.O.• • Section 3.4.3; Qualified unacceptable level of residual oil.• • Section 3.4.7 - Added fire extinguisher bottles and other tanks.• • Section 3.4.10 - Added negotiations had to be noted on P.O.
4,5	11/16/99	<ul style="list-style-type: none">• • Revised Section 4.1.4 to clarify proper packaging instructions for straight lengths, bales, sheet and plate and coils.• • Revised Section 4.2.3 to allow for making appointments two weeks in advance.