

Process Scrap Specification

Rev 2

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NONE

1.0 PURPOSE:

Novelis is a supplier to discerning customers of a wide variety of rolled aluminum products. Novelis' visibility in these markets depends on its' ability to consistently supply aluminum of the highest quality. A major impact on our ability to meet this requirement is the raw material we purchase for our processes. A key raw material in our can sheet production is class scrap.

The major purpose being to communicate as clearly as possible, the Novelis requirements for class scrap. The philosophy of Novelis is to work with all of its suppliers to enable them to continuously improve the quality of materials delivered.

2.0 RESPONSIBILITIES AND AUTHORITY:

All Novelis supplier origins.

3.0 GENERAL SCRAP SPECIFICATIONS

All returned beverage can process scrap shall be clean, dry, segregated and identified by scrap classification and free of all contamination (e.g. plastic, dirt, steel, etc.). Material must be stored indoors and free of moisture. Two or more classes cannot be mixed in one package. Loose scrap is not acceptable. Return of two separate scrap classifications on the same load are subject to inquiry prior to shipment.

4.0 DEFINITIONS:

- a) **Class I** scrap shall consist of 3104/3004 alloys used in the production of can bodies. Returned scrap cannot be lacquered, painted, coated or in any way contaminated with gaskets, sealants, oils, etc. Residual lubricant levels of up to 1.5% by weight is acceptable. Other oils or lubricants are not acceptable (e.g. hydraulic oil).
- b) **Class II** scrap shall consist of new production 5182 alloy used in the production of can end and tab stock. Lid and tab stock may be mixed, but the preference is for segregation. Only normal lacquer coating is acceptable.
- c) **Class III** scrap shall consist of new production 3104/3004 series alloys painted and decorated and free of all other contamination applicable to Class I.
- d) **Class IV** scrap shall consist of new production 5182 series alloy spoiled compounded ends.

5.0 Process Scrap Specifications

Briquettes

- a) Class 1 and Class 2 – Minimum density of 50 pounds per cubic foot.
- b) Class 3 – Minimum density 35 lbs per cubic foot; maximum density 45 lbs per cubic foot.
- c) Standard briquette dimensions are 12" x 12" x 12".
- d) No stretch wrap, plastic wrap, cardboard or covering dunnage is permitted

- e) Recommended strapping is 5/8" x .035 embossed polyester plastic strapping. All straps must be a minimum of 5/8" wide by .02 thick. A 6 lb. per bundle deduction will be taken for steel banding.
- f) Material must be banded securely and stackable.
- g) The maximum metal stack height is 56" (including pallet). Briquettes must have consistent height and width dimensions. The maximum bundle width allowed is 58". The maximum bundle weight is 6,000 lbs (including pallet).

Without Pallets

Novelis and some of its suppliers have adapted a pallet-less scrap package that utilizes a jig to provide a framework for building a bundle of briquettes. With the correct configuration and the use of plastic strapping, the bundle can safely be moved without use of a pallet. This eliminates the expense and management of pallets for the supplier and the cost of disposal and handling of pallets for Novelis.

See Appendix A for the configuration and notify your Novelis Technical Representative or Novelis Can Stock Representative for more information.

With Pallets

Briquetted class scrap on pallets must be securely strapped with two straps parallel to runners and under deckboards, two straps perpendicular to runners and under deck boards, and one horizontal strap per layer—see banding specification above.

Briquettes must not overhang the skid by more than 1", and must have consistent height and width dimensions.

Skids must be without protrusions or extensions on width and length, and free of padding on skid.

6.0 Sheet, Coil Scrap and Aluminum Cores:

- a) Material should be bundled together using a solid flat sheet for the base of the bundle or a skid.
- b) The minimum weight per bundle is 1,500 lbs. The maximum weight per bundle is 3,000 lbs.
- c) Must be secured with not less than four 3/4" by .025" steel or fiber straps banded two ways.
- d) Sheet scrap on pallets must not be double stacked and banded as one bundle. Only one pallet per bundle is acceptable. Preferable method would be to strap material together as a single unit before banding the unit to the pallet. Maximum number of sheet scrap bundles per load is limited to three.
- e) All coil returns are subject to prior approval by the Novelis Technical Representative or Can stock Account Manager and must either have no core or an aluminum core.
- f) Fiber cores are not permitted

7.0 Truck Loading Procedure

- a) All scrap shipped by truck must be loaded in standard dry vans with barn doors. A flatbed with sides can be used to return scrap, provided it is side loaded, secured and tarped.
- b) Shipper is responsible for inspecting all trailers. Trailer must be clean, in good shape, and free of holes.

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- c) Truckloads must be a minimum of 40,000 lbs. Truck shipments less than 40,000 lbs. are subject to inquiry.
- d) Skids/bundles must be loaded with the runners parallel to the side of the trailer. Briquettes should **NOT** be double stacked. Briquettes should be loaded either single or double wide from the nose of the trailer to end of the trailer.
- e) If loading single wide, skids/bundles should be loaded alternatively on the left side to the right side of the trailer, tight against one another so as to self-secure the load.
- f) All voids on loads must be properly blocked and braced to prevent shifting during transit. Loose or otherwise unrestrained skids/bundles or partial skids are not acceptable.
- g) Bill of lading must list scrap classification. The following information must be recorded on all shipping documents: vendor name, SRA number, PO number, product alloy, trailer number, seal number, product type, number of packages, gross weight, tare weight, dunnage and net weight. Failure to indicate the tare weight will result in a deduction of 100 lbs per skid. Material should be described "*Aluminum Scrap for Remelting Purposes Only*".
- h) Any truck shipment arriving improperly loaded shall be subject to rejection.
- i) While it is the driver's responsibility to ensure that his/her load is secure to move safely, it is common practice that the shipper ensure that adequate securement materials are made available for the driver to secure his load. It is recommended that the shipper not provide driver his/her bill of lading for signature until some level of securement has been done.
- j) If shipping by intermodal transport, a copy of the bill of lading bearing all required information must be affixed to the inside trailer wall (not the door). This copy would be in addition to the copy provided to the driver at time of pick-up.
- k) Novelis requires that truck drivers use proper personal protective equipment while on Novelis property. This includes safety glasses, steel or closed toed shoes and hard hats. (Please contact us for specifications on these.) Drivers must wear long pants and at least a short sleeve shirt – no shorts or sleeveless shirts are permitted. It is also recommended that they do wear hearing protection and do not wear jewelry while in the plant.

8.0 Railcar Loading Procedure

- 8.1 For briquetted scrap, standard boxcars with moveable bulkheads should be used. Cars must have a MINIMUM TEN FOOT DOORWAY clearance.
- 8.2 Boxcars must be inspected prior to loading. Boxcars should be clean and free of foreign material. All Bulkhead pin holes must be cleaned to ensure proper securing of bulkheads. Both doors should be operable on the boxcar.
- 8.3 All skids/bundles of scrap in the ends of the car must be loaded with runners parallel to the sides of the car. Skids loaded in the doorway are to be loaded with runners perpendicular to the sides of the car. Two-high stacking of skids is acceptable if they are uniform in size and loaded solid from end to end with fixed bracing to fill any voids.
- 8.4 Loads must be properly blocked and braced to prevent shifting during transit. Loose or otherwise unrestrained skids or partial skids are not acceptable. Railcars must be loaded so that unloading can be accomplished through door on either side.
- 8.5 Railcar loads must be a minimum of 100,000 lbs per car. Loads less than 100,000 lbs are subject to inquiry.
- 8.6 Packing slip must be attached inside railcar on the car wall. Within six feet of doorway. Packing slip must list each scrap classification separately. The following information must be recorded on all shipping documents: vendor name, SRA number, PO number,

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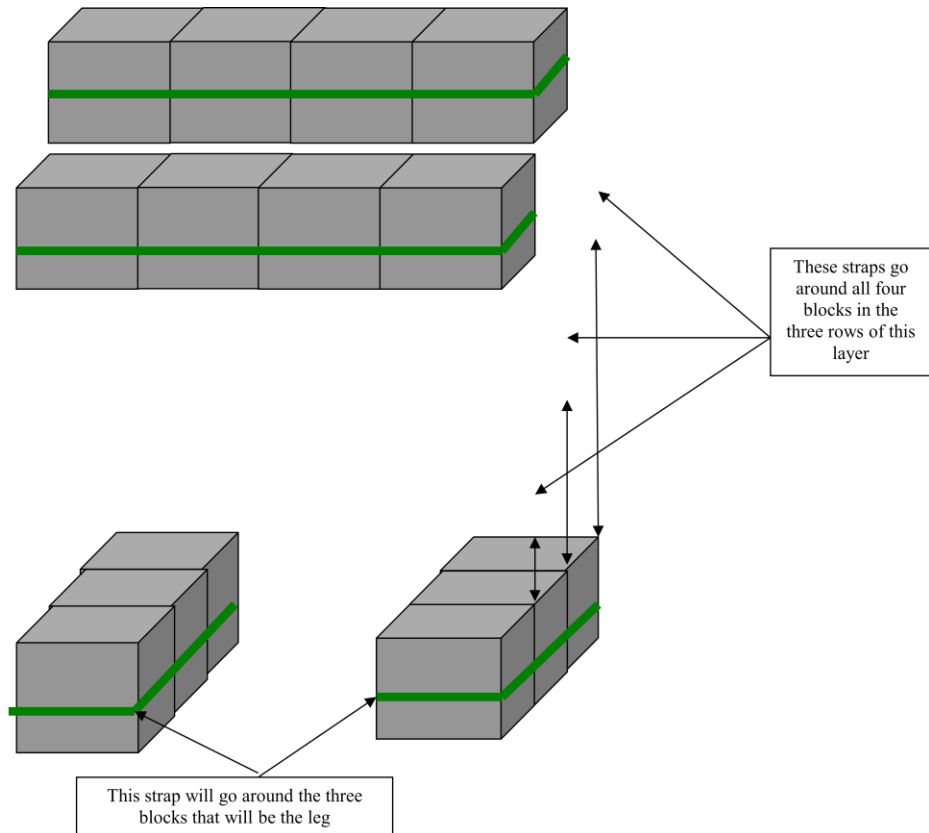
metal alloy, car number, seal number, product type, number of packages, gross weight, tare weight, dunnage and net weight. Failure to indicate the tare weight will result in a deduction of 100 lbs per skid. Material should be described "*Aluminum Scrap for Remelting Purposes Only*".

8.7 Any railcar shipment arriving improperly loaded shall be subject to rejection.

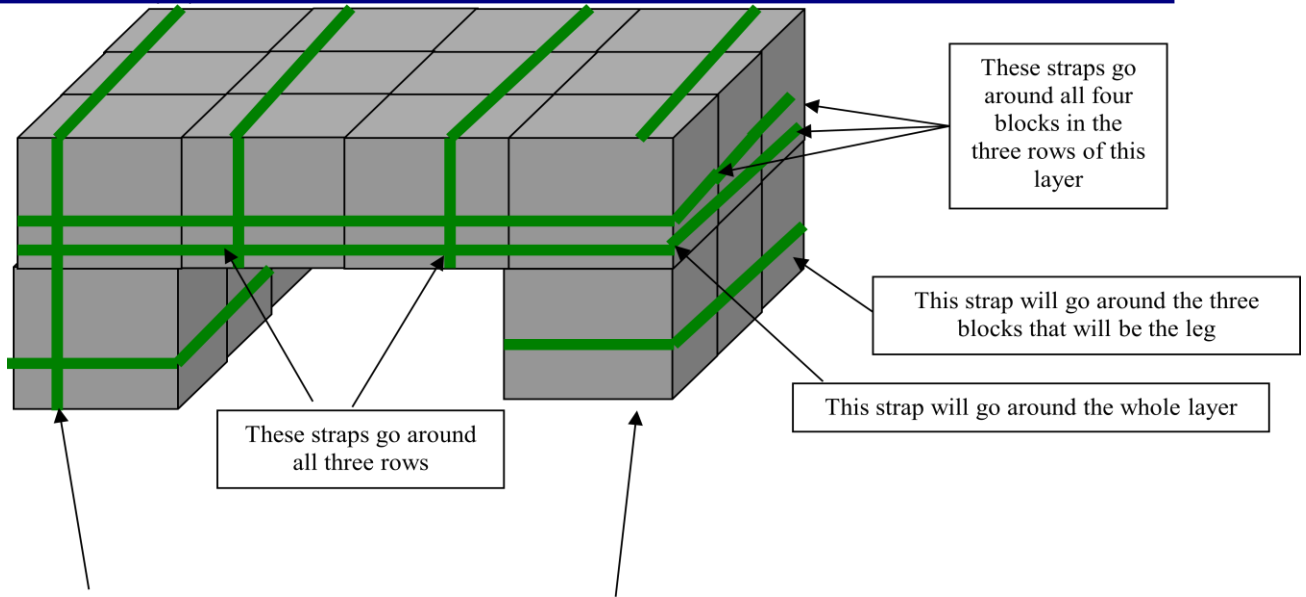
9.0 Pallet-Less Scrap Program

- a) Why Choose Pallet-Less Scrap?
- b) Safer
- c) Plastic Banding vs. Steel Banding
- d) Improved Bundle Integrity – Transit
- e) Costs Less
- f) No Need for Pallets
- g) Plastic Banding Costs Less Than Steel
- h) Time Saving
- i) Freight Savings
- j) Stackable
- k) Compatible With All Lift Truck Fork Sizes And Spacing

Plain/Bright
Scrap
Pallet-Less
Configuration



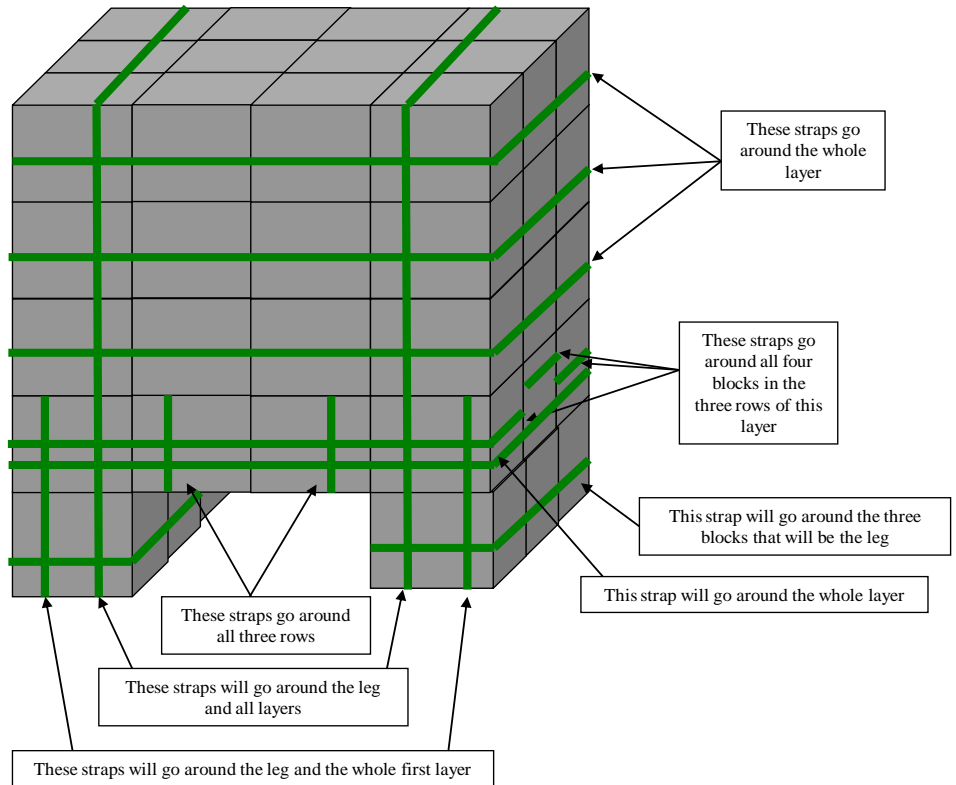
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Plain/Bright Scrap Palletless Configuration

4 bricks wide
by
3 rows deep
by
4 layers high

2 legs of
3 bricks



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