

**MATERIAL PACKAGING STANDARDS – COILS**

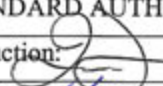



Plant 1 - 35 Spruce Street, Tillsonburg, Ontario N4G 5C4

Plant 2 - 35 Townline Road, Tillsonburg, Ontario N4G 4H3

Plant 3 - 101 Townline Road, Tillsonburg, Ontario, N4G 4H3

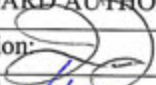
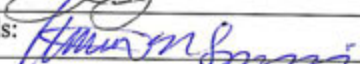
Plant 4 - 105 Spruce Street, Tillsonburg, Ontario, N4G 5C4

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Production: 	DATE: 5 Apr 07	
Materials: 	DATE: Apr 5/07	PAGE: 1 of 5



## MATERIAL PACKAGING STANDARDS – COILS

	TOPIC	PAGE
1.0	Overview	3
2.0	Standard Packaging	3
3.0	Processing Requirements	4
4.0	Quality Assurance and Documentation	5
5.0	Penalties	5
6.0	Acknowledgement	5

STANDARD AUTHORIZATION SIGN OFF	Marwood Metal Fab.	REV. No. : 5
Production: 	DATE: 5 APR 07	
Materials: 	DATE: Apr 5 / 07	PAGE: 2 of 5



**MATERIAL PACKAGING STANDARDS – COILS**

**1.0 OVERVIEW**

Material packaging specifications are developed in order to provide consistency in the following areas:  
 Material Preservation  
 Safe handling  
 Material Physically consistent with Production and material handling equipment

This document is intended as a guideline to make coil stock suppliers aware of the requirements that will provide the basis for material approval and invoice payment. It will also ensure continuity of general supply and delivery standards. Packaging requirements will be consistent minimizing the likelihood of return and reducing the time required to unload.

**2.0 STANDARD PACKAGING**

This section defines Marwood's current handling capabilities and requirements. When determining packaging characteristics the highest priority is to be given to packaging details that are included on the purchase order or material release.

All shipments of coil steel or aluminum must be tarped.

**2.1 Material Handling – Lift Truck**

Max lift weight	15000 lbs
Max coil weight	15000 lbs
Outside Diameter	72 In Max
Inside Diameter	18 In Min / 22 In Max
Packaging type supported	Standing coils and Pallets Rear Unload Only

The front trailer of any trailer train combination must contain coils for crane unload only.



**2.2 Material Handling - Crane**

Max lift weight	52000 lbs
Max coil weight	47000 lbs
Outside Diameter	72 In Max
Inside Diameter	18in Min / 22 In Max

**2.3 Coil Banding Requirements**

Minimum banding requirements are listed in the table below

Coil Dimensions	Number of bands through eye	Number of bands around coil
Less than 1.5" wide	3/4" – 4 Bands	None Required
Less than 1000 lbs	3/4" – 2 Bands	3/4" – 1Band
1000 lbs to 5000 lbs	3/4" – 3 Bands Or 1 1/4" – 2 Bands	1 1/4" – 1 Band
Greater than 5000 lbs	3/4" – 4 Bands Or 1 1/4" – 3 Bands	1 1/4" – 1 Band for coils less than 20" wide 1 1/4" – 2 Bands for coils greater than 20" wide

STANDARD AUTHORIZATION SIGN OFF	Marwood Metal Fab.	REV. No. : 5
Production: 	DATE: 5 April 07	
Materials: 	DATE: Apr 5/07	PAGE: 3 of 5



**MATERIAL PACKAGING STANDARDS – COILS**

\*\* When packaging coils of aluminum, strips of tape can be used instead of steel bands around the coil.

**2.4 Coil Orientation and Packaging Requirements**

**Eye to Sky**

- Multiple coils are to be banded together with 1 ¼ " banding
- Coils are to be separated with 2x2 hardwood spacers
- Each lift to be shipped on hardwood pallets, sized to safely support and prevent telescoping of the coil.
- Pallets weighing less than 10,000 lbs require 3" x 3" runners
- Pallets weighing more than 10,000 lbs require 4" x4" runners
- All contact surfaces between wood packaging and steel is to be covered with a moisture barrier
- The center opening of the coil is to be clear of all packaging material to allow access with an ID coil-lifting device.

**Eye Horizontal**

- Coils greater than 10" in width may be shipped standing (eye horizontal).
- Coils to be shipped as single units or banded together in packages less than 40,000 lbs.
- Coils less than 10" may be shipped standing if specifically indicated on the purchase order. Coils less than 10" in width must be bundled so that the total width of the bundle is 10" to 40" wide.
- Standing coils may be banded together provided 2" spacers are placed between the Coils to allow access for the crane and chain.



**2.5 Labeling**

Each individual Coil is to be labeled.  
 Each label is to contain the information indicated below. Information indicated with an '\*\*' must be in text and bar code formats.

- Marwood Part Number \*
- Quantity in lbs \*
- Material Specifications
- Mill Coil Number \*
- Heat number \*
- Service center lot # \*

**3.0 Processing Requirements**

- 3.1 All coils are to be provided as "Slit Edge" unless otherwise specified on the purchase order.
- 3.2 Width tolerance for all coils is +/- 0.010" unless a different tolerance is recorded on the purchase order.
- 3.3 The inside edge (tail) of the coil may not extend more than 1" into the center opening for for hot rolled material and not more than 2" for cold rolled material.
- 3.4 No balancing paper is allowed.
- 3.5 Where coil inners are required to protect the inside of the coil, plastic coil inner protectors are preferred over steel coil inner protectors.

STANDARD AUTHORIZATION SIGN OFF	Marwood Metal Fab.	REV. No. : 5
Production: 	DATE: 5 APR 07	
Materials: 	DATE: Apr 5 / 07	PAGE: 4 of 5



## MATERIAL PACKAGING STANDARDS – COILS

- 3.6 When processing aluminum coils cardboard cores can be used to ensure that the coil center does not collapse.

### 4.0 Quality Assurance and Documentation

#### 4.1 Mill Certs

Chemical certification is to accompany each coil supplied to Marwood. Physical certs, when required, as specified on the purchase order are to accompany the shipment.

Certs are to be maintained on file at the Service center for at least 7 Years

#### 4.2 Return of Non-conforming product.

It is Marwood's policy to collect all substandard material issues in a timely manner. To this end, Marwood will store any non-conforming product for a maximum of two weeks commencing at time of Supplier notification. During this time, the supplier is encouraged to examine their product at our facilities or to make arrangements for pick-up. Defective material stored at Marwood for more than two weeks will be shipped back to the supplier at the supplier's expense.

### 5.0 Penalties

- 5.1 When non conforming product arrives at Marwood the non conformance will be brought to the attention of the supplier. The supplier may authorize Marwood to use the non conforming product as supplied. Any resulting machine downtime or additional labour costs incurred will be the responsibility of the supplier.
- 5.2 Marwood may elect if required to use the material initially identified as non-conforming product. Any resulting machine downtime or labour costs incurred will be the responsibility of the supplier.
- 5.3 For product where minimum and maximum outside coil diameters are specified, a handling charge of \$125.00 per coil will be debited for each coil not meeting purchase order or material release requirements.

### 6.0 Acknowledgement



**Fax this page attention: Purchasing Department  
1-519-688-1194**

I acknowledge that I have read and understood this document

Supplier Name: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

STANDARD AUTHORIZATION SIGN OFF	Marwood Metal Fab.	REV. No. : 5
Production: 	DATE: 5 APR 07	
Materials: 	DATE: Apr 5 / 07	PAGE: 5 of 5