



Engine **Cooling Solutions** Worldwide®



Supplier Documentation for Barcode Labels

This document published for the use of employees
and suppliers.

Approval is required prior to using barcode labels.

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Introduction

Speed and quality are two key strategies for Horton to remain a world-class company. The barcode labeling of material received from suppliers is necessary to achieve requisite levels of speed and quality in our receiving transactions. This document details the specifications and approval requirements necessary to implement Horton barcode receiving labels and packing slips.

The importance of quality barcode shipping labels cannot be overstated. Strict adherence to the specifications will reduce implementation costs and increase benefits for our suppliers and Horton will be requiring that our suppliers institute barcode. We expect that our suppliers will have procedures in place to ensure the quality of these labels, just as with any product supplied by Horton.

Key Specifications

- Use **code 128b or 39 alphanumeric** barcode symbology (Standard Non Full ASCII). *Definition See Appendix B.1.* Code 128b is preferred because part numbers take up much less space than code 39.
- Fields must have barcodes and human readable per the field specifications and as shown on the samples provided within this document for Packing Lists / Part / Pallet / Container Labels.
- All fields will be coded exactly as in the original purchase order. Prefix characters such as a “P” are not to be used.
- The fields within each label should be separated by horizontal thin lines and should contain their respective titles, as shown in the examples, in the upper left-hand corner of the field.
- Horton must approve the format in writing for all barcode labels/packing lists prior to using on shipments.
- Remarks may be entered at the bottom of the label in the comment field.
- A single point of contact at the Supplier should be designated. The contact will handle all barcode related problems.
- Unless otherwise notes, label size should be 4” x 6”. If necessary, the Supplier can vary the standard label size as long as all required information is included, and label is pre-approved in writing by Horton.
- The Packing List will have a minimum of the Horton PO number, Release number, Part Number, Revision and quantity bar-coded and sent with each shipment.
- Label Material/paper shall be white in color with black text and printed with ink that does not smear if the label were to get wet.
- All containers/pallets will have the label attached to the shipment. The label will be attached to every pallet/container for each part/purchase order combination.
- All pallets/containers that contain multiple part numbers shall have individual labels for each part number. Each label shall be attached (not adhered) to the parts. Example: 1 pallet – contains 5 pieces part 1050403 and 10 pieces of part 108974. The supplier is required to have 2 labels one for each part number/purchase order combination. If multiple purchase orders exist for a part within the pallet/container separate labels would be required. Example: 10pc 108974 – 2pc P04444 and 3pc P03456 – 2 labels are required.

Note: *The examples contained in Appendix A are meant to show the layout only. The fonts, font sizes, and barcodes are used for example purposes only and do not represent specific requirements.*

Layout of Barcoded Label

1. PO Number: Human Readable and Barcode Required

The Horton purchase order number as it appears on the Horton purchase order.

2. Release number: Human Readable and Barcode Required

The Horton purchase order release number as it appears on the Horton purchase order.

3. Part Number: Human Readable and Barcode Required

The Horton part number as it appears on the Horton purchase order.

4. Revision: Human Readable and Barcode Required

The Horton part revision letter as it appears on the Horton purchase order. Please note the revision is a three digit field, including leading dashes (e.g. --B, -AA, etc.).

5. Quantity: Human Readable and Barcode Required

The total quantity in the container/pallet for a particular item.

6. Description: Human Readable Required

The Horton part description as it appears on the Horton purchase order.

7. Ship Date: Human Readable Required

The date the parts were shipped to Horton.

8. Packing List Number: Human Readable and Barcode Required

The supplier's packing list number.

9. Supplier Address: Human Readable Required

The supplier's name and address.

10. Comments

The space at the bottom of label may be used for remarks/comments that the supplier deems necessary.

Sample Diagram of Barcode Label See Appendix A.1

Layout of Barcoded Label for Castings

This label should be letter-sized (8½" x 11").

Upper left quarter of label:

The upper left quarter of the casting barcode label is identical to the barcode label listed in the previous section.

Upper right quarter of label:

1. Date: Human Readable and Barcode Required

The pour date of the raw castings contained on the pallet or container. The human readable text should be at least 36pts (1/2 inch) high.

2. Revision: Human Readable and Barcode Required

The Horton part revision letter as it appears on the Horton purchase order. Please note the revision is a three digit field, including leading dashes (e.g. --B, -AA, etc.). The human readable text should be at least 18 pts (1/4 inch) high.

3. Part Description: Human Readable Only

The Horton part description as it appears on the Horton purchase order. It should be at least 18 pts (1/4 inch) high.

Bottom half of label:

1. Part: Human Readable Only

The Horton part number as it appears on the Horton purchase order. It should be at least 63 pts (7/8 inch) high.

2. Quantity: Human Readable Only

The total quantity in the container / pallet for a particular item. It should be at least 63 pts (7/8 inch) high.

Iron lbs: Human Readable Only

Indicate the total weight of the iron in this pallet/container.

Tare lbs: Human Readable Only

Indicate the tariff weight of this pallet/container

Total lbs: Human Readable Only

Indicate the total weight of this pallet/container

Sample Diagram of Barcode Label for casting suppliers See Appendix A.2

Layout for Barcoded Packing List

This label should be letter-sized (8½" x 11").

1. Packing List Number: Human Readable and Barcode Required

The supplier's packing list number.

2. Supplier Address: Human Readable Required

The supplier's name and address.

The next section repeats for each item on the packing list.

3. PO Number: Human Readable and Barcode Required

The Horton purchase order number as it appears on the Horton purchase order.

4. Release number: Human Readable and Barcode Required

The Horton purchase order release number as it appears on the Horton purchase order.

5. Part Number: Human Readable and Barcode Required

The Horton part number as it appears on the Horton purchase order.

6. Revision: Human Readable and Barcode Required

The Horton part revision letter as it appears on the Horton purchase order. Please note, the revision is a three digit field, including leading dashes (e.g. --B, --A, etc.)

7. Packages: Human Readable Form

The number of boxes, containers, or packages in a shipment.

8. Quantity: Human Readable and Barcode Required

The total quantity in the container or pallet for a particular item.

9. Date: Human Readable

The date the parts were shipped to Horton.

10. Description: Human Readable Required

The Horton part description as it appears on the Horton purchase order.

Sample Diagram of Barcode Packing List See Appendix A.3

Supplier

Responsibility

Prior to implementation, the supplier shall submit label samples for approval. Strict adherence to these specifications will reduce implementation costs and increase benefits for our suppliers and Horton.

It is the responsibility of the supplier to provide barcode labels that meet all of the specifications listed in this document. The supplier shall be responsible for verifying the accuracy of the label and ensuring that the data is current and correct.

Approval Process

The process to follow for approval of barcode labels:

1. Supplier completes request for barcode receiving label approval (below) form and submits a sample label using actual order data to Horton.
2. Horton will review the sample labels and provide approval or areas for correction.
3. Before supplier can begin shipping parts with the barcode receiving label, supplier must receive written approval by Horton.

Bar Coding Supplier Request Form

PLEASE COMPLETE THIS FORM AND SUBMIT WITH YOUR SAMPLES OF:

- 1. BAR CODED LABEL (Do not use prefixes like a "P" in any of the barcodes.)**
 - 2. PACKING LIST (Must barcode PO#, Horton Part Number, revision and quantity.)**
- Both must show actual Horton data**

Supplier Information:

Name: _____

Address: _____

Contact: _____

Phone# : _____

SEND TO:

Horton Incorporated

Mark Janisch

10840 423rd Ave.

Britton SD 57430

mark.janisch@hortonww.com

Phone number 605-448-3551

Fax number 605-448-3439

Appendix A.1 – Barcode Label Example

PO # 1234567 	REL. NO 12 
PART # 601903 	REVISION -- A 
QUANTITY 400 	DESCRIPTION Sheave SHIP DATE 07/12/07
Packing List # 64345  Horton Inc. Britton SD	Supplier Address TK-Waupaca Plant-1 406 N Division Waupaca, WI 54981

Appendix A.2 – Barcode Label for Castings Example

PO # 1234567 	REL. NO 12 
PART # 601903 	REVISION --A 
QUANTITY 400 	DESCRIPTION Sheave
Packing List # 64345 	SHIP DATE 07/12/07
Horton Inc. Britton SD	Supplier Address TK-Waupaca Plant-1 406 N Division Waupaca, WI 54981

Part: **601903**

Qty: **400**

Date: **7F12**


Revision: **--A**


Part Description:
Sheave

Iron lbs: 1540 lbs:
Tare lbs: 45 lbs:
Total lbs: 1585 lbs:

Appendix A.3 – Barcode Packing List Example

Packing List # 89156

Supplier Address in this space



PO Number 234567	Release # 12	Part Number 601903	Revision --A	Packages 1
Quantity 400	Date 07/20/07	Description Sheave casting		

PO Number 234567	Release # 12	Part Number 601904	Revision --D	Packages 1
Quantity 295	Date 07/20/07	Description Sheave casting		

PO Number 234567	Release # 12	Part Number 601831	Revision --B	Packages 1
Quantity 750	Date 07/20/07	Description Journal casting		

PO Number 234567	Release # 12	Part Number 601908	Revision --B	Packages 1
Quantity 300	Date 07/20/07	Description Sheave casting		

Appendix B.1 – Definition of Code 39 symbology (standard Non Full ASCII)

Code 39 -- (3 of 9 Code) - A discrete, variable length, bar code symbology encoding the characters 0 to 9, A to Z, and the additional characters - (dash), . (period), space, \$ (dollar sign), / (slash), + (plus sign), and % (per cent sign), as well as a special symbology character to denote the start and stop character, conventionally represented as an * (asterisk). Each Code 39 symbol consists of a leading quiet zone, a start symbol pattern, symbol characters representing data, a stop pattern, and a trailing quiet zone. Each Code 39 character has three wide elements out of a total of nine elements. Each symbol consists of a series of symbol characters, each represented by five bars and four intervening spaces. Characters are separated by an inter-character gap. Each element (bar or space) is one of two widths. The values of the X dimension and N remain constant throughout the symbol. The particular pattern of wide and narrow elements determines the character being encoded. The inter-character gaps are spaces with a minimum nominal width of 1X.

Code 128 is a very high-density barcode symbology, used extensively worldwide in shipping and packaging industries. GS1-128 (formerly known as UCC/EAN-128) is one of its variants. It is used for alphanumeric or numeric-only barcodes. It can encode all 128 characters of ASCII and is also capable of encoding two numbers into one character width, called double density. This feature is evidence of it being designed to reduce the amount of space the bar code occupies to address the ever-increasing needs of item catalogs. Each printed character can have one of three different meanings, depending on which of three different character sets are employed. Code 128 is the major component of the labeling standard for GS1-128 (formerly known as UCC/EAN-128), used as product identification for container and pallet levels of retail markets.

Specification

A Code 128 barcode will have six sections:

- Quiet Zone
- Start Character
- Encoded Data
- Check Character
- Stop Character
- Quiet Zone

The check character is calculated from a modulo 103 calculation of the weighted sum of all the characters.

Subtypes

Code 128 barcodes may be generated specifically as 128A, 128B, or 128C. It is possible to change between each subtype at any time within a barcode.

- 128A - 0-9, A-Z, ASCII control codes, special characters
- 128B - 0-9, A-Z, a-z, special characters
- 128C - 00-99 (double density encoding of numeric only data)