

# Stainless Steel Tight Head 30-Gallon Drum Specification

Press  to see Check List only.

Description	Package ID Number	Packaging Filling Instructions*
Drum, Stainless steel, tight head, 30 gallon, 18 1/4 in. ID <b>UN 1A1/X 1.4/250</b> , 1.2141 mm Nominal (18 gauge)	112-6055	CHK-22

**Mfg. Details Per: Packaging Specifications**  
**No. 1A1-103-00**  
**Issue Date: February 1, 2000**  
**Revised Date:**

 1.0 GENERAL DESCRIPTION
 2.0 MATERIAL DETAILS
 3.0 CONTAINER PERFORMANCE CRITERIA
 4.0 QUALITY ASSURANCE
 5.0 MARKING
 6.0 INTENDED USE
 7.0 SUGGESTED MANUFACTURERS
 8.0 AUTHORIZED CHANGES
 9.0 DISTRIBUTION OF UN PERFORMANCE TEST REPORTS (per ¶ 3.1)

\* For future use.

Company  
Name  
Here

## Packaging Specifications

### Tight Head Stainless Steel Drum

Specification No. 1A1-103-00

Issued: February 1, 2000

Revised:

Page 1 of 7

## 1.0 GENERAL DESCRIPTION

Tight Head (TH) Stainless Steel drum with welded seams, 2 rolling hoops, steel body, steel head, conventional (with seams) construction. Steel gauge and specific variations as specified in [Appendix A-2](#) for 55, 30, 15 or 16 gallon drum capacity.

### 1.1 United Nations Designation - 1A1 /X sg/ tp/ \* [per 49 CFR, ¶178.503]

- 1A1 = Tight head steel drum.
- X = Suitable for Packing Group I, II, and III materials.
- sg = Specific gravity of material for which drum design type has been tested.
- tp = Hydrostatic test pressure (in kilopascals) for which drum design type was tested.  
[250 kPa equivalent to 36.3 pounds per square inch (psig) pressure- for PG I test.]
- \* = The last two (2) digits of the calendar year in which the container was manufactured.

Specific UN markings are specified in the Purchase Order Description for the referenced package ID number for each specific drum, which are the Company "minimum" UN requirements.

### 1.2 Size:

Inside diameter (in inches) [as specified in the Purchase Order Description for the referenced package ID number].

Drum dimensions to be in accordance with ANSI MH2-1997 (American National Standards Institute) Standards for Steel Drums and Pails, for 16-, 30-, and 55-gallon drums.

## 2.0 MATERIAL DETAILS

Drum construction must comply with Title 49, Code of Federal Regulations (49 CFR), ¶178.504 (latest edition) for steel drums, and the following minimum requirements. Manufacturer shall document appropriate quality control on incoming raw material. No significant changes to the manufacturing process or raw material is allowed without prior approval of the Company. Steel thickness dimensions/tolerances in conformance with GAUGE TABLE, per [Appendix A-2](#).

### 2.1 Drum Body:

Stainless steel, Type 304-2B, polished, ASTM A-240, or equivalent. Top of body rolled to form 1/2-inch false wire--see [Appendix A-2](#) for steel size for stated drum capacity.

### 2.2 Drum Head:

Stainless steel, Type 304-2B, polished, ASTM A-240, or equivalent--see [Appendix A-2](#) for steel size.

### 2.3 Drum Bottom:

Stainless steel, Type 304-2B, polished, ASTM A-240, or equivalent--same steel as drum body.

### 2.4 Body Seams:

Welded.

## Tight Head Stainless Steel Drum

Specification No. 1A1-103-00

Issued: February 1, 2000

Revised:

Page 2 of 7

## Tight Head Stainless Steel Drum

Specification No. 1A1-103-00

Issued: February 1, 2000

Revised:

Page 3 of 7

### 4.0 QUALITY ASSURANCE

The Seller shall assure, and be responsible, that the quality of the drums furnished under this document are of good quality, as pursuant to industry standard manufacturing practices for steel drums, including the materials/components used in the manufacturing of the stated steel drums.

The Seller shall meet the requirements stipulated in this document, and the specific requirements of the Purchase Order Description for the specific drum as specified in the Purchase Order.

#### 4.1 Manufacturer's Certification:

By the act of placing the UN performance criteria markings on each drum purchased, the manufacturer acknowledges he has certified, and accepted responsibility, that the stated drum design meets or exceeds the U.S. Department of Transportation's UN performance requirements as stipulated in ¶3.2 of this document, and in accordance with the markings prescribed in 49 CFR, ¶178.503.

In addition, the certification marking acknowledges that the drum manufacturer has complied with the specific standards for steel drums specifically noted in 49 CFR ¶178.504.

#### 4.2 Receiver Inspections:

The following inspections will be performed on the incoming drums by a Company designee to determine the drums meet quality standards and the requirements of this document. However, the Company is not limited to the following inspections to determine quality and specification conformance. Conformance will be indicated by a Y or N in the "Y/N" column, and negative responses documented and processed through the Company's Quality Assurance Program.

*NOTE: Checklist for this specification is on following page.*

## Tight Head Stainless Steel Drum

Specification No. 1A1-103-00

Issued: February 1, 2000

Revised:

Page 4 of 7

*This checklist will be reproduced for QC Inspections.*

### Receiver Inspection Quality Control (QC) Checklist for Incoming Stainless Steel Drums

QC Conformance		Y/N	<< " <b>No's</b> " to be documented in accordance with the Company's QA Program
1	Capacity (¶1.0)		Drum is the capacity specified in the package ID number.
2	Drum Surface (¶2.9)		Clean, no significant scratching, dings, or dents in drum, no significant corrosion, on exterior surface of drum.
3	Bung Closures (¶2.8)		Drum top contains a 3/4" and/or 2" opening; ["Iron Pipe Size" (IPS) Inside dimensions]. See <a href="#">Appendix A-2</a> . Closures contain gasket rings.
			Bung openings/closures are Type 304 stainless steel.
4	Markings (¶5.0)		Drums marked (as a minimum) with Company specified UN markings, per Purchase Order Description.
			Drums legibly marked (embossed) on bottom in accordance with required 49 CFR markings, and specified gross test weight.
			Markings include the manufacturer's identification -- company name or registered symbol (initials or M-number), or test agency code; after USA/. Ref: 49 CFR, ¶178.503(a)(8).
5	Side Markings (¶5.0)		The required UN markings are durably and legibly marked.

Package ID Number \_\_\_\_\_

P. O. Number \_\_\_\_\_

Total Units Received \_\_\_\_\_

Inspection Method: Per Company's QA Program

Sample Size \_\_\_\_\_ [Based on ANSI/ASQC Z1.4-1993]

Non-Conformance Document No. \_\_\_\_\_

Inspector/Date \_\_\_\_\_

Additional comments on back: \_\_\_\_\_ check, if yes.

The above QC inspection check list shall be accomplished for each order based on random samples of incoming stainless steel drums, by QC personnel to determine manufacturer's conformance to these specified Packaging Specifications.

Shipments of stainless steel drums not meeting specified requirements will be returned to the seller for credit.

QC inspections resulting in noncompliance with the Packaging Specifications will be cause for rejection of the entire shipment.

# Tight Head Stainless Steel Drum

Specification No. 1A1-103-00

Issued: February 1, 2000

Revised:

Page 5 of 7

## 5.0 MARKING

As a minimum, each drum shall be marked in accordance with 49 CFR, ¶178.2, 178.3, and 178.503 in a conspicuous location on exterior surface of the drum. Markings shall have a minimum letter height of 1/2-inch. Markings must include the manufacturer's identification -- company name or registered symbol (initials or M-number), or test agency code, per 49 CFR, ¶178.503(a)(8).

Additionally, drums are to be marked, in black, with the UN markings just below the top drum chime, as stipulated in ¶1.1. of this specification, and specifically stated in the Purchase Order Description.

The letters: CATN--(dash) plus the last four (4) numbers of the package ID number must be marked below the UN markings:

55 gallon = CATN--6060

30 gallon = CATN--6055

15 gallon = CATN--6219

## 6.0 INTENDED USE

Containers are intended for Packing Group I, II, and III hazardous materials in liquid form. Maximum fill capacity of the drum shall not exceed the tested hydrostatic pressure or density marked on the drum.

## 7.0 SUGGESTED MANUFACTURERS

The following list of suggested manufacturers have demonstrated ability to comply to the requirements set forth in this document. However, this list does not guarantee current or continued availability as a suggested manufacturer source:

[Enter Suggested Manufacturer\(s\) Here:](#)

The Seller must advise the Company prior to any change in the current source (manufacturer) of packaging materials described in this Packaging Specifications.

Any Manufacturer that satisfactorily demonstrates to the Company the capability to furnish packaging in compliance with this Packaging Specification, may be added to the above listing.

## 8.0 AUTHORIZED CHANGES

Changes/revisions in the requirements specified in this document will only be authorized by the Company.

## Tight Head Stainless Steel Drum

Specification No. 1A1-103-00

Issued: February 1, 2000

Revised:

Page 6 of 7

### 9.0 DISTRIBUTION OF UN PERFORMANCE TEST REPORTS (per ¶3.1) and CLOSURE INSTRUCTIONS (per ¶2.8)

A) Closure instructions must be furnished for each initial order, and annually (at the minimum) for each type/size package purchased by the Company to the address below.

B) Upon specific request, UN performance test documentation for each specified order/shipment will be submitted directly to the Company at the address below.

**COMPANY NAME AND ADDRESS** (enter information below)

**STAINLESS STEEL DRUM CONSTRUCTION VARIATIONS**

	OPEN HEAD (OH) DRUMS [Fully Removable Heads]			TIGHT HEAD DRUMS		
	<i>No. 1A2-102-00</i>			<i>No. 1A1-103-00</i>		
Construction	55 gallon	30 gallon	15/16 gallon	55 gallon	30 gallon	16 gallon
Nominal, mm	1.5189	1.2141	0.9119	<b>1.2141</b>	<b>1.2141</b>	<b>0.9119</b>
** Steel Thickness	.0598 in.	.0478 in	.0359 in.	<b>.0478 in.</b>	<b>.0478 in.</b>	<b>.0359 in.</b>
Minimum, mm						
<i>Drum gauge</i>	1.3538 .0533 in.	1.0871 .0428 in.	0.8230 .0324 in	<b>1.0871 .0428 in.</b>	<b>1.0871 .0428 in.</b>	<b>0.8230 .0324 in</b>
	<i>16 ga.</i>	<i>18 ga.</i>	<i>20 ga.</i>	<b>18 ga.</b>	<b>18 ga.</b>	<b>20 ga.</b>
Head Thickness	1.5189	1.2141	0.9119	<b>1.2141</b>	<b>1.2141</b>	<b>0.9119</b>
Same Tolerances.	<i>16 ga.</i>	<i>18 ga.</i>	<i>20 ga.</i>	<b>18 ga.</b>	<b>18 ga.</b>	<b>20 ga.</b>
Rolling Hoops	3 each	2 each	2 each	<b>2 each</b>	<b>2 each</b>	<b>2 each</b>
Locking Ring –mm Nominal.	2.6568 <i>12 ga.</i>	2.6568 <i>12 ga.</i>	1.5189 <i>16 ga.</i>	----	----	----
Bolt Size *see note below	5/8 inch	5/8 inch	3/8 inch	----	----	----
Gaskets	Required	Required	Required	----	----	----
Bung Openings	3/4 inch Tri-Sure (1)	No	No	<b>2 &amp; 3/4 inch</b>	<b>2 &amp; 3/4 inch</b>	<b>2 inch</b>

\*NOTE: Counterfeit bolts, as stipulated on current DOE listing, will not be accepted. Bolts are of foreign origin.

\*\*NOTE: Steel thickness dimensions/minimum tolerances, in millimeters, are converted from the DOT Gauge Table, CFR 49, ¶173.24, pre-HM-181 docket. [inches x 25.4000 = millimeters; current CFR 49, ¶171.10(c)(2)]

· NOTE: Minimum gauge thickness tolerances, as shown above, apply (block 1).