

FOR ALL REMANUFACTURED AND RECONDITIONED DRUMS

The person responsible for filling and closing these containers for shipment must have a copy of these instructions. Pursuant to U.S. Department of Transportation Regulations given in Title 49 Code of Federal Regulations Part 178, Specifications for Packagings 314.2(c)(1)(i) must notify each person to whom a packaging is transferred of the type and dimensions of any closures, including gaskets, needed to satisfy performance test requirements. This notification is to include tightening instructions for closures.

**Note:**

Paragraph 178.2(c) cited above requires you to provide closing information to any person to whom this package is transferred who may need to close the packaging prior to reshipment.

**Closing Instructions for Head Fittings:**

All non-removable head, UN 1A1 Steel drums, all fully removable head UN 1A2 Steel drums, that are supplied with plugs and gaskets, must be closed for shipment using only the plugs and gaskets supplied and specified in the design qualification test for the drum as indicated below:

- T/S Plugs: 2-inch and 3/4-inch steel and plastic, installed in T/S steel flanges of corresponding size and tightened to the torque recommended by the manufacturer for the plug and gasket used as indicated below.
- Rieke® Plugs: 2-inch and 3/4-inch steel and plastic, installed in the appropriate Rieke® steel or plastic flange of corresponding size and tightened to the torque recommended by the manufacturer as indicated below.
- Equivalent plugs: 2-inch and 3/4-inch steel and plastic, installed in the appropriate equivalent Steel flange of corresponding size and tightened to the torque recommended as indicated below.

*Note: Equivalent plugs and T/S plugs may be used interchangeably in the octagonal design fittings.*

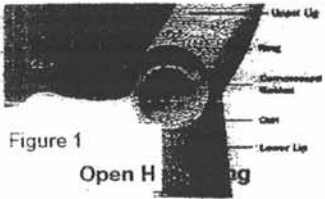


Figure 1

**Closing Instructions**

All removable head, UN 1A2, Steel drums supplied with bolt rings, bolts, gaskets and lids must be closed for shipment using only the components supplied.

- Place drum head, with gasket in place as supplied, on the curl at the top of the drum body. (See Figure 1)
- Place bolt ring around drum head and curl. (Note: Preferred orientation is with the ring gap in line with the 2" fitting.)
- Using a head compressor, apply force to the top of the drum head assembly to compress head gasket.
- Drive bolt into lug until the ends of the bolt ring are as follows: (See Figure 2)

*Note: If prescribed ring gap can not be achieved, torque ring to 75 ft. lbs. (+/- 5 ft. lbs.)*

If head compressor is not available, start bolt into lug, alternate tapping of ring with a mallet and drive bolt with wrench, until bolt ring ends meet requirements.

When ring has been tightened as required, the jam nut must be tightened against the unthreaded lug to prevent the bolt from backing out of the closing ring.

*Ring ends should not touch. Note: If ring ends touch after 75 ft. lbs. have been achieved, contact Kearny Steel Container for replacement rings. Drum Thickness 1.1/8/1.1 minimum.*

Open Head Ring and Bolt

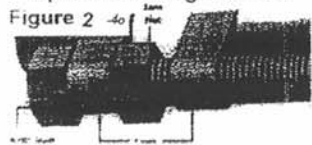


Figure 2

**Prescribed Closure Torques for Steel Drums (ft. lbs.)**

**\*\*\*Note: All Rubber Gaskets are Buna**

Item	T/S STYLE CLOSURES	
	3/4" (ft.lbs.)	2" (ft.lbs.)
<b>T/S Steel Plugs</b>		
Rubber Gaskets	12	20
Polyethylene, Teflon® Gaskets	20	30
<b>T/S Zinc Die Cast Plugs</b>		
Rubber Gaskets	12	20
Polyethylene, Teflon® Gaskets	20	30
<b>T/S Polypropylene 7 Nylon Plugs</b>		
Rubber Gaskets	8	20
Polyethylene Gaskets	8	30
<b>T/S Polyethylene Plug, High Density</b>		
Rubber Gaskets	8	15
<b>VS Self Gasketing Polyethylene Plugs</b>	5	12

RIEKE® OR EQUIVALENT CLOSURES	Steel Flanges Nylon Flanges			
	3/4" (ft.lbs.)	2" (ft.lbs.)	3/4" (ft.lbs.)	2" (ft.lbs.)

<b>Rieke® Steel Plugs</b>				
Rubber Gaskets	15	30	—	—
Polyethylene Gaskets	20	40	—	—
<b>Rieke® Plastic Poly-ViseGrip® Plugs</b>				
Rubber Gaskets	9	20	9	20
Polyethylene Gaskets	9	20	9	20
<b>Rieke® Poly-ViseGrip® Plug with Built-In Gasket</b>	9	20	9	20

*Recommended torque tolerance: +6,-2 ft.lbs.*

I have received the attached Closure Notification Instructions. Please sign and date.

X \_\_\_\_\_ X \_\_\_\_\_ X \_\_\_\_\_  
Signature Date Company Name

CLOSING INSTRUCTIONS  
RECONDITIONED POLY DRUM

(UN 1H1/Y)

The United States Department of Transportation regulations state that packaging manufactures ARE REQUIRED TO NOTIFY EACH PERSON TO WHO THE PACKAGING IS TRANSFERRED OF ALL REQUIREMENTS NOT MET AT THE TIME OF TRANSFER. THIS NOTIFICATION IS GIVEN IN TITLE 49, CODE OF FEDERAL REGULATIONS, (CFR) part 178 specifications for packagings ss. 178.2 (c).

The following instructions and guidelines outline all necessary materials and procedures to prepare the drum so that when closed for shipment it is capable of meeting the performance standards indicated by the UN marking on the side of the drum.

**PLASTIC DRUMS:** All non-removable head, 1H1 plastic drums, 49 CFR ss178.509(a)(1) supplies with closures such as plugs and gaskets must be closed for shipment using only the closures and gaskets supplied and specified in the design qualification test for the drum, as indicated below:

2" INCH BUTTRESS	20 ft. - lbs.
2" INCH NPT	20 ft. - lbs.

Closures must be tightened to recommended torque using pre-set or variable range machinist torque wrenches calibrated to indicated value.

The following method should be used to ensure that the packagings have been closed in the same manner as which they were initially tested.

1. Both fittings must be tightened after filling.
2. Do not cross thread fittings. Use proper thread type (NPT or Buttress) in matching bung holes.
3. Using a torque wrench of known calibration accuracy, slowly apply the recommended torque to each fitting.
4. Drums closed in this manner have met the UN performance test requirements as specified on the container markings.

**Note:** All reconditioned plastic tight head (UN 1H1/Y) drums for UN regulated use are tested for packaging group Y or # 2 @ 20 kpa, or 3 psi for leakproofness.

There are no design type changes to the drum from the original manufacturer in the reconditioning process.