

MEYER STEEL DRUM

To include Questar part #'s as follows:

5555-64062, 5555-64064, EDD317F, EDD317FE, EDD317T, EDD330F, EDD330FE, EDD330T, EDD355F-YLW, EDD355F, EDD355FE, EDD356T

To Our Valued Customer;

Meyer Steel Drum certifies that the container (s) we ship meet the requirements as stated in part 178, subparts L and M. Although the containers are tested in a "closed configuration", they are not shipped as such. After receiving our container(s), you, as the filler and most likely the shipper, are responsible for checking ALL closures for proper assembly prior to shipping.

To comply with part 178.2 and to assist the filler/shipper (you our customer), we have listed the pertinent information which will enable you to fulfill your responsibility under part 173.22. If the container(s) we shipped are altered in any manner from the condition they were at the time of delivery, or closure procedure is not done properly, Meyer Steel Drum, as the manufacturer, assumes no responsibility.

Procedure for Closed Head/Open Head Containers with fittings in head/cover.

1. Inspect plugs to be certain that the gaskets are seated properly.
2. Insert plug into flange without cross threading (plug should screw down easily using only fingers to do so).
3. Tighten plugs to at least the minimum torque setting using the guide listed below; based on the type of plug and gasket being used.

	<u>2"</u>	<u>1 1/2"</u>	<u>3/4"</u>
Tri-Sure style steel plugs w/ Buna Gaskets	20 ft-lbs		12 ft-lbs
Tri-Sure style steel plugs w/ EPDM/EPT Gaskets	20 ft-lbs		12 ft-lbs
Tri-Sure style steel plugs w/ Poly Gaskets	30 ft-lbs		20 ft-lbs
<u>Tri-Sure style steel plugs w/ Teflon Gaskets</u>	<u>30 ft-lbs</u>		<u>20 ft-lbs</u>
Nylon Tri-Sure style plugs w/ Poly. Irrad. Gaskets	30 ft-lbs		8 ft-lbs
Nylon Tri-Sure style plugs w/ Buna Gaskets	20 ft-lbs		8 ft-lbs
Nylon Tri-Sure style plugs w/ EPDM/EPT Gaskets	20 ft-lbs		8 ft-lbs
Tri-Sure style Self-Gasketing Polyethylene Plugs	12 ft-lbs		5 ft-lbs

	<u>2"</u>	<u>1 1/2"</u>	<u>3/4"</u>
Rieke style steel plugs w/ Buna Gaskets	30 ft-lbs	30 ft-lbs	15 ft-lbs
Rieke style steel plugs w/ EPDM/EPT Gaskets	30 ft-lbs	30 ft-lbs	15 ft-lbs
Rieke style steel plugs w/ Dapon Gaskets	30 ft-lbs	30 ft-lbs	15 ft-lbs
Rieke style steel plugs w/ Poly. Irrad. Gaskets	40 ft-lbs	40 ft-lbs	20 ft-lbs
Nylon Rieke style plugs w/ EPDM/EPT Gaskets	20 ft-lbs		9 ft-lbs
Nylon Rieke style plugs w/ Poly. Irrad. Gaskets	20 ft-lbs		9 ft-lbs

Closure Procedure for Open Head Drums:

1. Inspect cover gasket to verify the bond to metal is still intact and seated in cover groove.
2. Carefully place cover onto bead (top curl) of drum using caution to be certain gasket is seated evenly on bead.
3. Place the proper drum closure ring on the drum (ring received with drum from drum manufacturer) observing that the inner channel of ring has the entire cover curl engaged.
4. Bolt is to be inserted through the unthreaded lug loop, screw lock nut onto bolt and then feed bolt into threaded lug loop.
5. Begin tightening bolt while tapping on ring to aid in drawing ring up to the torque and gap recommendation listed below:

The torque pressure in foot-pounds required to close the ring properly will vary according to the gasket type used, as well as the variance of steel thickness used in manufacturing of containers. Sponge gaskets have a lesser density and will compress easier than hard tubular.

When using a 16 or lighter gauge ring with $\frac{3}{4}$ " wide lug ends, use only enough pressure to pull the ends up tight. Over tightening will cause the lugs and possibly the bolt to bend, which could cause trouble when removing the bolt. Tapping the outer edge of the ring with a fiber mallet while tightening the bolt will lessen the pressure necessary to close the ring properly.

A 12 gauge or 17H style bolt ring will take a considerable amount of pressure to close. A torque of about 50 foot pounds should normally be enough to close the ring. (containers with a 1A2/Y1.6 or higher rating will require a torque to a minimum of 60 foot pounds to comply with testing procedure).Once the ring is seated properly and is completely closed, do not apply excessive pressure on the bolt, this could cause the threads of the bolt to become stripped, making it difficult, if not impossible to remove.

When the closure ring used on an Open-Head container is locked up, a $\frac{3}{16}$ " to $\frac{7}{16}$ " gap is ideal. This allows for the $\frac{1}{8}$ " plus or minus in ring length. The ends of any ring should never touch, as this may prevent ring from closing all the way.

All Open Head containers should have the Locking Ring Bolt torque setting checked after filling & before transportation.

Procedure for checking Bolt Torque setting:

1. Release the Jam nut
2. Tighten the Locking Ring Bolt to the proper torque. While torquing, bump the ring at a downward angle.
3. Retighten the Jam nut to 25-30 ft-lbs. (Torque against the unthreaded lug.)

AMERICAN FLANGE & MANUFACTURING CO. INC.
1100 WEST BLANCKE STREET, LINDEN, J.J. 07036

TRI-SURE
CLOSURES

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GASKET TEMPERATURES AND RECOMMENDED TORQUES

<u>GASKET</u>	<u>MAXIMUM TEMPERATURE</u>	<u>MAXIMUM OVEN TIME</u>	<u>TORQUE* 3/4"</u>	<u>TORQUE* 2"</u>
BLACK BUNA	450 F	15 MIN.	10-12 FT. LBS.	15-20 FT. LBS.
WHITE BUNA	250 F	15 MIN.	10-12 FT. LBS.	15-20 FT. LBS.
BUTYL	400 F	15 MIN.	10-12 FT. LBS.	15-20 FT. LBS.
WHITE NEO	250 F	15 MIN.	10-12 FT. LBS.	15-20 FT. LBS.
POLYETHYLENE	200 F	15 MIN.	15-20 FT. LBS.	25-30 FT. LBS.
IRRADIATED POLY	350 F	15 MIN.	15-20 FT. LBS.	25-30 FT. LBS.
VITON	450 F	15 MIN.	10-12 FT. LBS.	15-20 FT. LBS.
HYPALON	200 F	15 MIN.	10-12 FT. LBS.	15-20 FT. LBS.
TEFLON	225 F	15 MIN.	15-20 FT. LBS.	25-30 FT. LBS.
SILICONE	500 F	15 MIN.	10-12 FT. LBS.	15-20 FT. LBS.
E.P.D.M. (ETHYLENE PROPYLENE DIENE MONOMER)	400 F	15 MIN.	10-12 FT. LBS.	15-20 FT. LBS.

* RECOMMENDED TORQUES WHEN USED IN TRI-SURE STEEL FLANGES.

PROPER CLOSING OF A STEEL DRUM

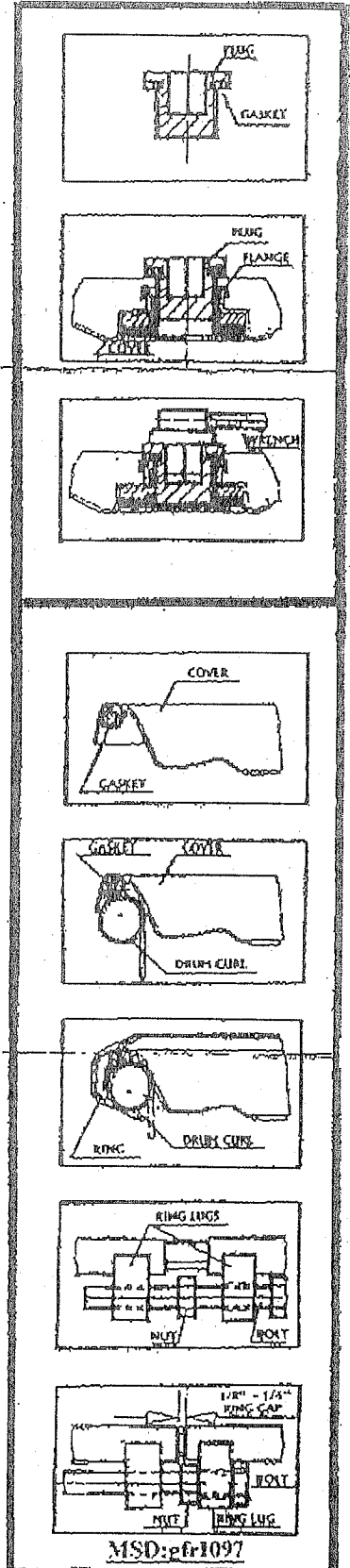
HOW TO CLOSE A TIGHT HEAD DRUM

CHECK PLUGS MAKING CERTAIN GASKET IS PROPERLY SEATED.

CAREFULLY SCREW IN PLUG TO INSURE NO CROSS THREADING.

USING PROPER WRENCH, TIGHTEN PLUGS TO RECOMMENDED TORQUE.

INSTALL CAP SEALS IF REQUIRED.



HOW TO CLOSE AN OPEN HEAD DRUM

INSPECT COVER GASKET, THE GASKET SHOULD BE PROPERLY AND COMPLETELY IN GROOVE OF THE COVER.

CAREFULLY PLACE COVER WITH GASKET ONTO DRUM CURL.

INSTALL THE DRUM RING BY ENGAGING THE COVER AND DRUM CURL IN RING CHANNEL ALL AROUND TOP.

SCREW IN BOLT WITH NUT THROUGH RING LUGS.

USING PNEUMATIC IMPACT WRENCH OR EQUIVALENT, TIGHTEN BOLT WHILE TAPPING THE PERIMETER OF RING IN ORDER TO ASSIST THE CLOSING PROCESS.

CHECK TORQUE OF BOLT TO BE WITHIN 60 TO 65 FT/LBS.

USING RING GAP AS A GUIDE 1/8 TO 1/4.

SECURELY TIGHTEN THE JAM NUT TO THE HEAD SIDE OF THE BOLT.