

MECHANICAL PACKINGS INSTALLATION GUIDE



Step No.1

Preparations

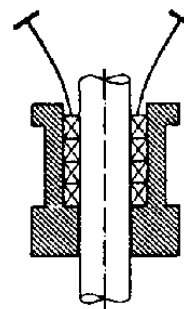
Remove all old packing ,using care not to damage stem or bore.

If the stuffing box has a lantern ring not in use(no leak off),remove it and all packing below it.The lantern ring will not be re-installed.

The stuffing box must be clean.Packing material fragments can prevent new packing rings from fully seating against stuffing box wall

Also,thoroughly clean valve stem,packing gland,gland followers, studs, nuts.

Inspect stem,gland and bore for worn, scored,grooved or galled conditions that no longer meet manufacturer's specifications.It may be necessary to rework or replace these valve components.



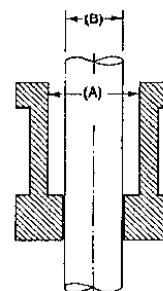
Step No.2

Determining Ring Size

Follow this procedure to select the correct packing cross-section:

- a) Measure bore (A).
- b) Measure stem (B).
- c) Subtract stem size form bore size.(A-B)
- d) Divide that difference by 2 to get correct packing ring size.

$$(A-B)/2=CROSS-SECTION$$

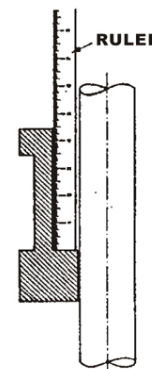


Step No.3

Determining Number of Rings

Follow this procedure to determine the correct number of rings to be used.

- a) Measure depth of box.
- b) Divide the cross-section size (form Step No.2) into depth measurement.This is the number of rings needs.(Depth divided by ring size equals rings required.)



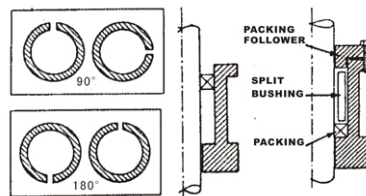
Step No.4

Installing Packing Rings

Rings should be installed one at a time making sure when using more than 2 rings, stagger joints 90° apart. When using only 2 rings, stagger joints 180° apart. A split bushing should be used to firmly tamp each ring into the stuffing box.

Important: Do not use pointed or sharp tools-screwdriver, chisel, pen point, etc.

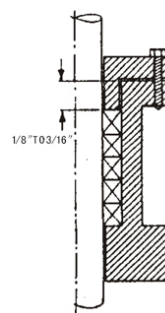
If a lantern ring is used, and the valve has external leak off piping, make certain lantern ring is aligned with leak off port(s).



Step No.5

Positioning Gland Follower

A space of 1/8" to 3/16" should remain for gland follower when stuffing box is filled. This assures optimal axial loading on packing.



Installation for Pump only

• If a lantern ring is provided, make sure the lantern ring is installed under the pipe tap hole.

• **AFTER THE LAST RING IS INSTALLED**, bring the follower down on the packing and finger-tighten the gland nuts. Do not jam the packing by excessive gland loading. Start pump, and tighten the bolts until leakage is decreased to tolerable minimum. Make sure gland bolts are tightened evenly. **STOPPING LEAKAGE ENTIRELY AT THIS POINT WILL CAUSE THE PACKING TO BURN UP.**

• **ALLOW PACKING TO LEAK FREELY UPON START-UP AFTER REPACK.** Gradually reducing leakage during the first hour of operation will result in a better seal over a longer period of time. Tighten the gland nuts one flat at a time until the desired leakage is obtained, and the pump is running cool.

