
Title: i-RSVP Gland Packing Replacement Procedure
Reason for use: Information
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Proc. No.	PAGE NO	ISSUE NO	ORIGINAL ISSUE DATE	CURRENT ISSUE DATE
WSMS010	1 of 2	2	21/09/12	24/12/14

- The RSVP Maintenance Work is to be conducted with site approval and in accordance with **all** site Health and Safety rules.
- All Dutch Engineering Services Ltd (DES Ltd) personnel to have carried out the ECITB Client/Contractor National Safety Group Safety Passport scheme.
- Full PPE will be worn in accordance with site guidelines.

RSVP Gland Packing Method of Work:

1. On arrival at site, DES Ltd personnel to report to site engineer responsible for area of plant that DES Ltd wish to work. This is to insure that site engineer knows that DES Ltd personnel are on site and that DES Ltd personnel know that plant area is safe for work to be conducted as well as any other site considerations that need to be taken into account (e.g. site alarm tests, Asbestos, etc...).
2. DES Ltd personnel to get final site permission for work to be conducted where the Mogas Ball Valves are situated.
3. Before the work can be carried out, DES Ltd will require a permit to work to insure safety from the system. If DES Ltd personnel are not carrying out any work, but are on site in an advisory capacity, the PTW must be shown and explained before entering work area.
4. DES Ltd personnel will conduct an onsite LOCAL Risk Assessment before any work commences by DES Ltd personnel. If DES Ltd personnel are not carrying out any work, but are on site in an advisory capacity, the LOCAL Risk Assessment must be shown and explained before entering work area.
5. Locate packing gland nuts and turn counter clockwise to remove.
6. Locate and slide upwards the gland Flange, live loading and gland thruster.
7. Gland studs to be removed to allow clear access to the packing rings, double nut if required.
8. Using a small pick or suitable removal device, remove all the packing rings **except** the solid metal anti-extrusion ring at the bottom of the packing box. If possible, use an air hose to clean out the debris from the stuffing box before installation to insure it does not affect future sealing.
9. The quantity of valve packing rings required per model and pressure class follows:

Valve Model	1500#	3100#	4500#
RSVP-UC	4	5	5
RSVP-UF	5	5	5
RSVP-UL	5	5	
RSVP-UM	5		

Proc. No.	PAGE NO	ISSUE NO	ORIGINAL ISSUE DATE	CURRENT ISSUE DATE
WSMS010	2 of 2	2	21/09/12	24/12/14

10. Carefully bend each fragile ring, spiraling it around the stem, and then insert and evenly press into the packing box making sure it is firmly seated (tamped) by using the gland thruster as a tool to tamp down. Install the required remaining rings in the same manner but **insure** that the joints are staggered at a 90 degree angle clockwise to the previous packing joint (as recommended by Chesterton).
11. Slide the gland thruster over the packing box followed by the load springs.
12. Re-install the gland studs, double nut if necessary.
13. Re-install the gland flange over the packing bolting.
14. The whole assembly needs to be tightened by alternating diagonally on the gland nuts. Make sure the gland flange is brought down evenly so that it does not bind or drag on the stem.
15. The following table shows the proper torque required for the valves:

RSVP GLAND BOLT TORQUE VALUES (Nm)			
Valve Model	1500#	3100#	4500#
RSVP-UC	5.4	14.9	21.7
RSVP-UF	9.5	20.3	33.9
RSVP-UL	10.9	23.1	-
RSVP-UM	12.2	-	-

16. Cycle the valve at least 6 times to ensure proper re-packing, **VERIFY** torque as shown in the table above and re-torque if required.