

TECHNICAL INFORMATION

AVAILABILITY

Packings can be supplied on KGcreels, as precut metre lengths or as prepressed / preformed rings (single or in ready to inst all sealing sets). Packings are available in standard sizes 3 to 25 mm. Other shapes or sizes on request.

PACKING INSTALLATION

The ideal way to pack a stuffing box is with dieformed rings. Also precut lengths or self cut lengths can be used. If cutting lengths from a creel a packing cutter can be used. By wrapping the cut packing around the shaft or spindle it can be checked if the length is correct. Alternatively the packing can be directly wound around the shaft from the creel and cut accordingly. A diagonal cut helps to produce a better sealing effect than a straight cut. When cutting packings which tend to fray adhesive tape should be placed on appropriate side of the area to be cut, prior to cutting, in order to prevent fraying. Install each ring into the stuffing box, ensuring the ends are placed together and inserted first followed by the rest of the ring. The joints of the individual packing rings should be staggered by 90°. The packing set should initially be tightly compressed, so that it will mould and seat itself into the stuffing box. The gland nut should then be loosened and retightened to an appropriate setting.

INSTALLING DIE-FORMED RINGS

Dieformed rings with exact dimensions should be handled with care in order to retain the advantages that these rings offer. If the rings have to be opened to fit onto the shaft then the ring ends should only be opened axially so far that the ring will fit over the shaft. Bending the ring radially deforms the ring and makes installation more difficult.

PRE-COMPRESSION OF PACKINGS

The correct compression of packing set is dependent of the type of packing and application. If a torque wrench or a similar tool is available the necessary gland pressure can be adjusted precisely.

PRE-COMPRESSION FOR PUMPS

Pump packings should be compressed with a gland pressure of 1.05 to

2 times the media pressure. A minimum compression of 0.5 to 1.5 MPa is necessary.

PRE-COMPRESSION FOR VALVES

Valve packings should be compressed with a gland pressure of 2 to 5 times the media pressure. A minimum compression of 5 MPa is necessary.

"RUNNING-IN" OF NEW PACKINGS

Pump packings are particularly susceptible to damage through high temperature during the run-in period. If the packing is running dry it will get too hot and the pump must be stopped. After a short cooling down period a regular leakage drip should appear and the pump can be restarted. It may be necessary to repeat this procedure several times until regular leakage appears.

RECOMMENDED SURFACE

The recommended surface roughness for the stem or spindle should be $R_z < 1.6 \mu\text{m}$. For increased sealing effect and longer service life the surface roughness can be reduced to $R_z < 0.6 \mu\text{m}$. The permissible eccentricity on centrifugal pumps should be less than 0.001 of the shaft diameter. In the interest of reduced leakage the eccentricity must not exceed 0.01 of the packing width. The permissible extrusion gaps between shaft and gland or housing are 0.02 of the packing section. If the gaps are larger or the packing in question is inclined to extrude, suitable antiextrusion rings should be fitted.