

STEERING GEAR SERVICE NEWS

DATE : 2021/8/3

No.: E8-21-002

SUBJECT : Oil leakage from V -packing

V-packings are used in the steering gear to prevent the hydraulic oil in the cylinder from leaking out when the ram is operated. The V-packing forms a thin film of oil on the surface of the ram, so there may be a small amount of oil leakage. This oil leakage is necessary for the function of the V packing and is not an abnormality, so wipe off any oil that drips. If there is an oil pan at the bottom of the packing gland, discard the hydraulic oil that has accumulated in the oil pan as waste oil.

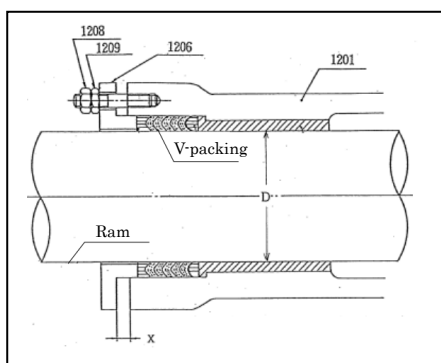
If continuous leakage from the V-packing is observed, run the ram back and forth one time without load, and if the amount of hydraulic oil dripping is two or three drops or more, retighten the packing gland by the following method.

<Adjustment method for retightening>

- 1) Loosen the hexagonal locking nuts (Symbol 1208).
- 2) Evenly tighten the hexagon nuts (Symbol 1209) by about 1/4 turn.

Make sure that the ram is not unevenly tightened. Contact between the ram and the packing gland may cause damage to the ram.

- 3) Confirm the leakage state from the V-packing while operating the steering gear.
- 4) Repeat Steps 2) and 3) so that thin film of hydraulic oil is formed on the ram surface.
- 5) After additional tightening adjustment, tighten the hexagonal locking nuts (Symbol 1208) to check again the V-packing.



The packing gland (symbol 1206) and cylinder (symbol 1201) can be additionally adjusted until the clearance reaches 0mm.

Over-tightening the packing gland (symbol 1206) or hexagonal nut (symbol 1209) may cause a chattering sound or vibration. In addition, rust may occur on the ram surface due to the lack of oil film formation.

V-packings deteriorate over time, so we recommend replacing them every 5 to 7 years.

If the ram is operated with foreign matter on the surface, it may damage the ram or V-packing and cause oil leakage. Check the surface of the ram for foreign matter or damage before leaving port and every month.

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