

INSTALLATION AND REMOVAL INSTRUCTIONS FOR MAV RIGID COUPLING SERIES 1204

MAV 1204 Rigid Couplings are supplied ready for installation. The torque capacity of this device is based on a coefficient of friction of $\mu=0.12$ for lightly oiled shaft contact areas. Recommended shafts tolerance: h7 - h9. The clearances between the two shafts and inner ring [1] should be similar. Recommended shafts surface roughness: $Ra \leq 3.2 \mu\text{m}$.

INSTALLATION

Important: Never tighten locking screws before shaft installation, as MAV 1204 Coupling inner ring can be permanently deformed even at relatively low tightening torques.

1. Carefully clean and lightly lubricate with ordinary machine oil shafts and inner ring bore. **It is important NOT to use Molybdenum Disulfide (e.g., Molykote, Never-Seeze or similar lubricants) for shafts lubrication, since it will greatly reduce the torque capacity of the connection.**
2. Once coupling is centered over shaft ends, hand-tighten three (3) or four (4) equally spaced locking screws and make sure that outer collars [2] & [3] are parallel. Hand-tighten remaining locking screws. NOTE: shaft engagement equal for both ends with gap not exceeding 5% of shaft diameter.
3. Use torque wrench and set it approximately 5% higher than specified locking screw tightening torque (Ma). Tighten locking screws in either a clockwise or counterclockwise sequence, using approx. $\frac{1}{4}$ (i.e., 90°) turns (even if initially some locking screws require a very low tightening torque to achieve $\frac{1}{4}$ turns) for several passes until $\frac{1}{4}$ turns can no longer be achieved.
4. Continue to apply overtorque for 1-2 more passes. This is required to compensate for a system-related relaxation of locking screws since tightening of a given screw will always relax adjacent screws. Without overtorquing an infinite number of passes would be needed to reach specified tightening torque.
5. Reset torque wrench to specified torque (Ma) and check all locking screws. No screw should turn at this point, otherwise repeat step 4 for 1 or 2 more passes. It is not necessary to re-check tightening torque after equipment has been in operation.

REMOVAL

Prior to initiating the following removal procedure, check to ensure that no torque or thrust loads are acting on the Rigid Coupling, shafts or any mounted components.

1. Loosen all locking screws in several stages by using approx. $\frac{1}{2}$ turns, following either a clockwise or counterclockwise sequence, until Rigid Coupling can be moved on shafts. The Rigid Coupling will return to its original clearance fit.

WARNING

DO NOT completely remove locking screws before outer collars are disengaged. A sudden release of the outer collars involves high separating forces and could result in permanent injury or death. Be certain that outer collars are disengaged before completely removing locking screws.

REINSTALLATION OF RIGID COUPLING

In relatively clean operating conditions, MAV 1204 Rigid Couplings may be reused without prior cleaning. In all other cases, Rigid Couplings require thorough cleaning and re-lubrication as follows:

- Dow Corning® *Molykote BR 2 Plus* (or equivalent) on locking screw threads and under screw heads;
- Dow Corning® *Molykote G-Rapid Plus* (or equivalent) on tapers.

Please note for sizes from inner diameter 6mm up to 14mm the tapers have to be lightly lubricated with machine oil only.

