Mechanical Power Clamping Nut I MCA/MDA/MDR/MCG

- maximum clamping forces through force amplification
- simple & manual operation – low actuation torques
- high operational safety through self-locking mechanism
- corrosion - resistant, robust, up to 400°C

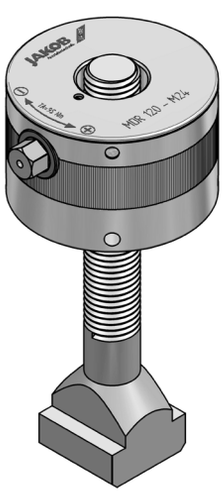
The salient design feature of the MCA, MDA and MDR series is an integral transmission gear for the amplification of the manual actuation torque. With this, the user has a sturdy and flexible clamping element which allows for high clamping forces with simple manual operation and maximum operational safety.
The MCA and MCG series are designed with blind hole thread or threaded bolt and a centrally arranged operating hexagon, the MDA and MDR series with a through hole thread and sidewise respectively radial arranged hexagon design. The power clamping nut can be used for various clamping tasks throughout the machine tool industry, particularly for clamping in presses and punches.

Available options:

- Type MCA-DB with integrated torque limiter
  - operation possible without a torque wrench
- high temperature version up to T = 400°C
- corrosion-resistant version for demanding ambient conditions
- with additional latch mechanism for automatic switch over to power clamping mode for fast feeding or in a lowered layout (standard in types MCA 60, MCA-T, MCA-S, MDA, MDR)
- lubrication with food grease for the food industry, laboratory area, etc.
- torque wrench or operation tools upon request

Function and handling:

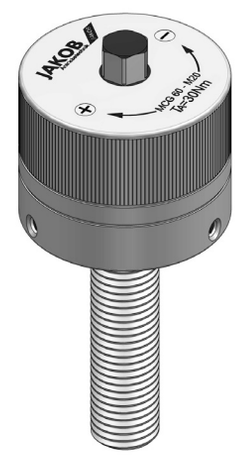
After manually tightening the clamping nut up to the surface, the drive pinion is activated through a right-hand turn of the actuation hexagon SW 1 or SW 2. The gearbox ratio tightens the torque with a high multiplier and the rotation of the threaded nut produces the clamping stroke of the threaded tension bolt. The clamping force is built up depending on the actuation torque.
Self-locking is guaranteed in every clamping position. To reliably ensure the necessary clamping force on one hand and to protect the clamping mechanism from damage caused by excessive actuation torques on the other, the use of a torque wrench or series MCA-DB is recommended.
In certain circumstances, clamping with the help of normal box spanners, angle wrenches and ratchet spanners may be acceptable while the use of impact wrenches is not. The operating direction “clamping / releasing” as well as the respective, specific operating torque is indicated by means of an engraving on the top of the clamping nut. Make sure that the threaded-down stud bolts are fixed; i.e. that they cannot be turned.
The power clamping nuts are maintenance-free under normal operating conditions. The tempered steel housing and threaded nut are corrosion-resis-



MDR

MDA

MCA



MCG

MCA-DB