

# Mechanical power clamping nut I Series MCA/MDA

- /// maximum clamping forces through force magnification
- /// simple, manual operation – low tightening torques
- /// high operation safety through self locking
- /// corrosion - resisting, robust, up to 400°C

The salient design feature of the series MCA and MDA is an integral transmission gear for the multiplication of the manual tightening torque. With this, the user has a sturdy and flexible clamping element, which enables highest clamping forces with simple manual operating and maximum operating safety.

The Series MCA is designed with bottomed thread and centered hexagon, the Series MDA is a trough hole thread and sidewise staggered hexagon design.

The power clamping nut can be used for various clamping tasks throughout the machine tool industry, particularly for the clamping in presses and punches.

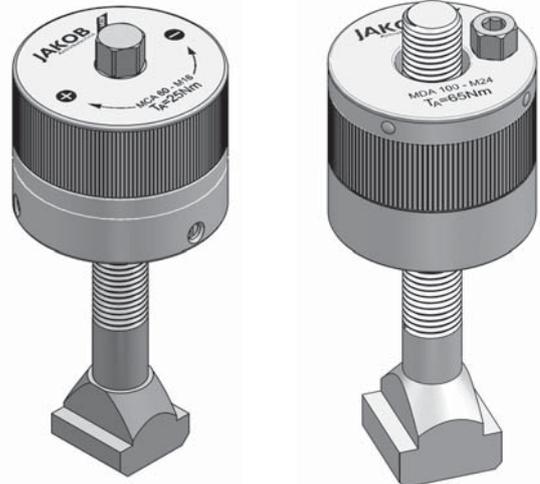
## Function and handling:

After manually feeding the clamping nut up to the facing, 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 multiple and the rotation of the threaded nut produces the clamping stroke of the threaded tension bolt. The clamp force is built up depending on the actuation torque.

Self-locking is guaranteed in every clamping position. To reliably ensure the necessary clamp force on the one hand and to protect the clamping mechanism from damage caused by excessive tightening torques on the other, the use of a torque wrench is recommended.

In certain circumstances, clamping with the help of normal box spanners, angle wrenches and ratchet spanners could be acceptable. Make sure that the threaded-down stud bolts are fixated; 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 protected through surface-nitriding.



## Available options:

- /// High temperature version up to  $T = 400^{\circ}\text{C}$  (e.g. forging presses)
- /// Corrosion resistant version for critical ambient conditions
- /// With additional latch mechanism for automatic switchover to the power clamping mode for fast feeding or in a lowered layout (standard in types MCA 60, MCA-T, MCA-S)
- /// Lubrication with food grease for the food industry, laboratory area, etc.
- /// With additional grease nipple for re-lubrication
- /// Second actuating hexagon (only type MDA)
- /// Delivery including torque wrench or operating tools (see Accessories, Page 27)

## Application example:

MCA-power clamping nut for clamping of upper and lower die in a hydraulic press.

