



Application

ESP UF electro-mechanical actuators are intended for the power actuated clamping and release of steep taper tooling on milling and boring machines on which the tool change is performed manually. They are firmly connected by way of appropriate connection pieces to the workspindle which has a maximum rotational speed of 4000 rpm. The electrical control can be performed both manually and automatically.

Design Features

The ESP UF electro-mechanical actuator comprises the proven assembly groups: three-phase brake motor, collector ring power supply, planetary gearing, detent clutch and output drive gear with splined bore hub profile which transfers the clamping and release torque onto the draw bar to be driven, and allows the draw bars simultaneous stroke movement during screwing in or release. The design of the splined bore hub profile depends on the size of the tool shank, or on the torques to be transferred. Appropriate ASM stop nuts, as well as further accessories are available as connection pieces for the draw bar. Electrical energy is only required for clamping and release as the tool shanks are clamped to the spindle in a self-locking manner by the draw-in thread during spindle rotation. The clamping torque can be altered within a wide range by turning the EST setting ring.

Clamping actuators with higher torques at lower speeds are available on request.

Other voltages and frequencies are available on request.

Any installation position is possible. Installation examples available on request.