engraflexx ELC

A core element of the engraflexx ELC is the axially movable tool spindle with integrated chuck for tool clamping. This consists of an electric, air-cooled high frequency motor with infinitely variable speed adjustment. Thanks to the tried and tested electric drive, efficiency and process-safety are among the special characteristics of the spindle.

The spindle (start/stop command, speed specification etc.) is actuated via the frequency converter that is connected to the robot and the higher-order machine controller.

This tool system is used for deburring work or part reworking on robots or special systems. Anywhere where contours are being machined on workpieces whose dimensional or position differences have to be compensated for automatically and with maximum process-safety.

Field of application

Deburring and reworking of many different types of workpiece with different or undefined edges.

General information

- Universal use in robots and special systems
- Driven by an integrated electrical high-frequency spindle
- Compact, stable construction

Tool specifications

- Integrated, axial deflection function up to max 10 mm
- Chuck for holding the processing tools
  - span diameter 1-8 mm
- Axial spindle deflection with adjustable deflection force
  - mechanically, preloaded via spring package
  - stepless adjustment via adjusting knob
  - setting readable on engraved scale
- Driven by an electrical high-frequency spindle motor
  - power consumption 700 W
  - speed is infinitely adjustable via frequency converter
    (speed 1’000-18’000 rpm)
  - different monitoring functions such as speed stability etc.
- Total weight of the spindle unit: 6.5 kg
- Wide range of application options
  - reworking of cast parts
  - workpiece deburring with bevel cutting bit
  - process-safe deburring with brushes
- Various options
  - pneumatically adjustable, lateral pre-tension pressure
  - deflection blocking function
  - automatic tool change unit