

EMAG VL3 (2001)

Mechanical overhaul – Overview

Complete refurbishment of the machine in 2022: The machine has been in a condition equivalent to new after the refurbishment.

MAIN SPINDLE UNIT - MOTOR:

- Replaced main spindle bearings.
- Motor stator was inspected by authorized service.

X-AXIS DRIVE:

- Installed new ball screw and bearings for the X-axis drive.
- Replaced old X-axis guides with new ones.
- Replaced pulleys and installed a new timing belt for the X-axis drive.
- Linear scale (measuring system) was refurbished by Heidenheim service.
- Installed new dosing elements for the central lubrication system.
- New hardware protections were installed.

Z-AXIS DRIVE:

- Installed new ball screw and bearings for the Z-axis drive.
- Replaced old Z-axis guides with new ones.
- Installed a new brake for the Z-axis drive.
- Linear scale (measuring system) was refurbished by Heidenheim service.
- Installed new dosing elements for the central lubrication system.
- New hardware protections were installed.

TURRET HEAD AND DRIVEN TOOLS:

- Replaced all static and dynamic seals in the turret head.
- Replaced all bearings in the turret head.

MACHINE WORKING AREA:

- Installed new safety glass on the machine.
- Replaced all wipers in the machine working area.
- Installed new seals in the machine working area.
- Installed new light in the machine working area.
- Installed new nozzles in the machine's working area.

HYDRAULICS / PNEUMATICS:

- Hydraulic pressure accumulator filled with appropriate gas.
- Replaced all hydraulic flexible hoses.
- Installed a new hydraulic filter.
- Installed a new pneumatic air group.

ELECTRICAL:

- All sensor cables were replaced.
- Installed a new monitor.

WORKPIECE TRANSPORTER A-AXIS:

- Replaced all bearings on the A-axis drive.

AIR CONDITIONING / EXHAUST SYSTEM:

- Serviced the machine's air conditioning system.
- Machine coolant was changed.
- Replaced suction filters.

MACHINE PAINT:

- All metal sheets and parts for the workpiece transporter were sandblasted before painting.
- The machine was repainted with emulsion-resistant paint RAL 7035 and RAL 5023.