# **ROBOSHOT Preventive maintenance**



Preventive maintenance of your ROBOSHOT maximises uptime and reduces your down time to a minimum. Below you will find a detailed overview of what FANUC means by preventive maintenance. Maintenance is carried out strictly in accordance with the current DIN EN ISO 9001 standard and is concluded with an inspection report.

Maintenance intervals are adapted to the customer-specific, operational requirements after consultation (approx. every 2,000 operating hours or 1x per year).

#### **MACHINE (GENERAL)**

- Safety devices, emergency stop, door switch
- Function and condition of the fans on the amplifier, motors and control cabinet
- Visual inspection of the mechanical components
- And more ...

#### **INJECTION UNIT**

- Barrel and screw wear measurement
- Lubrication
- Temperature optimisation of the heating bands
- And more ...

### **CNC CONTROL**

- Backup
- Battery
- Touch screen check & calibration

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- Fan check
- And more ...

#### **CLAMPING UNIT**

- Check toothed belt for damage and measure belt tension
- Lubrication
- And more ...





## **ROBOSHOT Preventive maintenance**

#### GENERAL

- Check toothed belt for damage and measure belt tension, adjust if necessary
- Touch screen check & calibration
- Checking and adjusting the levelling
- Nozzle center
- Input voltage
- Zero points
- Torque ejector
- Damage to covers and safety doors
- Safety devices, emergency stop, door switch,
- Tightness and flow of the cooling circuit for the feed zone and actual temperature
- Clean foreign particle filter of the cooling circuit
- Wear of the cooling water hoses
- Visual inspection of the mechanical components of the injection unit, ejector and clamping unit (ball screws, guides, toggle levers, bolts, screw connections, gear wheels, tie bars)
- Mechanical check of ball screw conditions
- Moving all axes (acoustic testing of mechanical components)
- Axis end positions, travels, minimum/ maximum mould installation height
- Function and condition of the fans on the amplifier, motors and control cabinet
- General condition of the control cabinet components CNC, amplifier, contactors, circuit boards, wiring (cables), connectors
- Carry out central lubrication and check damage to lubrication points
- Tightness, hold and colour change at connections of the central lubrication system
- Lubricate lubrication nipples for clamping and injection unit manually and check wear on components

- Remove any excess grease
- Barrel and screw wear measurement
- Temperature optimisation of the heating bands
- Replace pulse decoder and CNC battery
- Check battery voltage
- Checking & cleaning filter mats
- Replacing filter mats
- Dry-run, auto emptying syringes, mould height adjustment
- Option of Servo Guide to improve Servo Motor lifetime
- Note software version
- Software update if required
- Data backup/Backup

#### PARTS INCLUDED

- Pulsecoder batteries
- Filter mats
- Battery CNC
- Grease

#### REPORT

- (Annual) status report/PM report in line with latest DIN EN ISO 9001 norm
- Final discussion/Consultation