

# C30 CNC Lathe with Automatic Loading and Unloading

Automatic handling with an integrated gantry robot



## MACHINE OVERVIEW

The C30 is a CNC lathe configured for automatic workpiece loading and unloading. The supplied specification lists an in-machine, two-axis gantry robot and integrated infeed and outfeed conveyors.

### ROBOT UNLOADING CYCLE

**8 s**

As stated in the source document. This refers to robot unloading, not the complete machining cycle.

Machine exterior

## MACHINE INTERIOR



Spindle, workholding area and in-machine automation

# Technical Specifications

C30 CNC lathe - specifications and configuration stated in the supplied document

| Group                  | Parameter                                        | Specification                                            |
|------------------------|--------------------------------------------------|----------------------------------------------------------|
| Machining capacity     | Maximum diameter for automatic loading/unloading | 85 mm                                                    |
| Machining capacity     | Maximum length for automatic loading/unloading   | 60 mm                                                    |
| Machining capacity     | Maximum bar-stock diameter                       | 35 mm                                                    |
| Machining capacity     | Maximum workpiece weight                         | 0.5 kg                                                   |
| CNC system             | Controller                                       | Mitsubishi E80 / M80 (optional)                          |
| Spindle                | Spindle nose                                     | A2-4                                                     |
| Spindle                | Spindle power                                    | 5.5 kW                                                   |
| Spindle                | Maximum spindle speed                            | 6,000 rpm                                                |
| Spindle                | Spindle center height above X-axis slide center  | 60 mm                                                    |
| Axis travel            | X-axis travel                                    | 320 mm                                                   |
| Axis travel            | Z-axis travel                                    | 280 mm                                                   |
| Bed and guarding       | Bed                                              | Horizontal gang-tool layout;<br>one-piece cast bed       |
| Bed and guarding       | Guarding                                         | Internal splash protection with<br>sheet-metal enclosure |
| Automation             | Gantry robot                                     | Two-axis gantry robot installed<br>inside the machine    |
| Automation             | Conveyors                                        | Integrated infeed and outfeed<br>conveyors               |
| Automation             | In-process measurement                           | Optional                                                 |
| Automation             | Automatic workpiece flipping                     | Optional                                                 |
| Coolant and monitoring | Low-pressure coolant                             | Multi-stage centrifugal pump                             |
| Coolant and monitoring | High-pressure coolant                            | Four outlets with bag-filter filtration                  |
| Coolant and monitoring | Coolant level monitoring                         | Low-level sensor                                         |
| Environment            | Oil-mist collector                               | Optional                                                 |
| Site requirements      | Electrical supply                                | 3-phase, AC 380 V, 50 Hz, 8 kVA                          |
| Site requirements      | Compressed air                                   | 0.5-0.7 MPa                                              |
| Site requirements      | Total machine weight (standard configuration)    | 2,200 kg                                                 |

Optional items are identified as optional in the source. Confirm configuration, workpiece limits and cycle-time definition with the supplier before finalizing a production layout.