

FANUC

T12 Simple operation for conventional entry-level lathes

# CNC Solution for Conventional Lathes

## Overview of product features:

- Manual operation with programmable processing limits
- Automatic cycles
- Machine tool geometry compensation for up to 16 tools
- · Constant surface speed
- Program execution in accordance with DIN/ISO
- Imperial or metric display
- Several language versions

TURN MATE i is the user-friendly and interactive programming software from GE Fanuc for conventional entry-level lathes. By replacing mechanical operations with CNC technology, the productivity as well as the flexibility of the lathe is significantly increased. This solution is easy to operate using touchscreen and/or keyboard entry. Besides manual and semi-automatic operation, the user also has various automatic cycles at his disposal.



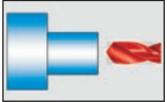
#### Reliable CNC control systems and drives

TURN MATE i operator software runs on the ultra-compact 0i-TC and 0i Mate-TC Series CNC control systems. The control systems can be installed with a 7.2 inch monochrome LCD or a 8.4 inch colour LCD. The entire control system is only 70 mm deep and is therefore ideal for the automation of compact machine.

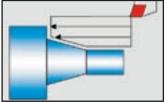
In addition, the TURN MATE i solution includes GE Fanuc servo and spindle motors from the Beta i Series. Because of its high performance and reliability, the broad product range of the Beta i Series of motors has impressed customers throughout the world.

The TURN MATE *i* software solution with its macro programs performs automatic cutting cycles. Instead of requiring the usual ISO programming, this allows quick and easy machine set-up using interactive screens. However, the machine operator can also switch to use the standard CNC interface.

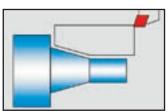
#### Types of turning cycles



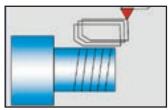
Drilling & rigid tapping



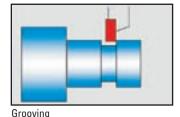
Rough cutting (including free figure)



Finishing (including free figure)



Threading



#### Automatic cycles (cycles can be linked)

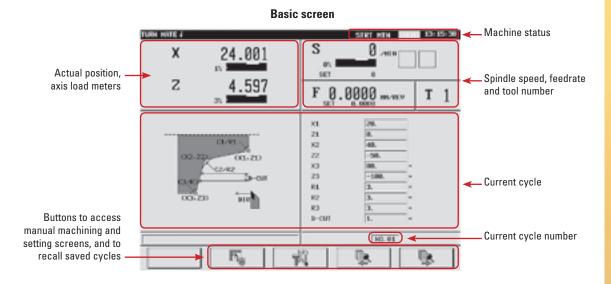
- Exterior rough cutting
- Interior rough cutting (including finishing)
- Reverse side machining
- Conical turning
- Tapping
- Thread cutting
- Cutting of taper threads

- Recessing
- Spherical turning
- Contour turning from individual points
  - Also for gradually increasing or decreasing contours
  - Contour is displayed immediately after data input

## Focus on Easy Operation

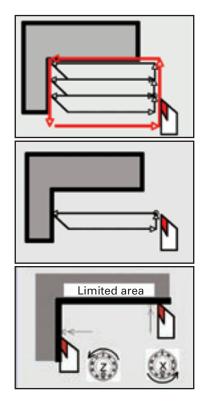
Operating TURN MATE i is so easy that any experienced lathe operator without CNC training can handle it immediately: no G code programming or operating mode switching required. The operation is based on that of a conventional mechanical lathe, whereby substantial numbers of work processes can be automated.

TURN MATE *i* also supports fully manual operation for which two electronic handwheels are available. The operator defines the processing limits in the X or Z direction with simple touch-screen inputs. During data input, the software assists the operator with simple, understandable pictograms and questions. The masks are organised so that only the data that is really necessary must be entered.



#### Support of different machining methods

- 1. Machining cycle with automatic in-feeding
  - Complete cutting with roughing or finishing tool path within a defined range
  - Operator can specify procedures for either roughing or finishing or both
- 2. Machining cycle with manual in-feeding
  - One cutting step to a defined end position
  - Operator can control the cutting depth manually
- 3. Manual machining within a limited range
  - Limited machining by hand wheels or JOG switch within a defined range



#### The Complete CNC Package – Automation from a Single Source

GE Fanuc offers everything that an automated machine tool needs – CNC control systems, amplifiers, servo and spindle motors, I/O modules, stationary and mobile operator terminals as well as the necessary cables. From the beginning, all CNC products are conceived as a system and optimised as a CNC package for your application.



#### Ten Reasons for Choosing CNC Control Systems from FANUC/GE Fanuc

- 1. Maximum machine availability because of the highest reliability
- 2. Effective support by a comprehensive service network
- 3. High productivity through the employment of the latest technologies
- 4. Fast and simple workshop programming through innovative software
- 5. A supply of spare parts is guaranteed for 20 years after termination of series production
- 6. Upward compatibility of software, i.e. even older programs run on the latest CNC control systems
- 7. Simple maintenance by a multiplicity of functions
- 8. Decades of experience in CNC and robot technology
- 9. The market leader in CNC technology
- 10. More than 1.6 million installed CNC control systems attest to the popularity of these control units.



### **GE Fanuc Automation CNC**

For details of a GE Fanuc sales agent or authorised dealer in your area, please contact:

#### Furone

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