

# Course description:

**Course name:** Operator course for CNC lathes of the TNX 65/42 series with milling spindle

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**Course no.:** 4.50

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**Participants:** Operators

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## Training goal:

The course participant will be able to:

- Operate the machine and control
  - Safely and reliably use tool handling and programming technology
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## Course content:

A turned part will be set up and manufactured from input of the program (via data carrier and manual input) including changing and optimizing.

## The following topics will be covered and practiced on the machine:

- Structure and working principle of CNC lathes
  - Operation of machine and NC control panel
  - Setup operation, explaining F0
  - MDI operation
  - Collet change / pressure adjustment MSP/CSP
  - Tool gauging, tool data entry, tool life monitoring
  - Tool life monitoring
  - Installing tools in the machine
  - Testing programs in dry run and single block mode and checking for errors
  - Using the axis display Tool Pos, distance to go, G-modal
  - Program run-in
  - Program interrupt and continue
  - Entry
  - Program optimization, tool offset, etc.
  - Explanation of all the important menus on the control panel
  - Activating subprograms
  - Setup settings, program parameters, check alarms
  - PLC switches, key switch
  - Procedure after collision, axis calibration
  - Data input/output
  - Safety devices,
  - Alarms, error diagnostics and program error correction
  - iXpanel - operation and functionality
  - Access security concept
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## Participation requirements:

- Programming basic course no. 4.0 and advanced course no. 4.5
  - **Safety shoes must be brought along and worn during the entire course.**
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## Course duration:

4.5 days - from Monday (9:00 am) to Friday (12:00 pm)

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## Course location:

### **INDEX-Werke GmbH & Co. KG Hahn & Tessky**

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