# Course description:

**INDEX TRAUB**

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| **Course name:** | **Programming and operator course for CNC lathes of the TNL18P series** |
| **Course no.:** | **2.4** |
| **Participants:** | **Programmers and operators** |

**Training goal:**
- Learning the TX8i-p-specific programming technique
- Creating complete programs with the most common machining applications.

**Course content:**
- Zero offsets of all systems on main/counter spindle
- Using the geometry processor
- Dialog functions, init, gripping, cutting off
- Synchro
- Cycle programming for roughing, drilling, threading
- Subroutine technique/macro call
- Creating a part program for a simple turned part
- Input and simulation of a part program on the PC
- Structure and working principle of CNC lathes
- Operation of machine and NC control panel
- Setup operation, explaining F0
- Collet change / pressure adjustment MSP / CSP
- Tool measurement, tool data entry, 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
- Program optimization, tool offset, etc.
- Activating subprograms
- Setup settings, program parameters, check alarms
- PLC switches, key switch
- Procedure after collision, axis calibration
- Data input/output
- Alarms, error diagnostics and program error correction,
- Changeover from sliding to fixed headstock operation and vice versa

**Participation requirements:**
- Basic knowledge of CNC technology
- PC basic knowledge and experience with Traub CNC machines are recommended
- **Safety shoes must be brought along and worn during the entire course.**

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

**Course location:**

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

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