

# Course description:

**Course name:** Servicing and maintenance course for CNC lathes of the TNL20 series with TX8i-s V8 control

---

**Course no.:** 5.9

---

**Participants:** Machine operators, service, repair and maintenance specialists

---

## Training goal:

Troubleshooting and maintenance of mechanical and electrical assemblies of CNC lathes

---

## Course content:

- Machine layout and assemblies
  - Names of spindles, axes, tool turrets and hydraulic components
  - Changeover from sliding to fixed headstock operation
  - Control axes and spindle components
  - Handling on the screen, operating modes
  - Checking and adjusting the backlash compensation of linear axes
  - Checking and adjusting geometry and reference points
  - Turret indexing and live tools
  - Diagnosing inputs and outputs of the PLC control
  - Diagnosing Profibus
  - Performing parameter backup
  - Hydraulic diagram, pneumatic diagram, central lubrication, fluid diagram
  - Wiring diagram and spare parts catalog
  - Troubleshooting
  - Maintenance instructions
- 

## Participation requirements:

- General knowledge of machine tools
  - Basic knowledge: Mechanics, electrics and electronics
  - **Safety shoes must be brought along and worn during the entire course.**
- 

## Course duration:

4 days - from Monday (9:00 am) to Thursday (4:00 pm)

---

## Course location:

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

Reichenbach Plant  
Hauffstrasse 4  
73262 Reichenbach, Germany

Email: [schulung@index-werke.de](mailto:schulung@index-werke.de)  
Phone +49-7153-502-525