We reserve the right to make technical changes | 09/22 5.0915.17.90.00.42

THE ESSENTIALS OF CYCLE TURNING

Photograph shows options

BLUEcoMPETENCE Alliance Member
Partner der Nachhaltigkeitsinitiative des Maschinen- und Anlagenbaus

www.weiler.de

User videos are available on the WEILER Channel at

YouTube

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C4 TOUCHSCREEN

WEILER

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TOOL ROOM LATHES/SEMI-CYCLE CONTROLLED LATHES CYCLE-CONTROLLED LATHES CNC LATHES RADIAL DRILLING MACHINES SERVICE

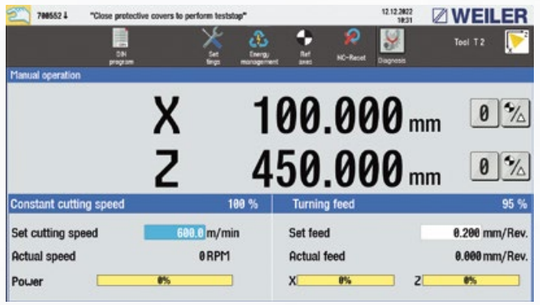
The essentials to perfection!

The control system C4 from WEILER is ideally suitable for getting started in the world of CNC control systems, and it also provides optimum assistance for inputting cycles quickly, easily and effectively. No prior programming experience is required; any trained worker or machinist can intuitively understand how the system works.

PERFORMANCE CHARACTERISTICS

Intuitive and straightforward operation of controls

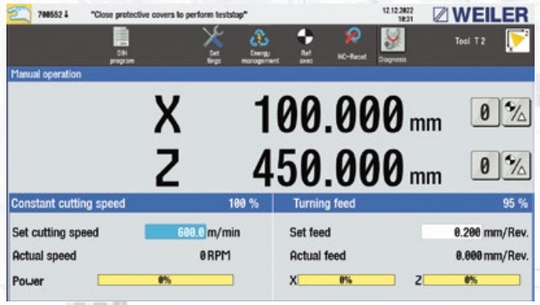
- Accommodation of latest user features such as swiping or tapping a 15" touch screen
- All essential input fields can be directly selected
- Few control buttons
- Control system and drive units from a single source (Siemens Sinumerik ONE)
- The teach-in function facilitates working quickly and efficiently
- Tool measurement by means of workpiece measurement and tool measurement or direct input
- Manual turning functions just like on conventional lathes
- Predefined cycles, DIN/ISO programming up to CAM data transfer
- Data transfer via USB port or network connection



EASY TO USE – WEILER C4 TOUCH SCREEN

- **Accommodation of latest user features**
  Operation similar to that of a smartphone or tablet PC: Making a swipe movement suffices to change the control screens
- **All essential input fields can be directly accessed**
- **Few buttons on the control panel**

MANUAL TURNING



Accommodation of latest user features

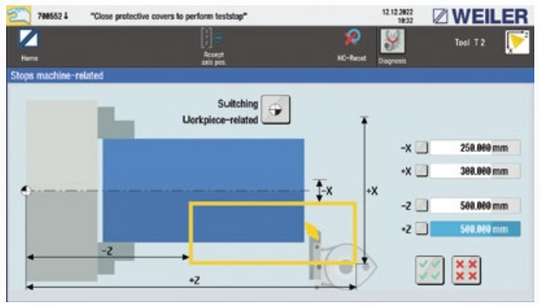
- Operation similar to that of a smartphone or tablet PC: Making a swipe movement suffices to change the control screens
- All essential input fields can be directly accessed
- Few control buttons on the control panel

Speed values and feed values

- Speed values and feed values can be directly entered
- Speed limitation
- Oriented spindle retention (teach-in)
- Transfer of technological data from the tool database

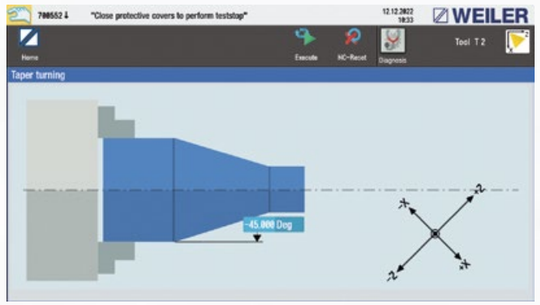
Zero-point offset

- Teach-in or input the workpiece zero point
- Computation of tools



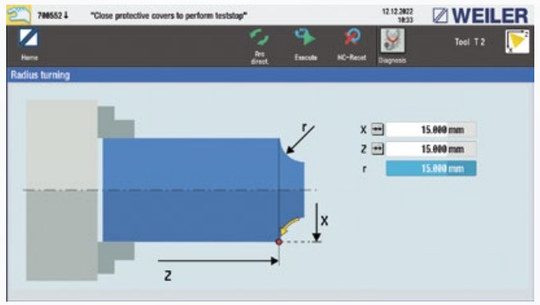
Turning to stop lengths

- Electronic stops can be set longitudinally and on the face in both axis directions
- Teach-in or input stop points
- Active with automatic feed and when working with the handwheels
- Stops can also be used as a safety feature



Taper turning

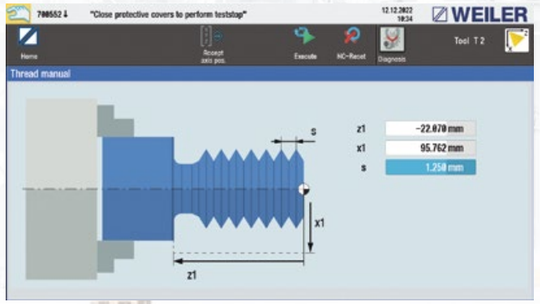
- Angles for all four directions can be directly entered
- Can be started using a 4-way cross-switching lever
- Any taper can be turned throughout the working area



Radius turning

- Radius for convex and concave radii can be directly entered
- Any radius and end point coordinates can be entered

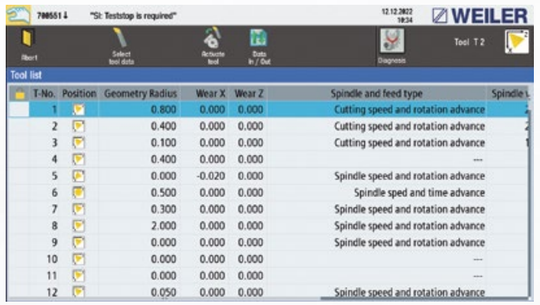
MANUAL TURNING



Manual thread turning

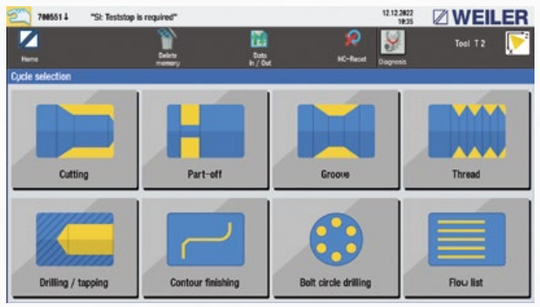
- Tapping with automatic reversal of direction at the end of the thread
- Thread turning with optimum cutting results
- No cycle required

TOOL MANAGEMENT



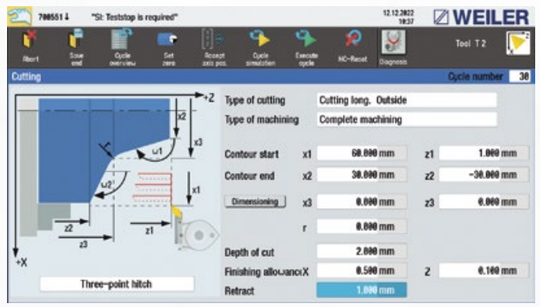
- 99 tool memory slots
- Tool lengths for the X-axis and Z-axis can be directly entered or input by tapping
- Cutter radius compensation
- Tool wear correction
- Graphic view of cutting position
- Technological data for speed, cutting speed and feed values

SIMPLE CYCLES WITH PREDEFINED INPUT SCREENS



Selection of cycle

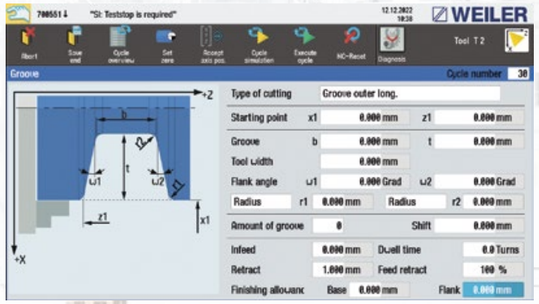
- Straightforward programming with graphic assistance
- Intuitive input screens



Machining cycles

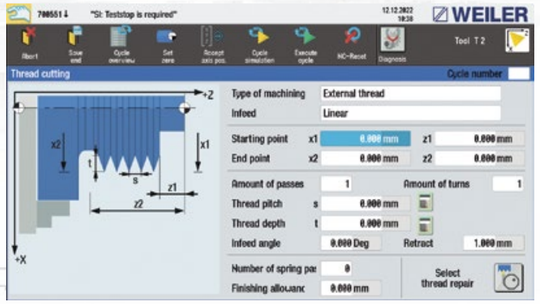
- Longitudinal machining and face machining
- For internal and external turning
- Optional conventional machining in all four directions

SIMPLE CYCLES WITH PREDEFINED INPUT SCREENS



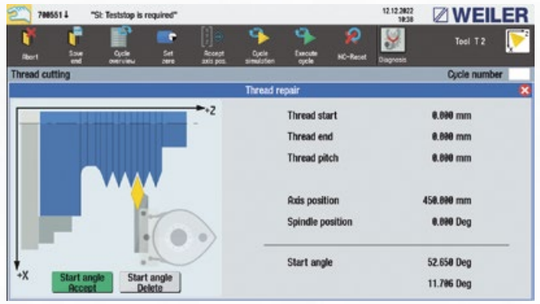
Undercut cycle

- For symmetrical and asymmetrical undercuts
- Internal and external undercuts
- With or without bevel or radius



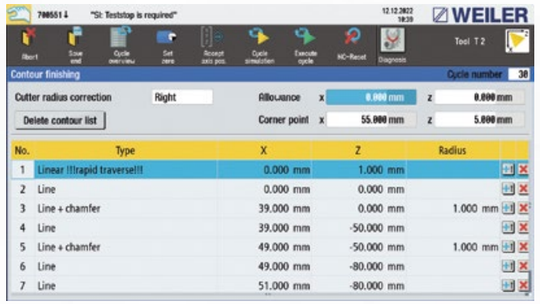
Thread cutting cycles

- For longitudinal, face or tapered threads
- Optionally with a constant cutting cross-section or a constant infeed depth
- Automatic computation of thread depth
- For all types of threads
- Cutting of multiple threads (max. 99 threads)



Thread repair

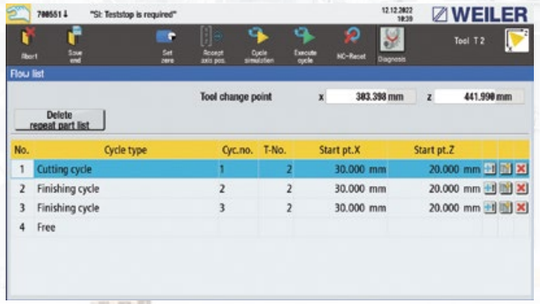
- Merging into an existing thread (thread repair)
- Transfer of starting angle via teach-in function



Contour finishing (finishing cycle)

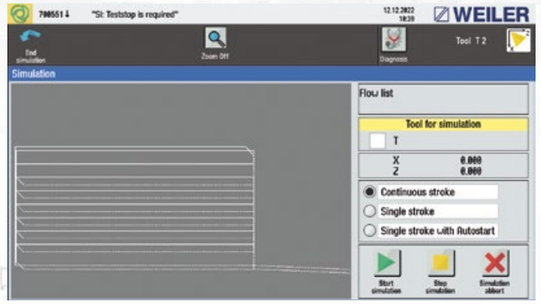
- Description of finished part contour with X and Y coordinates
- Radii and chamfers can be incorporated
- Max. of 20 elements

SIMPLE CYCLES WITH PREDEFINED INPUT SCREENS



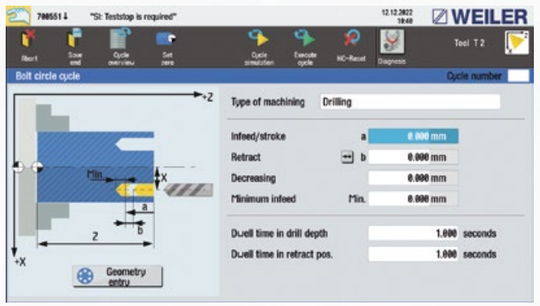
Repeat part parameter list

- Summary of all machining steps for a workpiece forming a program sequence
- Automatic program stop for a tool change at the tool change point
- Clear illustration of complete machining procedure
- Facilitates operation since the individual steps do not need to be manually retrieved



Simulation (vector illustration)

- Simulation of complete machining procedure
- Path of theoretical tool tips as vector illustration
- Single stroke and continuous stroke



Simple hole circle cycle (holding brake option)

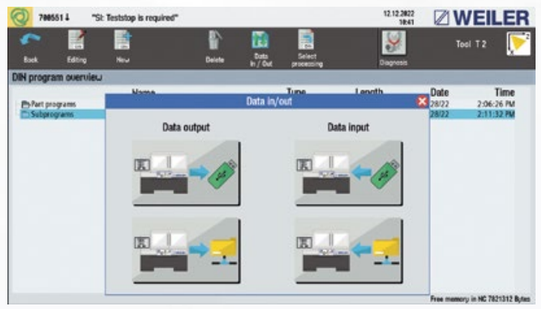
- A driven tool axis is not included
- Thread drilling is not possible

DIN/ISO PROGRAMMING

DIN/ISO programming

- A driven tool axis is not included

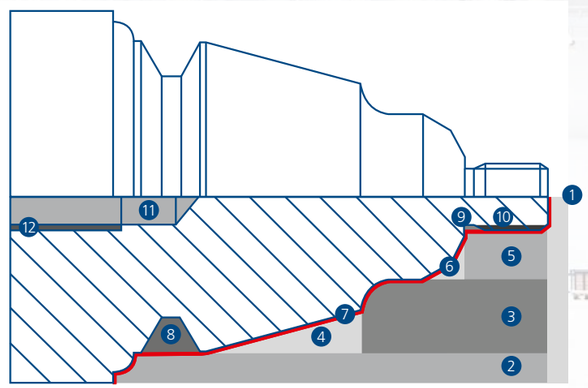
NETWORK INTERFACE/USB INTERFACE



Interface

- Data read-in and read-out via a network interface and a USB interface

DESCRIPTION OF CYCLES



1. Face turning, machining cycle
2. Longitudinal turning with a convex circle, machining cycle
3. Longitudinal turning with a concave circle, machining cycle
4. Tapered turning, machining cycle
5. Longitudinal turning, machining cycle
6. Longitudinal turning, 3-point definition, machining cycle
7. Contour finishing, finishing cycle
8. Symmetrical undercutting, undercut cycle
9. Asymmetrical undercutting, undercut cycle
10. Thread turning, thread cycle
11. Centric drilling, drilling cycle
12. Centric tapping, thread tapping cycle

MEMORY CAPACITY OF CONTROL SYSTEM

- 50 machining cycles
- 50 undercut cycles
- 50 parting cycles
- 50 thread cutting cycles
- 50 drilling cycles
- 50 hole circle cycles
- 50 contour cuts with 20 elements each (finishing)
- 1 repeat part parameter list
- DIN/ISO program memory, 3 MB maximum

THE SERVO-CONVENTIONAL PRECISION LATHES C35HD AND C50HD FROM WEILER

All of the straightforward, practical and beneficial features that distinguish conventional lathes have been incorporated in the C35HD and C50HD lathes from WEILER. At the same time, they offer significantly more capabilities as a result of the cutting-edge drive and control technology and WEILER's expertise.

	Swing over bed	Distance between centres	Spindle bore	Speed range	Drive power 60 %/100 % ED
C35HD	360	800	57	1 – 4,500	9/7
C50HD	570	1,000/2,000	83	1 – 2,500	15/12