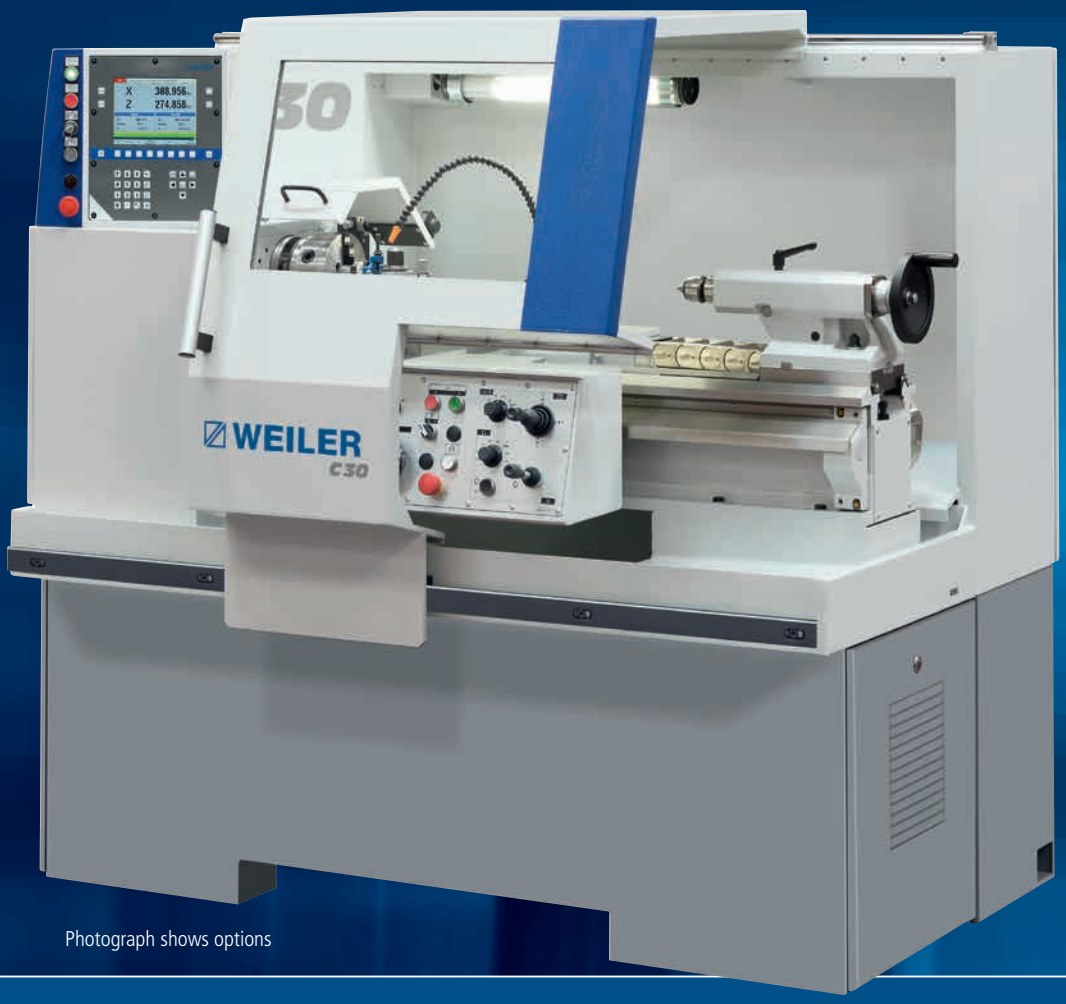
Turning Made Simply



Photograph shows options

The Servo-Conventionals

C30 / C50

WEILER

www.weiler.de

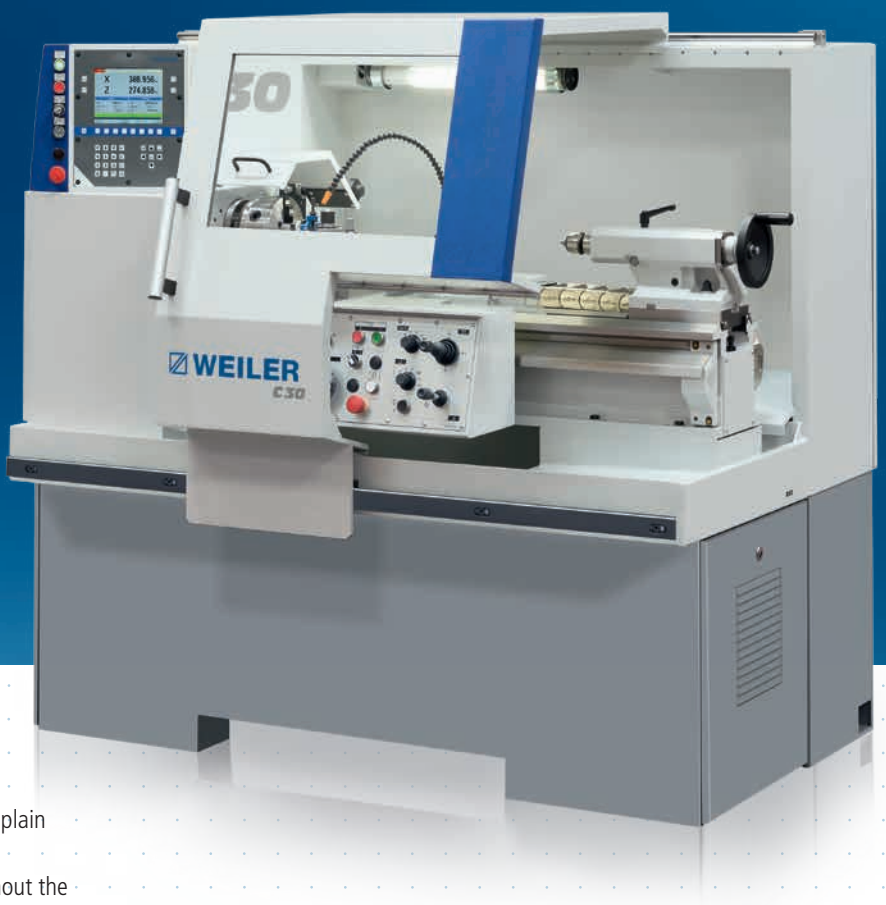
BLUEcoMPETENCE
Alliance Member
Partner of the Engineering Industry Sustainability Initiative

The Servo-Conventionals C30 / C50

Servo-conventional lathes allow the operator to concentrate on the job at hand. Time and effort spent on setting the gearbox speed or exchanging the change gears for thread cutting operations become a thing of the past – this eliminates sources of errors and increases productivity.

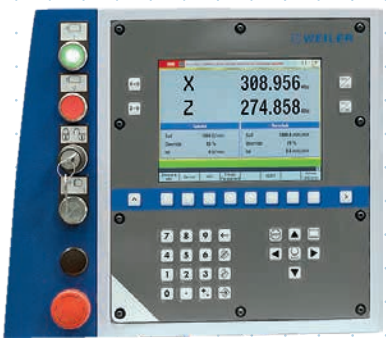
Conventional lathes have proven themselves for the machining straightforward turning jobs for a number of years. This can be particularly attributed to the simple handling of the machine.

The C30 / C50 have enhanced the simplicity, practicality and profitability of conventional lathes through leading-edge drive and control technology together with extensive WEILER application know-how.



User-Friendly

- No psychological barrier for the operator as data input is plain language, i.e. graphically supported and dialog-guided.
- Predefined screen forms for taper and radius turning without the need to use additional tools.
- Direct selection of simple cycles
  - Facing and cylindrical turning
  - Radius and taper turning
  - Thread cutting
  - Grooving
- Simple data input for the corresponding cycles in predefined screen forms
- USB interface



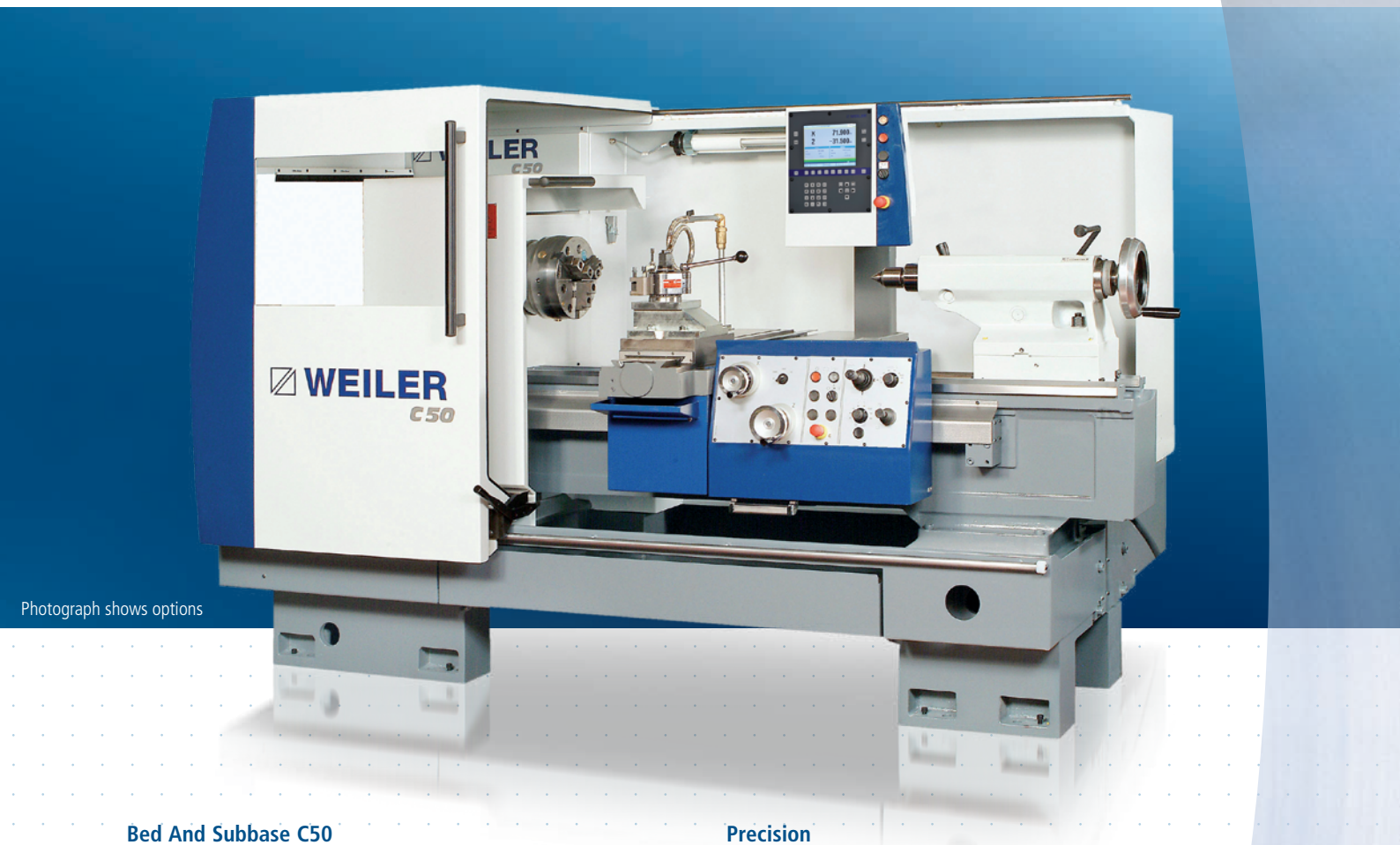
current, convenient, user friendly and well placed – the control

Cost-Effective

- Short set-up times and easier operation through oriented main spindle stop. The main spindle or chuck comes to a stand-still at the pre-selected chuck key setting.
- Fast adaptability to job changes.

Short processing cycle times through:

  - Constant cutting speed
  - Thread cutting of various types of threads with continous running of main spindle
  - Simple re-cutting of existing threads
  - Grooving cycle for a wide range of groove geometries
- Radius and taper turning
- Possibility of storing tool data and processing cycles
- Cutter radius compensation feature ensures the highest possible contour accuracy.
- Cutting cycle
- Turning against the stop in both axes without mechanical settings
- Automatic central lubrication of the guideways as well as ground ball screws



Photograph shows options

Bed And Subbase C50

- The bed is manufactured from high-quality grey cast iron. Strong transverse ribbing and continuous guides ensure resistance to bending and torsional forces. The separate vee and flat guides for the carriage and tailstock are flame-hardened and ground.
- The bed is supported by robust cast iron feet. In between there is a large coolant tank (100 l) with settling tray and sub-mergible pump. Above the tank there is a chip tray on four rollers that can be pulled out to the front.

Precision

- High surface quality through constant cutting speed with variable speed limitation and override switch for feed and main spindle speed.
- Machine accuracy to DIN 8605 (tool maker's accuracy)
- Positioning in µ-range, also through electronic handwheels.

Energy efficiency – a WEILER priority
WEILER cycle-controlled lathes implement their energy saving potential through the integral **TIM** software.

Energy efficiency with **TIM** means:

T ime-controlled Emergency Stop operation from the standby mode according to operation requirements.

I ntelligent drive management with energy recovery: Dynamic energy management controls the flow of energy within the machine. Excess braking energy is not pointlessly converted to heat, but fed back into the supply network.

M achine status energy management of ancillary components: Only the ancillary components that are required for the active machining process are powered up, all other shut down.

Technical data

Working range		C30	C50
Distance between centres	mm	750	1,000/2,000
Swing over bed	mm	330	570
Swing over cross slide	mm	160	340
Travel of cross slide	mm	180	340
Width of bed	mm	240	350
Cross section of turning tool (width x height)	mm	20 x 20	32 x 25
Main spindle			
Spindle head DIN55027	size	5	8
Spindle diameter in front bearing	mm	70	120
Spindle bore	mm	43	83
Inner taper of main spindle	ME	50	90
Main drive			
AC drive			two-step gearbox
Drive power 60% / 100% ED	kW	9/7	15/12
Speed range	rpm	1 - 4,500	1 - 2,500
Feed drive			
Feed force longitudinal	N	6,000	10,000
Feed force transverse	N	3,000	7,000
Feed range longitudinal/transverse	mm/rev	0.001 - 10	0.001 - 10
Maximum rapid motion long./transv.	m/min	6/3	6/3
Thread cutting range			
Metric threads	mm	0.1 - 400	0.1 - 400
Inch threads	TPI	56 - 1/4	56 - 1/4
Modular threads	mm	0.125 - 28	0.125 - 28
Diametral threads	DP	224 - 1	224 - 1
Number of thread courses max.		99	99
Tailstock			
Quill diameter	mm	50	80
Quill travel	mm	110	200
Inner taper of the quill	MT	3	5
Dimensions			
Length	mm	1,750	2,850/3,850
Width	mm	1,350	2,000
Height	mm	1,700	1,800
Weight	kg	1,300	3,200/3,700

User videos are available on the WEILER Channel at YouTube

WEILER

WEILER Werkzeugmaschinen GmbH
Friedrich K. Eisler Strasse 1
91448 Emskirchen, Germany
Telephone +49 (0)9101-705-0
Fax +49 (0)9101-705-122
info@weiler.de • www.weiler.de