

The Complete Range



A Symbol
for Success

 **WEILER**
www.weiler.de

Tool Room Lathes / Semi-Cycle Controlled Lathes

Cycle-Controlled Lathes

CNC Lathes

Radial Drilling Machines

Service



There are good reasons for the proverbial WEILER virtues of precision, quality and reliability: a qualified and highly motivated workforce that are always fully aware of their responsibility towards their customers and a management team that ensures stability and continuity.

To us responsibility means being the best possible partner to our customers in every respect.

That is why when we design and develop our products we pay particular attention to long-term precision, extreme ease of operation and energy efficiency by using state of the art drive and control technology. That is why we are committed to providing competent technical advice to select the right product as well as top quality product training. And that is why we provide fast and professional assistance for repair and maintenance work through a comprehensive spare part supply service and well trained service technicians – throughout the complete lifetime of the machine.

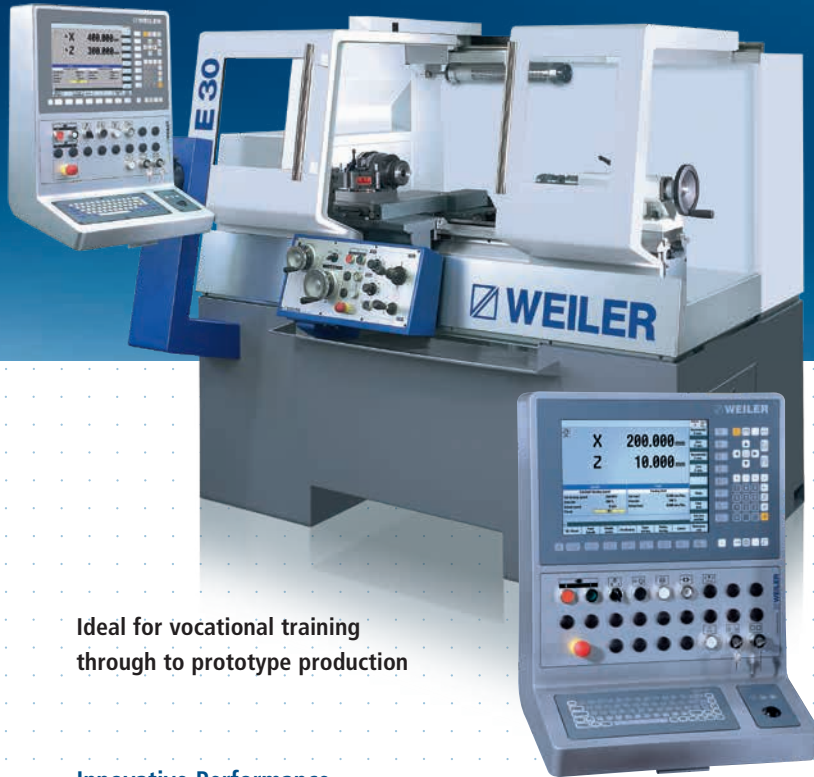
As can be expected from one of the best partners!



The E-Series

Cycle-Controlled Precision Lathes

E30



Ideal for vocational training through to prototype production

Innovative Performance

Based upon the proven WEIPERT lathe concept, an installed base of over 5,000 E-Machines provide uninterrupted evidence of total customer satisfaction. An outstanding feature is the simple, job-oriented operation that at the same time, still allows fast adaptability to countless possible applications. This is achieved through a wide range of cycles, which can be run individually, or automatically as a sequence. This control concept ensures that one-offs and small batches can be quickly produced with extremely high accuracy.

E40



The area of application for this robust machine ranges from tool making to small batch production



The E-Series

Cycle-Controlled Precision Lathes

E50HD



The multi-purpose machine for high-performance turning

The Machines

- ▶ Digital drive technology and SIEMENS Control with user-oriented WEILER software
- ▶ Digital display of slide travel, main spindle speed and feed speed
- ▶ Variable, digital three-phase main drive with two mechanical gear stages and high drive power
- ▶ Variable three-phase axis drives with rigid precision bearings for the ballscrews enable high feed thrusts
- ▶ Cross switch with intuitive operating action for feed and rapid traverse
- ▶ Constant cutting speed with freely selectable speed limitation
- ▶ Longitudinal and transverse taper turning throughout the complete working area
- ▶ High rapid traverse speeds
- ▶ Thread cutting without changing the sense of rotation
- ▶ Cutting of taper threads
- ▶ Cutting of multiple threads
- ▶ Finishing of existing threads
- ▶ Orientated "main spindle stop"
- ▶ Drive power display for the main drive.
- ▶ Override switch for feed rate and main spindle speed adjustment
- ▶ Automatic centralized lubrication of the longitudinal and transverse slides as well as ballscrew nuts



- ▶ Toolmakers accuracy according to
DIN 8605 for E30 to E80
DIN 8606 for E90 to E120
DIN 8607 for E150 to E200



E60

The E-Series

Cycle-Controlled Precision Lathes

E70HD / E80HD



High performance for spindle bores from 128 mm to 216 mm

Automated Cycles / Control Manual Turning

- ▶ Constant cutting speed, oriented "main spindle stop"
- ▶ Turning against the stop on all axes
- ▶ Taper turning at any angle
- ▶ Radius turning
- ▶ Storable simple cycles

Cutting Cycle

- ▶ Powerful contour calculator for the calculation of non-dimensioned points (of intersection)
- ▶ Simple modification of existing workpiece contours
- ▶ Free definition of raw contours for forged and cast parts
- ▶ Monitoring of the tool angle

Thread Cutting Cycle

- ▶ Pitches: metric, inch, modular, DP
- ▶ Infeed types: flank infeed, API mode for oil and gas tight threads, Trapezoidal threads
- ▶ Thread finishing: definition through "Teach In" as well as through manual reworking

Data Transfer Interfaces

- ▶ USB
- ▶ Network interface

DXF File Import (Optional)

- ▶ Workpiece contour extracted from fully imported drawings in the DXF format from a wide variety of CAD systems
- ▶ Free selection of layers and contour elements
- ▶ Mirroring and scaling of the workpiece contour

DIN-ISO-Programming

- ▶ Creation, editing and processing of DIN-ISO programs

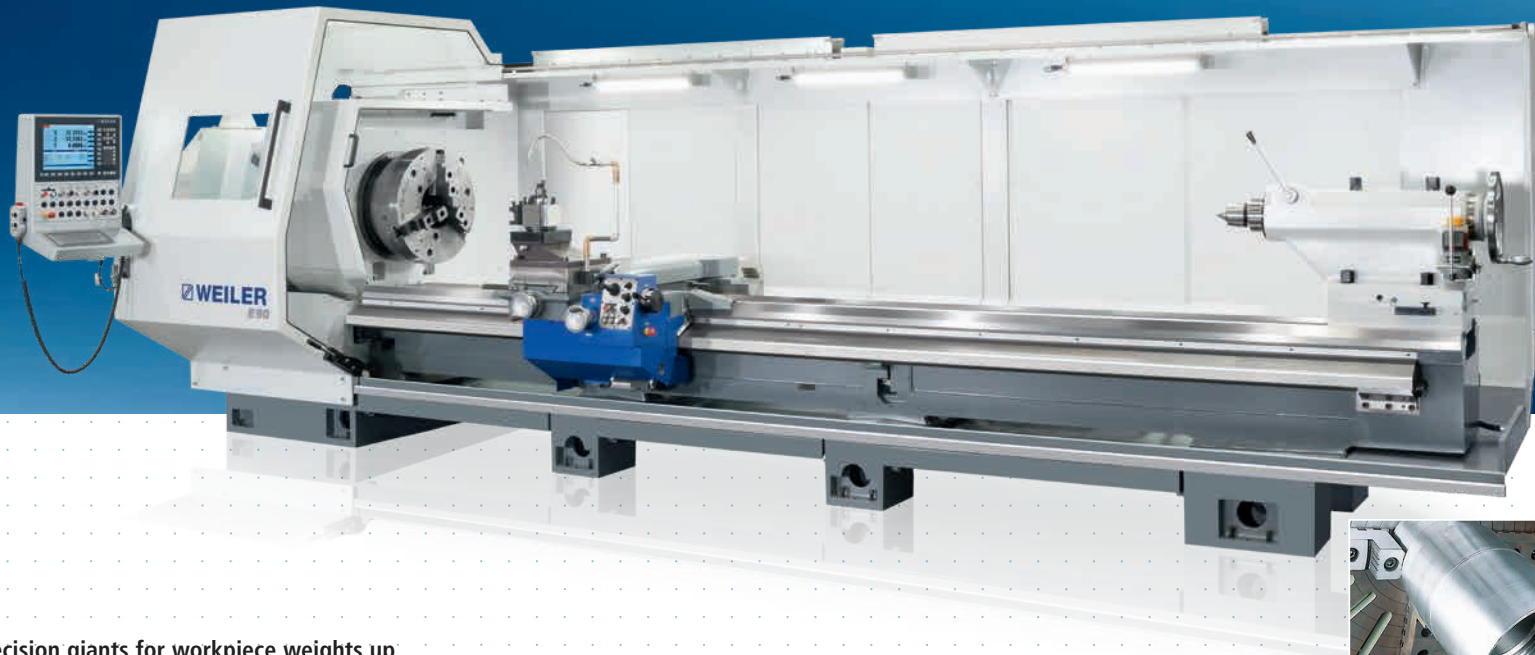


The E-Series

Cycle-Controlled Precision Lathes

10/11

E90 / E110 / E120



Precision giants for workpiece weights up to 10,000 kg and spindle bores between 128 mm and 362 mm for powerful turning

Automated Cycles / Control

Even without programming knowledge, the smart WEILER Software will easily guide you through the program. The automated cycle feature means that you can operate your E-machine like a "conventional" manual lathe. Or you can use the geometry processor to program the workpiece contour right through to automatic calculation of the points of intersection. For further information, please refer to the WEILER Control brochure.

- ▶ Simple workpieces can be machined in the same way as on a conventional machine, except more comfortably.
- ▶ Complicated workpieces can be machined in the same way as on a conventional machine, except faster.
- ▶ Complex workpieces can be produced in the same way as on a CNC machine, except more easily.

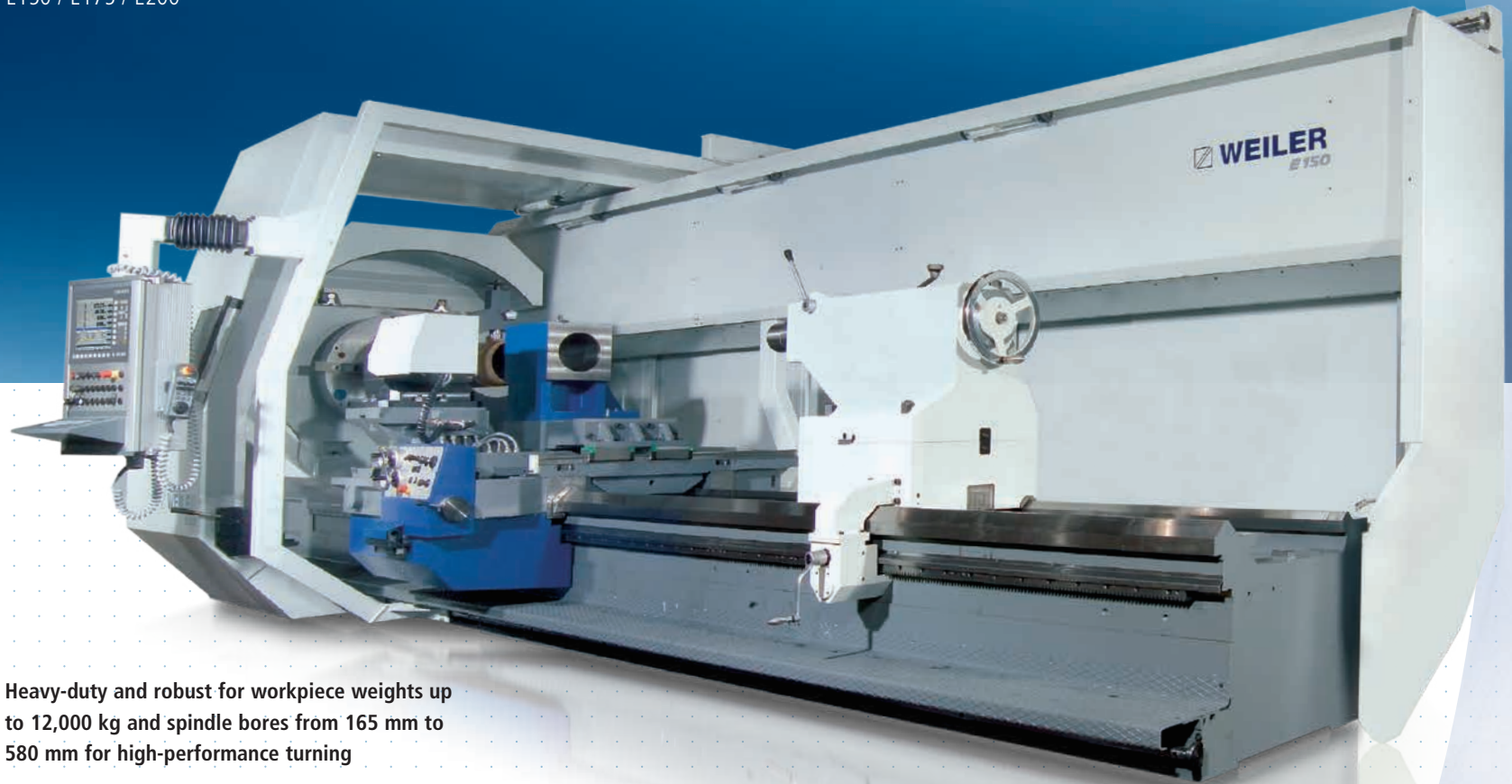


The E-Series

Cycle-Controlled Precision Lathes

12/13

E150 / E175 / E200



Heavy-duty and robust for workpiece weights up to 12,000 kg and spindle bores from 165 mm to 580 mm for high-performance turning

The Top End

The largest of WEILER E-Series precision lathes are characterized by being powerful and energy-efficient with optimum accessibility. The machine for large-size workpieces in high productivity applications with a swing over bed of up to 2 m. Smart optional extras offer a high level of cost-effectiveness and flexibility for a wide range of applications from turning to milling.



The E-Series

Cycle-Controlled Precision Lathes

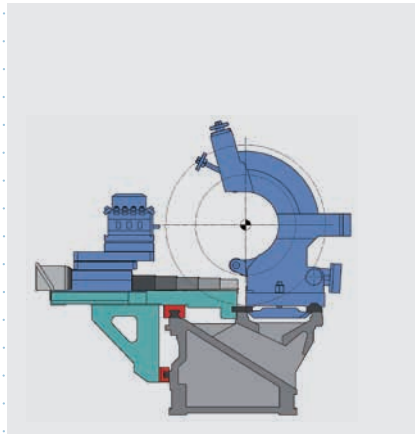
Technical Data		E30	E40	E50HD	E60	E70HD	E80HD	E90	E110	E120	E150	E175	E200
Working Range													
Distance between centres	mm	750	1,000	1,000-2,000	1,000-2,000	1,000-6,000	1,000-6,000	2,000-15,000	2,000-15,000	2,000-15,000	2,000-15,000	2,000-15,000	2,000-15,000
Swing over bed	mm	330	435	570	650	720	800	900	1,100	1,200	1,500	1,750	2,000
Swing over cross slide	mm	160	200	340	400	430	510	530	730	830	1,030	1,280	1,530
Travel of cross slide	mm	180	260	340	380	410	410	590	590	590	790	790	790
Bed width	mm	240	330	350	380	480	480	600	600	600	830	830	830
Main Spindle													
Spindle nose acc. to DIN 55027 (DIN ISO 702-3)	size	5	6	8	8	11	11	11	11	15	15	15	20
Spindle bore	mm	43	66	83*	83	128**	128**	128***	128***	165****	165*****	165*****	165*****
Spindle diameter in front bearing	mm	70	110	120	120	180	180	178	178	235	235	235	235
Main Drive													
Drive power 60% / 100% duty cycle	kW	11/9	20/17	20/17	25/20	37/30	37/30	45/37	45/37	45/37	65/51	65/51	65/51
Max. torque at the spindle	Nm	165	450	1,300	1,700	2,800	2,800	6,000	6,000	8,000	10,000	10,000	10,000
Speed range	rpm	1-4,500	1-3,500	1-2,500	1-2,500	1-1,800	1-1,800	1-1,120	1-1,120	1-900	1-900	1-900	1-900
Feed Range													
Feed force longitudinal	N	6,000	10,000	12,000	12,000	25,000	25,000	20,000	20,000	20,000	30,000	30,000	30,000
Rapid traverse speed longitudinal/transverse	m/min	8/4	8/4	10/5 7/5	10/5 7/5	10/5	10/5	10/5 7/5	10/5 7/5	10/5 7/5	10/5	10/5	10/5
Feed range	mm/rev	0.001-50	0.001-50	0.001-50	0.001-50	0.001-50	0.001-50	0.001-50	0.001-50	0.001-50	0.001-50	0.001-50	0.001-50
Thread Cutting Range													
Thread Cutting Range	mm	0.1-2,000	0.1-2,000	0.1-2,000	0.1-2,000	0.1-2,000	0.1-2,000	0.1-2,000	0.1-2,000	0.1-2,000	0.1-2,000	0.1-2,000	0.1-2,000
Tailstock													
Quill diameter	mm	50	65	80	100	115	115 (140)	140	140 (180)	140 (180)	180	180	180
Inside taper of quill	MT	3	4	5	5	6	6	6	6	6	metr. 100	metr. 100	metr. 100
Machine Accuracy													
Acceptance Accuracy	DIN	8605	8605	8605	8605	8605	8605	8606	8606	8606	8607	8607	8607

Spindle bore on request: *128, 165 mm **165, 216 mm ***165, 262, 362 mm ****262, 362 mm *****262, 362, 450, 580 mm

The V-Series

4-Way Precision Lathe with Automated Cycles

V90 / V110



New Product: The first 4-way Precision Lathe with Automated Cycles

The V-Series has been developed for the economic machining of long workpieces. To enable this, the slides can overrun the steady rest and tailstock.

Even without programming experience, the smart WEILER software easily guides you through the program.

The automated cycle feature means that you can operate your E-machine like a "conventional" manual lathe. Or you can use the geometry processor to program the workpiece contour right through to automatic calculation of the points of intersection.

For further information, please refer to the WEILER Control brochure.

- ▶ Simple workpieces can be processed in the same way as with a conventional machine, only more efficiently.
- ▶ Elaborate workpieces can be processed in the same way as with a conventional machine, only faster.
- ▶ Complex workpieces can be processed in the same way as with a CNC machine – only more simply

Technical Data		V90	V110
Working Range			
Distance between centres	mm	3,000-12,000	3,000-12,000
Swing over bed	mm	940	1160
Swing over cross slide	mm	590	810
Travel of cross slide	mm	580	580
Bed width	mm	900	900
Main Spindle			
Spindle nose acc. to DIN 55027 (26) (DIN ISO 702-3)	size	15 (20)	15 (20)
Spindle bore	mm	165*	165*
Spindle diameter in front bearing	mm	235	235
Main Drive			
Drive power 60% / 100% duty cycle	kW	45/37	45/37
Max. torque at the spindle	Nm	8,000	8,000
Speed range	rpm	1-900	1-900
Feed Range			
Feed force longitudinal	N	20,000	20,000
Rapid traverse speed longitudinal/transverse	m/min	10/5	10/5
Feed Range	mm/rev	0.001-50	0.001-50
Thread Cutting Range			
Metric threads	mm	0.1-2,000	0.1-2,000
Inch threads	TPI	112 - 1/64	112 - 1/64
Tailstock			
Quill diameter	mm	140	140 (180)
Inside taper of quill	MT	6	6 (metr. 100)
Weight			
Machine weight	kg	15,000/27,000	16,000/28,000
Machine Accuracy			
Acceptance Accuracy	DIN	8606/8607	8606/8607
*Spindle bore 262, 362 mm on request			

The C-Series

C30/C50 Servo-Engine Precision Lathes

C30 / C50



Precision

- ▶ High surface quality through constant cutting speeds with variable speed limitation and override switch for feed and main spindle speed
- ▶ Machine accuracy to DIN 8605 (toolmaker's accuracy)
- ▶ Positioning in μ -range, also through electronic handwheels
- ▶ Direct selection of simple cycles
 - Longitudinal and transverse machining
 - Radius and taper turning
 - Thread cutting
 - Grooving
- ▶ Simple data input in predefined screen forms for the corresponding simple cycles.
- ▶ USB-interface

User-Friendliness

- ▶ 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

Cost-Effectiveness

- ▶ Short set-up times
- ▶ Easy operation of the control
- ▶ Fast adaptability to job changes

Technical Data		C30	C50
Working Range			
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
Bed width	mm	240	350
Tool cross section (height x width)	mm	20 x 20	32 x 25
Main Spindle			
Spindle nose acc. to DIN 55027 (DIN ISO 702-3)	size	5	8
Spindle diameter in front bearing	mm	70	120
Spindle bore	mm	43	83
Inner taper of main spindle	MT	5	metr. 90
Main Drive			
AC Drive			2-speed gearbox
Drive power 60% / 100% duty cycle	kW	9/7	15/12
Speed range	rpm	1-4,500	1-2,500
Feed Range			
Three-phase servo drive			
Feed force longitudinal	N	6,000	10,000
Feed force transverse	N	3,000	7,000
Feed range longitudinal and transverse	mm/rev	0.001-10	0.001-10
Max. Rapid traverse speed longitudinal/transverse	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
DP threads	DP	224-1	224-1
Number of thread starts	max.	99	99
Tailstock			
Quill diameter	mm	50	80
Quill travel	mm	110	200
Inside taper of quill	MT	3	5
Weight	kg	1,300	3,200/3,700

The Conventional Multi-Purpose Precision Lathes

20/21

Praktikant GSD



Precision, Safety and Efficiency

GS certification mark from the testing and certification body of the German Statutory Accident Insurance Association (DGUV Test)

The Praktikant GSD can be used for countless applications in one-off and small series production in craft workshops and industrial operations as well as tool and jig manufacturing.

- ▶ Pole-changing main drive with 16 main spindle speeds as fixed speeds
- ▶ Automatic handwheel release
- ▶ Lead screw and feed rod cover

- ▶ Spindle brake
- ▶ Minimization of pinch points
- ▶ Countless accessories integrated in the safety features

Countless options increase the efficiency of this machine for small and medium-sized batch production.

Primus VCD / Praktikant VCD



PRIMUS VCD / PRAKTIKANT VCD

- ▶ Acceptance limits significantly better than DIN 8605 (toolmaker's precision)
 - ▶ Extremely smooth running
 - ▶ Large spindle bore
 - ▶ Sliding chuck guard with customized end settings for optimum protection against chips
 - ▶ Straight-forward chip removal through removable chip tray
 - ▶ Efficiency
 - ▶ Long-term accuracy and quality
 - ▶ Reliability
- ▶ Increased safety through integral main spindle speed monitoring, automatic handwheel release, lead screw and feed rod cover, minimization of pinch points etc.
 - ▶ Space-saving design, the machine can be directly placed against a wall

Praktikant VCPlus

Condor VCPlus



Mechanical System

- ▶ High precision and excellent surface quality through vibration-damping, robust machine base
- ▶ Large spindle bore
- ▶ Thread cutting without change gears
- ▶ Removable chip tray



Operator GUI

- ▶ User-friendly and future orientated
- ▶ Large, easy-to-read 9" colour screen
- ▶ Constant cutting speed with speed limitation
- ▶ Speed and feed override through potentiometer
- ▶ Electronic turning against the stop
- ▶ Electronic end stop device for thread cutting

e-TIM

- ▶ Timer-controlled standby mode: automatic shut-down after predetermined time period
- ▶ Intelligent drive management: recovery of braking energy
- ▶ Machine-status energy management: automatic shut-down of all ancillary devices that are not required

e-LISSY

- ▶ Learner Identification System assigns individual access authorization through coded chips to enable optimum adaption to the individual progress in training

Options for Praktikant VCPlus and Condor VCPlus: WEILER WTS

- ▶ First 15" touchscreen on a conventional engine lathe
- ▶ Operate in the same way as a smartphone or tablet PC
- ▶ Superimpose technical drawings
- ▶ Videos about maintenance and operation



The Conventional Multi-Purpose Precision Lathes

24/25

Commodor 180 GSD



Headstock

Headstock

The thick-walled, grey cast iron casing provides the basis for low-vibration running and exceptional dynamic rigidity. Extremely precise, case hardened and ground gearwheels running in an oil bath enable high gear speeds and exceptional turning quality.

Tool Slides

The bed slide guides on the bed are plastic-coated. The primary advantages of this design are smooth running, stick-slip-free start-up of the bed slide and high quality surface finish of the workpiece.

Commodor 180 VCD / Commodor 230 VCD



Bed

The bed is made of high-quality grey cast iron. The guides are hardened and finely ground. The bed slide has double-V-guides to ensure high stability



The Conventional Multi-Purpose Precision Lathes

Technical Data		Primus VCD	Praktikant GSD	Praktikant VCD	Praktikant VCPlus	Condor VCPlus	Commodor 180 GSD	Commodor 180 VCD	Commodor 230 VCD
Working Range									
Distance between centres	mm	500	650	650	650	800	1,000	1,000	1,000
Centre height	mm	140	160	160	160	180	180	180	230
Swing over bed	mm	280	320	320	320	360	380	380	475
Swing over cross slide	mm	150	190	190	190	190	180	180	270
Main Spindle									
Spindle nose acc. to DIN 55027 (DIN ISO 702-3)	size	5	5	5	5	6	6	6	6
Spindle diameter in front bearing	mm	70	70	70	70	90	90	90	90
Spindle bore	mm	43	43	43	43	57	56	56	56
Inside taper (similar to DIN 228)	MT	metr. 50	metr. 50	metr. 50	metr. 50	6	6	6	6
Main Drive									
Drive power	kW	4	2.6/3.1	7.5	8	10.5	2.2/4.4	7,5	12.5
Speed range	rpm	30-4,000 (5,000)	48-2,500	30-4,000 (5,000)	25-5,000	25-4,000	25-2,000	25-2,000	25-2,000
Number of speeds		Stepless	16	Stepless	Stepless	Stepless	18	Stepless**	Stepless**
Feeds									
Number		24	24	24	Stepless	Stepless	200	200	320
Longitudinal	mm/rev	0.02-0.63	0.02-0.63	0.02-0.63	0.01-6	0.01-6	0.026-0.9	0.026-0.9	0.026-7.4
Transverse	mm/rev	0.006-0.2	0.006-0.2	0.006-0.2	0.003-2	0.003-2	0.013-0.45	0.013-0.45	0.013-3.7
Thread Cutting Range									
Metric threads	mm	0.25-8*	0.25-8*	0.25-8*	0.1-20	0.1-20	0.3-10	0.3-10	0.3-80
Inch threads	TPI	80-2*	80-2*	80-2*	80-2	80-2	80-2.75	80-2.75	80-0.75
Tailstock									
Quill travel	mm	85	85	85	85	110	150	150	150
Quill diameter	mm	40	40	40	40	50	60	60	70
Inside taper of quill DIN 228	MT	3	3	3	3	3	4	4	4
~ Weight (without packaging and accessories)	kg	1,050	1,050	1,150	1,100	1,500	1,750	1,800	2,000

* Inch threads and metric thread pitches 0.45; 0.75; 4.5 and 5.5 are only possible with additional change gears

** 4 gear stages

The Conventional Multi-Purpose Lathes

DA 210 / DA 260



Safety

- ▶ EMERGENCY OFF buttons on the headstock and apron
- ▶ Lead screw and feed rod cover
- ▶ Chuck guard monitored through limit switch
- ▶ Change gear door monitored through limit switch
- ▶ Automatic braking of the main spindle
- ▶ Restart protector in case of a power cut

Productivity

- ▶ Precision consistently ensured
- ▶ Easy to operate
- ▶ High drive performance

Intrinsic value

- ▶ Long lifetime; high resale value
- ▶ Solid quality

Technical Data		DA 210	DA 260
Working Range			
Distance between centres	mm	1,000/1,500	1,000/1,500/2,000
Centre height	mm	210	260
Swing over bed	mm	435	535
Swing in bed recess	mm	470	560
Swing over cross slide	mm	245	345
Bed width	mm	330	330
Travel of cross slide	mm	330	330
Travel of top slide	mm	130	130
Tool cross section (height x width)	mm	25 x 25	25 x 25
Main Drive			
Drive power 100 % ED	kW	5.5	7.5
Max. torque at main spindle	Nm	900	1,200
Main Spindle			
Spindle nose acc. to DIN 55027 (DIN ISO 702-3)	size	6	6
Spindle diameter in front bearing	mm	83	100
Spindle bore	mm	52	71
Inner taper of main spindle	mm	metr. 57	metr. 76
Speed range	rpm	44-2,000	33-1,500
Number of speeds		12	12
Feeds			
Longitudinal feeds	mm/rev	0.072-4	0.072-4
Transverse feeds	mm/rev	0.036-2	0.036-2
Tailstock			
Quill diameter	mm	65	65
Quill travel	mm	120	120
Inside taper of quill	MT	4	4
Thread Cutting Range			
Metric threads	mm	0.5-28	0.5-28
Inch threads	TPI	56-1	56-1
Permissible Workpiece Weights			
With chuck max.	kg	150	200
With tailstock max.	kg	500	800
With steady rest max.	kg	700	1,000
Weights	kg	1,300/1,550	1,510/1,760/2,050

The Conventional Multi-Purpose Lathes

DA 210 AC / DA 260 AC



Ease of Use and Dependability

- ▶ Infinitely variable main drive in conjunction with two-speed gearbox
- ▶ Digital display of main spindle speed
- ▶ EMERGENCY OFF buttons on the headstock and apron
- ▶ Lead screw and feed rod cover
- ▶ Chuck guard monitored through limit switch
- ▶ Change gear door monitored through limit switch
- ▶ Automatic braking of the main spindle
- ▶ Restart protector in case of a power cut
- ▶ Precision consistently ensured
- ▶ Easy to operate
- ▶ High drive performance
- ▶ Intrinsic value
- ▶ Long life, high resale value

Technical Data		DA 210 AC	DA 260 AC
Working Range			
Distance between centres	mm	1,000/1,500	1,000/1,500/2,000
Centre height	mm	210	260
Swing over bed	mm	435	535
Swing in bed recess	mm	470	560
Swing over cross slide	mm	245	345
Bed width	mm	330	330
Travel of cross slide	mm	330	330
Travel of top slide	mm	130	130
Tool cross section (height x width)	mm	25 x 25	25 x 25
Main Drive			
Drive power 100 % ED	kW	5.5	5.5
Main spindle			
Spindle nose acc. to DIN 55027 (DIN ISO 702-3)	size	6	6
Spindle diameter in front bearing	mm	83	100
Spindle bore	mm	52	71
Inner taper of main spindle	mm	metr. 57	metr. 76
Speed range	rpm	20-2,500	20-2,500
Number of speeds		2	2
Feeds			
Longitudinal feeds	mm/rev	0.072-2	0.072-2
Transverse feeds	mm/rev	0.036-1	0.036-1
Tailstock			
Quill diameter	mm	65	65
Quill travel	mm	120	120
Inside taper of quill	MT	4	4
Thread Cutting Range			
Metric threads	mm	0.5-14	0.5-14
Inch threads	TPI	56-2	56-2
Permissible Workpiece Weights			
With chuck max.	kg	150	200
With tailstock max.	kg	500	800
With steady rest max.	kg	700	1,000
Weights	kg	1,450/1,700	1,650/1,900/2,200

DZ40 CNC



Precision

- ▶ Rigid substructure
- ▶ High repeatability through direct path measuring on the X-axis
- ▶ High quality, heavily ribbed grey cast iron bed ensures extreme rigidity
- ▶ Linear guides for the highest possible dynamics and precision
- ▶ Precisely borne work spindle
- ▶ High positioning accuracy
- ▶ High thermostability

Control Siemens Sinumerik 840D sl

- ▶ 15" LED Multitouch
- ▶ USB interface
- ▶ CNC full-range keyboard
- ▶ NCU 720 module with 10 MB user memory
- ▶ Network interface and optional tele-diagnosis capability

DZ45 CNC / DZ65 CNC



Complete Machining of Workpieces

- ▶ C-axis for main spindle and NC sub-spindle
- ▶ Y-axis for complex workpieces
- ▶ Live tooling for axial and radial machining
- ▶ NC-subspindle with 32 mm capacity in draw and thrust tube with DZ40
- ▶ NC-subspindle with 42 mm capacity in draw and thrust tube with DZ45/65

Productivity

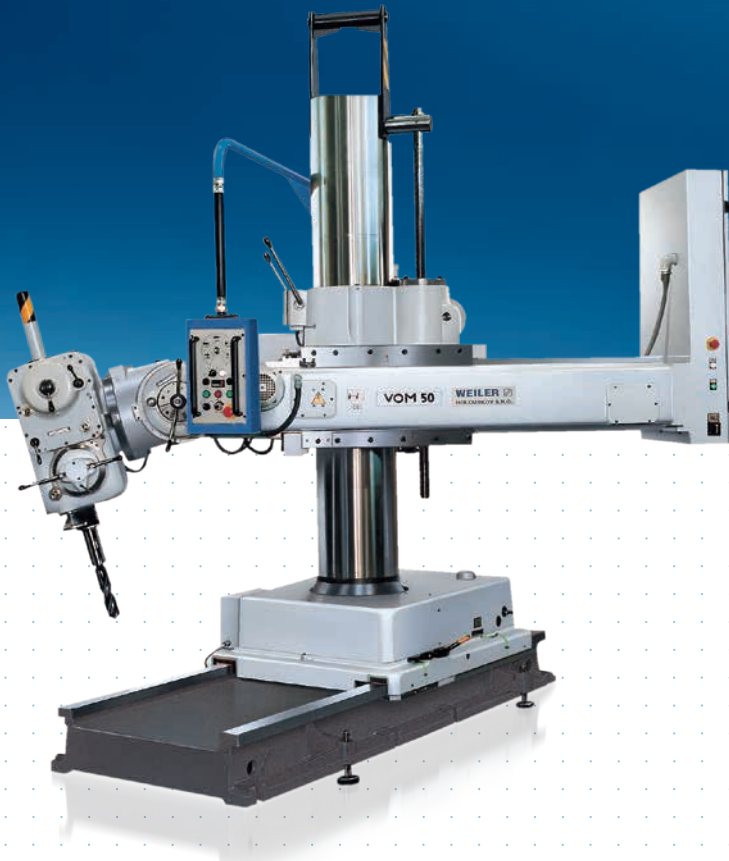
- ▶ Dynamic and powerful axis and spindle drives
- ▶ Fast rapid traverse speeds
- ▶ Digital drive technology
- ▶ Easy maintenance

The CNC Precision Lathes

Technical Data		DZ40 CNC				DZ45 CNC					DZ65 CNC				
Working Range		AR	ARY	AG	AGY	R	AR	ARY	AG	AGY	R	AR	ARY	AG	AGY
Swing, max.	mm	560	560	560	560	560	560	560	560	560	560	560	560	560	560
X axis travel	mm	200	200	200	200	207.5	207.5	205	205	205	207.5	207.5	205	205	205
Z axis travel	mm	350	350	350	350	530	530	530	530	530	530	530	530	530	530
Turning diameter, max	mm	180	180	180	180	240	240	240	240	240	240	240	240	240	240
Main Drive Type		spindle motor				spindle motor					spindle motor				
Drive power 60 % ED	kW	11.6	11.6	11.6	11.6	21.5	21.5	21.5	21.5	21.5	27	27	27	27	27
Speed range	rpm	6,300	6,300	6,300	6,300	6,000	6,000	6,000	6,000	6,000	5,000	5,000	5,000	5,000	5,000
Torque at main spindle 60 % duty cycle	Nm	65	65	65	65	128	128	128	128	128	260	260	260	260	260
Main spindle															
Spindle nose DIN 55026 (DIN ISO 702-1)	size	5	5	5	5	5	5	5	5	5	6	6	6	6	6
Chuck size	mm	160	160	160	160	160	160	160	160	160	200	200	200	200	200
Spindle bore	mm	52	52	52	52	53	53	53	53	53	77	77	77	77	77
Bar capacity in draw/thrust tube	mm	42	42	42	42	42	42	42	42	42	66	66	66	66	66
Feed Drive															
Feed force X/Z/Q	daN	270	270	270	270	530	530	530	530	530	530	530	530	530	530
Rapid traverse X/Z/Q	m/min	30/30/30	30/30/30	30/30/30	30/30/30	30/30/30	30/30/30	30/30/30	30/30/30	30/30/30	30/30/30	30/30/30	30/30/30	30/30/30	30/30/30
Tailstock															
Centre fixture	MT	4	4			4	4	4			4	4	4		
Supporting force	daN	270	270			530	530	530			530	530	530		
Subspindle Type		spindle motor				spindle motor					spindle motor				
Spindle nose DIN 55026 (DIN ISO 702-1)	Size			4	4				5	5				5	5
Chuck size	mm			130	130				160	160				160	160
Bar capacity in draw/thrust tube	mm			32	32				42	42				42	42
Drive power 60 % ED	kW			11.6	11.6				17	17				17	17
Speed range	rpm			6,300	6,300				6,000	6,000				6,000	6,000
Torque 60 % duty cycle	Nm			65	65				85	85				85	85
Tool Turret															
Number of tools not driven / driven		16/16	16/16	16/16	16/16	12	12/12	16/16	16/16	16/16	12	12/12	16/16	16/16	16/16
Reference circle diameter	mm	340	340			300	300				300	300			
Width across flats	mm			300	300			300	300	300			300	300	300
Tool shank cross section	mm	16 x 16	16 x 16	16 x 16	16 x 16	20 x 20	20 x 20	16 x 16	16 x 16	16 x 16	20 x 20	20 x 20	16 x 16	16 x 16	16 x 16
Shank diameter DIN 69880	mm	25	25	25	25	30	30	25	25	25	30	30	25	25	25
Drive power 100 % duty cycle	kW	4.5	4.5	4.5	4.5		4.5	4.5	4.5	4.5		4.5	4.5	4.5	4.5
Tool Turret with Y-Axis															
Y-axis travel	mm		+/-25		+/-25			+45/-35		+45/-35			+45/-35		+45/-35
Sinumerik Control	Sinumerik	840D sl	840D sl	840D sl	840D sl	840D sl	840D sl	840D sl	840D sl	840D sl	840D sl	840D sl	840D sl	840D sl	840D sl
Measurements															
Length/width/height	mm	2,590 x 1,580 x 1,890				3,180 x 2,050 x 2,200					3,180 x 2,050 x 2,200				
Turning centre above floor	mm	1,160	1,160	1,160	1,160	1,130	1,130	1,130	1,130	1,130	1,130	1,130	1,130	1,130	1,130
Weight	kg	5,400	5,400	5,500	5,500	6,100	6,100	6,300	6,500	6,500	6,100	6,100	6,300	6,500	6,500

The Portable Drilling Machines

VOM50



Our portable radial drilling machine takes the machine to the workpiece. This guarantees high productivity and minimizes standstill periods.

means that drilling jobs can be executed in any position. The ergonomic placement of the control elements and simple operation ensure stress-free work

This makes it the machine of choice for your drilling jobs, even in places that are hard to reach. The flexibility of seven axes

Technical Data		VOM50
Working Range		
Max. drilling diameter in steel	mm	50
Max. drilling diameter in grey cast iron, strength up to 250 N/mm ²	mm	65
Max. thread cutting in steel, strength up to 600 N/mm ²		M48
Vertical arm travel, max.	mm	1,250
Horizontal arm travel, max.	mm	900
Spindle reach, min./max.	mm	1,170/2,070
Distance from spindle nose to base plate, min./max.	mm	305/1,555
Swivelling range of arm and drilling head	°	360
Drilling Spindle / Feed Range		
Taper in spindle	MT	5
Spindle travel, max.	mm	350
Number of spindle speeds	n	15
Spindle speed range	rpm	16-800
Number of feed rates	n	6
Feed range	mm/rev	0.05-0.5
Power of Main Drive kW	kW	4.0
Total Connected Load KVA	KVA	7.5
Bed Dimensions		
Length	mm	2,610
Width	mm	1,050
Dimensions of the Machine		
Length	mm	3,430
Width	mm	1,325
Height	mm	3,400
Machine weight incl. standard accessories	kg	6,570

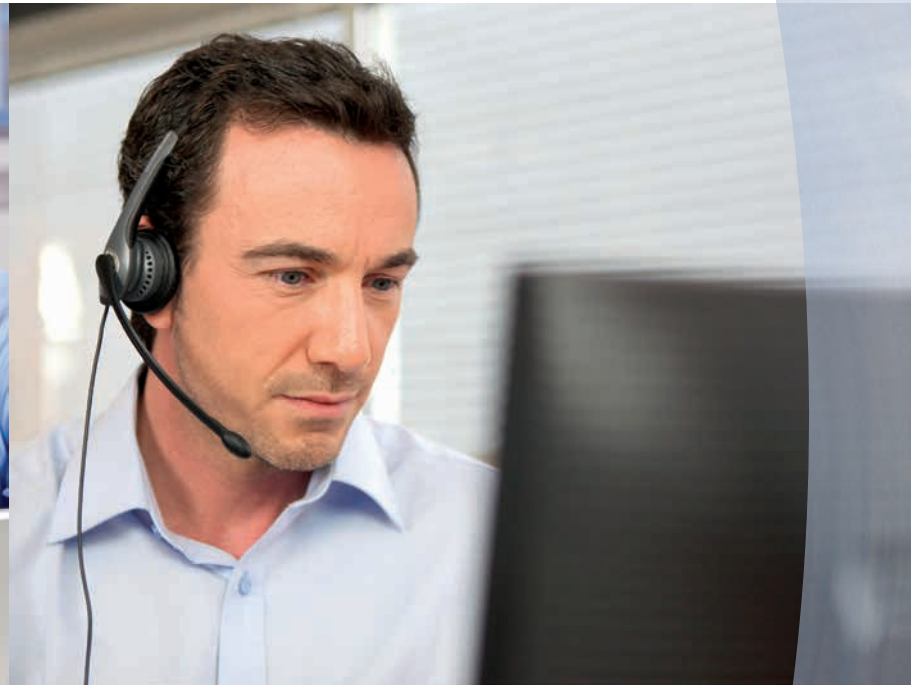
The Radial Drilling Machines

VO75 / VO100 / VO104



Straightforward handling, extreme stability, powerful drilling performance, heavy-duty build quality and large traversing range are the predominant features of WEILER radial drilling machines. The VO range of radial drilling machines has been designed for the drilling, boring, reaming and thread cutting of large-sized workpieces. They are used for one-off as well as batch production and are also suitable for integration into production lines

Technical Data		VO75	VO100	VO104
Working Range				
Max. drilling diameter in steel, strength up to 600 N/mm ²	mm	75	100	100
Max. thread cutting in steel, strength up to 600 N/mm ²	M	75x4	76x6	76x6
Vertical arm travel	mm	950	1.155	1.535
Drilling head travel on radial arm	mm	1,614	1,985	3,470
Drilling Spindle / Feed Range				
Spindle reach, max./min.	mm	2,000/386	2,565/580	4,000/530
Distance from spindle nose to base plate max./min.	mm	2,000/670	2,200/570	2,720/710
Drilling spindle outer diameter	mm	72	110	110
Taper in spindle	MT	5	6	6
Spindle travel, max.	mm	380	475	475
Number of spindle speeds		16	32	32
Spindle speed range	rpm	11.2-2,000	9-2,800	9-2,800
Number of feed rates		16	16	16
Feed range	mm/rev	0.035-2.8	0.035-2.8	0.035-2.8
Power of Spindle Motor	kW	7.5	11.0 (15.0)	11.0 (15.0)
Total Connected Load	kVA	9.3	13 (16.8)	13 (16.8)
Dimensions of the Machine				
Length	mm	3,700	4,500	6,210
Width	mm	1,375	1,456	1,800
Height	mm	4,090	4,600	5,130
Machine weight incl. standard accessories	kg	6,900	12,100	19,500



Programming and Learning on a PC

WEILER PC-Version

- ▶ The graphical user interface (GUI) on the PC is identical with the machine GUI
- ▶ Simple creation of programs for turned parts with contours of any complexity
- ▶ Offline training software
- ▶ Programs can consist of any number of WEILER cycles and DIN (ISO) blocks
- ▶ Simulation either as wire model or solid model
- ▶ Import workpiece contours from DXF files (CAD drawings)
- ▶ The ready-to-run program is transferred to the machine control via USB or Ethernet interface

Teleservice

- ▶ Teleservice is a hotline service for fast support to issues relating to your machine
- ▶ You are directly linked to the WEILER Service Hotline
- ▶ The GUI of your machine is transmitted to the WEILER Service Centre
- ▶ This, for example, enables us to provide you support when you are writing programs
- ▶ We can diagnose the operating condition of your machine online
- ▶ We supply the machine with modem and software. You only need to provide a telephone connection

WEILER Committed to Sustainability and Energy Efficiency!



Environmental pollution, climate change, rapidly increasing raw material and energy prices:

Buzzwords and issues that have been with us a long time. But the global interdependencies and effects on everyone concerned have never been more intensively researched, analyzed and felt than they have been in the past few years.

As one of Europe's leading lathe manufacturers we take our responsibility towards sustainability and resource conservation for our customers and ourselves extremely seriously.

WEILER

- ▶ conserves resources during production and
- ▶ supplies products that conserve resources

WEILER Conserves Resources During Production:

- ▶ Program to reduce energy demand in all areas of the production plant
- ▶ Utilization of alternative sources of energy (photovoltaic) and waste heat
- ▶ Program to reduce CO2 emissions (savings of approx. 30% compared to 2005!)

- ▶ "Made in Germany" high degree of vertical integration as well as sourcing of parts from regional suppliers not only ensures quality – it also prevents global parts tourism.
- ▶ Finite element based module design for optimum module rigidity and at the same time reduction of the moving mass
- ▶ The quality relevant machine components are designed and dimensioned to ensure long-term accuracy and retention of value
- ▶ Machines conceived for ease of set-up and maintenance
- ▶ Use of re-usable materials

During Operation of the Products:

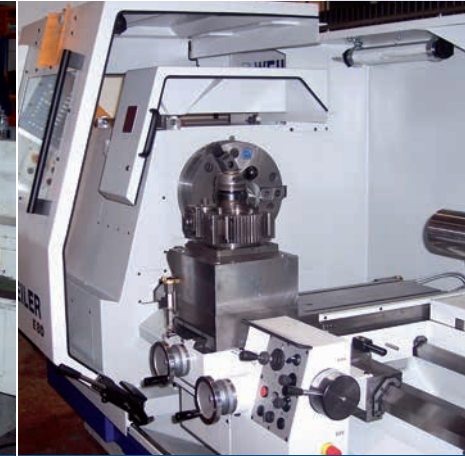
- ▶ Energy efficiency with e-TIM:
 - Timer-controlled standby mode
 - Intelligent drive management
 - Machine mode specific energy management
- ▶ Intelligent, sensor-controlled heat compensation to avoid machine warm-up times
- ▶ Reduction of unscheduled downtime through the proverbial reliability of WEILER machines

Retrofit & Co.: Your WEILER – As Good As New

42/43



before



after

Service

- ▶ Training of your operating personnel
- ▶ Long lifetimes and long-term precision through WEILER original spare parts and specially trained service personnel
- ▶ Increased productivity through high availability of spare parts and fast reaction times

General Overhauls

- ▶ Specialist refurbishment in the original WEILER production process
- ▶ Geometric acceptance according to DIN 8605 / 8606
- ▶ 6 months warranty from WEILER

Please feel free to contact us if you have any further questions:

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WEILER

www.weiler.de



User videos are available
on the WEILER Channel at



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