

The Complete Range



 **WEILER**

A Symbol for  
Success in Training  
and Industry

 **WEILER**

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Service

Radial Drilling Machines

CNC Lathes

Cycle-Controlled Lathes

Conventional/Servo-Conventional Lathes



There is a solid basis for WEILER being a synonym for precision, quality and reliability – a qualified, motivated staff, ever mindful of their responsibility to the customer, and a management team dedicated to maintaining stability and continuity.

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

That is why we design and develop our machines with the greatest attention to detail for long term precision, 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 in product selection and top notch training. And that is why we provide prompt and professional support for repair and maintenance work through comprehensive spare part supply and well trained service technicians – an entire WEILER machine lifetime.

Just as you would expect from the best possible partner!

# The E-Series

## Cycle-Controlled Precision Lathes

4/5

E30



Particularly suitable for vocational training through to prototype production

E40



The range of applications for this robust machine extends from tool making through to small scale production

### Innovative performance

Based upon the proven WEIPERT lathe concept, over 4,500 E-machine installations provide uninterrupted evidence of total customer satisfaction. An outstanding feature is the simple, job-oriented operation which, at the same time, still allows fast adaptability to countless possible applications. This is achieved through a wide range of cycles which can be called individually or automatically run as a "sequence". A control concept that means that one-off and small batch workpieces can be produced with the highest precision in the shortest possible time.



# The E-Series

## Cycle-Controlled Precision Lathes

6/7

E50



The multi-purpose machine for high-performance turning



E60



### The Machines

- ▶ Digital drive technology and SIEMENS control with user-friendly 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 output drive
- ▶ Variable, three-phase axis drives with rigid precision bearings for the ballscrews enable high feed thrusts
- ▶ Cross switch with logical 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 multiplex threads
- ▶ Finishing of existing threads
- ▶ Orientated main spindle "stop"
- ▶ Main drive output display
- ▶ Override switch for feed rate and main spindle speed adjustment
- ▶ Automatic centralized lubrication of the longitudinal and traverse slides as well as ballscrew nuts
- ▶ Toolmakers accuracy in accordance with
  - DIN 8605 for E30 to E80
  - DIN 8606 for E90 to E120
  - DIN 8607 for E150 to E175

# The E-Series

## Cycle-Controlled Precision Lathes

8/9

E70  
E80



High-performance with spindle bores between 106 and 216 mm

### Automated Cycles/Control

- ▶ Practical data input in clearly arranged screens. No further CNC knowledge necessary.
- ▶ Cycles for:
  - Longitudinal and transverse machining
  - Thread cutting of various types of threads
  - Radius turning
  - Taper turning
  - Internal and external thread/grind undercutting cycles
- Groove cutting
- Drilling and tapping
- Bolt circle and thread drilling with the input of any angle
- Graphically supported contour programming with automated intersection point calculation
- ▶ Copying and deletion of cycles
- ▶ Preparing, editing and executing DIN (ISO) programs
- ▶ Large memory capacity for processing cycles and tool data
- ▶ Input/output of data through V24/RS232 interface
- ▶ USB interface
- ▶ Ethernet interface

# The E-Series

## Cycle-Controlled Precision Lathes

10/11

E 90  
E 110  
E 120

E 150  
E 175



Heavy-duty and robust for workpiece weights up to 12,000 kg and spindle bores between 128 and 580 mm



### Automated Cycles/Control

Even without CNC experience the intelligent 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, only better.
- ▶ Complicated workpieces can be machined in the same way as on a conventional machine, only faster.
- ▶ Complex workpieces can be produced in the same way as on a CNC machine, only easier.

## The E-Series Cycle-Controlled Precision Lathes

12/13

Technical Data		E30	E40	E50	E60	E70	E80	E90	E110	E120	E150	E175
Working Range												
► Distance between centres	mm	750	1,000	1,000-2,000	1,000-2,000	1,000-4,500	1,000-4,500	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
► Swing over cross slide	mm	160	200	340	400	430	510	530	730	830	1,030	1,280
► Cross slide travel	mm	180	260	340	380	410	410	590	590	590	790	790
► Width of bed	mm	240	330	350	380	480	480	600	600	600	830	830
Main Spindle												
► Spindle nose according to DIN 55027 (DIN ISO 702-3)	size	5	6	8	8	11	11	11	11	15	15	15
► Spindle bore	mm	40.5	66	83	83	106*	106*	128**	128**	165***	165****	165****
► Spindle diameter in front bearing	mm	70	110	120	120	150	150	178	178	235	235	235
Main Drive												
► Drive power at 60 %/100 %	kW	11/9	20/17	20/17	25/20	37/30	37/30	45/37	45/37	45/37	65/51	65/51
► Max. torque at spindle	Nm	165	450	1,500	1,700	3,150	3,150	6,000	6,000	8,000	10,700	10,700
► 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
Feed Range												
► Longitudinal feed force	N	6,000	10,000	10,000	12,000	20,000	20,000	20,000	20,000	20,000	30,000	30,000
► Longitudinal/cross rapid traverse	m/min	8/4	8/4	10/5	10/5	10/5	10/5	10/5	10/5	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
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
Tailstock												
► Tailstock quill diameter	mm	50	65	80	100	115	115 (140)	140	140 (180)	140 (180)	180	180
► Tailstock quill taper	MT	3	4	5	5	6	6	6	6	6	metr. 100	metr. 100
Machine accuracy												
► Acceptance accuracy	DIN	8605	8605	8605	8605	8605	8605	8606	8606	8606	8607	8607
*Spindle bore 165, 216 mm on request		**Spindle bore 165, 262, 362 mm on request				***Spindle bore 262, 362 mm on request				****Spindle bore 262, 362, 450, 580 mm on request		



# The C-Series

## C30 / C50 Servo-Conventional Precision Lathes

14/15

C30  
C50



### Precise

- ▶ 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  $\mu$ -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 cycles

### 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

### Cost-Effective

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

Technical Data		C30	C50
▶ Distance between centres	mm	750	1,000/2,000
▶ Swing over bed	mm	330	570
▶ Swing over cross slide	mm	160	340
▶ Cross slide travel	mm	180	340
▶ Bed width	mm	240	350
▶ Turning tool section (height x width)	mm	20 x 20	32 x 25
Main Spindle			
▶ Spindle nose according to DIN 55027 (DIN ISO 702-3)	size	5	8
▶ Spindle diameter in front bearing	mm	70	120
▶ Spindle bore	mm	40.5	83
▶ Taper in spindle nose	MT	5	metric 90
Main Drive			
▶ AC Drive			2-step gearbox
▶ Drive power at 60 %/ 100 %	kW	9/7	15/12
▶ Spindle speed range	rpm	1-4,500	1-2,500
Feed Range			
▶ AC Servo drives			
▶ 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
▶ Rapid motion longitudinal/transverse max.	m/min	6/3	6/3
Thread Cutting Range			
▶ Metric threads	mm	0.1-400	0.1-400
▶ English threads	TPI	56-1/4	56-1/4
▶ Module threads	mm	0.125-28	0.125-28
▶ DP threads	DP	224-1	224-1
▶ Number of thread courses	max.	99	99
Tailstock			
▶ Quill diameter	mm	50	80
▶ Quill travel	mm	130	200
▶ Quill taper	MT	3	5
<b>Weight</b>	kg	1,300	3,200/3,700
Dimensions			
▶ Length, width, height	mm	1,750/1,350/1,650	CD 1,000 mm 2,850/2,000/1,800 CD 2,000 mm 3,850/2,000/1,800



# The Conventional Multi-Purpose Precision Lathes

16/17

## Primus VC

Praktikant GS  
Praktikant VC



### Precision and Efficiency

The Primus VC is an ideal choice for countless applications requiring one-off or small batch production, in workshops and industrial environments, for apprentice and vocational training as well as in tool and fixture manufacturing.

- ▶ Automatic handwheel release
- ▶ Lead screw and feed rod cover
- ▶ Spindle brake
- ▶ Numerous accessories included in the safety functions

### Drive VC

The machine is equipped with a maintenance-free, three-phase asynchronous motor and a current and speed regulated frequency converter (VC) with actual value feedback – infinitely variable speed settings.

### Position Display for VC-Machines

- ▶ Fading out of the axes values via key switch
- ▶ Speed limitation via key switch
- ▶ Decoupling of Z and Zo axis
- ▶ 99 tool zero positions

### Drive GS

The machine is equipped with a reversible polarity brake motor. 16 main spindle speeds can be selected as fixed speed settings.



## Mechanical System

- ▶ High precision and 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 8" 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 learning level

# The Conventional Multi-Purpose Precision Lathes

20/21

Commodor  
Commodor AC



Commodor 230  
Commodor 230 AC



## 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.

## Bed

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



## 22/23

Technical Data		Primus VC	Praktikant GS	Praktikant VC	Praktikant VC <sup>plus</sup>	Condor VC <sup>plus</sup>	Commodor	Commodor AC	Commodor 230	Comm. 230 AC
Working Range										
► Distance between centres	mm	500	650	650	650	800	1,000	1,000	1,000	1,000
► Centre height	mm	140	160	160	160	180	180	180	230	230
► Swing over bed	mm	280	320	320	320	360	380	380	475	475
► Swing over cross slide	mm	150	190	190	190	190	190	190	270	270
Main Spindle										
► Spindle nose according to DIN 55027 (DIN ISO 702-3)	size	5	5	5	5	6	6	6	6	6
► Spindle diameter in front bearing	mm	70	70	70	70	90	90	90	90	90
► Spindle bore	mm	40.5	40.5	40.5	43	56	56	56	56	56
► Inside taper (similar to DIN 228)	MT	5	5	5	metric 50	6	6	6	6	6
Main Drive										
► Drive power	kW	5	2.9/3.9	10	8	10.5	4	5.5	7.5	11
► Spindle speed ranger	pm	30-4,000 (5,000)	48-2,500	30-4,000 (5,000)	25-5,000	30-4,000	25-2,000	25-2,000	13-2,000	25-2,000
► Number of speeds		stepless	16	stepless	stepless	stepless	18	stepless	24	stepless
Feeds										
► Number of feeds		24	24	24	stepless	stepless	200	200	320	320
► Longitudinal	mm/rev	0.02-0.63	0,02-0.63	0.02-0.63	0.01-6	0.01-6	0.022-0.8	0.022-0.8	0.028-8.2	0.028-8.2
► Transverse	mm/rev	0.006-0.2	0,006-0.2	0.006-0.2	0.003-2	0.003-2	0.011-0.4	0.011-0.4	0.014-4.1	0.014-4.1
Threads										
► 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	0.3-80
► Inch threads	TPI	80-2*	80-2*	80-2*	80-2	80-2	80-2.75	80-2.75	80-0.375	80-0.375
Tailstock										
► Quill travel	mm	85	85	85	85	130	150	150	150	150
► Quill diameter	mm	40	40	40	40	50	60	60	70	70
► Quill taper according to DIN 228	MK	3	3	3	3	3	4	4	4	4
~ Weight (without packaging and without accessories)	kg	780	710	950	1,100	1,400	1,600	1,700	1,900	1,800
* Inch and metric thread pitches 0.45; 0.75; 4.5 and 5.5 are only possible with additional change gears.										

# The Conventional Multi-Purpose Precision Lathes

24/25

DA 210  
DA 260



## Safety

- ▶ Emergency Stop 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 power cut

## Productivity

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

## Intrinsic Value

- ▶ Long life, high resale value
- ▶ Solid quality

Technical Data		DA 210	DA 260
<b>Working Range</b>			
▶ 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
▶ Width of bed	mm	330	330
▶ Cross slide travel	mm	330	330
▶ Top slide travel	mm	130	130
▶ Cross section of turning tool (height x width)	mm	25 x 25	25 x 25
<b>Main Drive</b>			
▶ Drive power at 100 %	kW	5.5	7.5
▶ Max. torque at main spindle	NM	900	1,200
<b>Main Spindle</b>			
▶ Spindle nose according to DIN 55027 (DIN ISO 702-3)	size	6	6
▶ Spindle diameter in front bearing	mm	83	100
▶ Spindle bore	mm	52	71
▶ Taper in spindle nose	mm	metric 57	metric 76
▶ Speed range	rpm	44-2,000	33-1,500*
▶ Number of speeds		12	12
<b>Feed Range</b>			
▶ Longitudinal	mm/rev	0.072-4	0.072-4
▶ Transverse	mm/rev	0.036-2	0.036-2
<b>Tailstock</b>			
▶ Quill diameter	mm	65	65
▶ Quill travel	mm	120	120
▶ Quill taper	MK	4	5
<b>Thread Cutting Range</b>			
▶ Metric threads	mm	0.5-28	0.5-28
▶ Inch threads	TPI	56-1	56-1
<b>Workpiece Weights</b>			
▶ With chuck max.	kg	150	200
▶ With tailstock max.	kg	500	800
▶ With steady rest max.	kg	700	1,000
<b>Weights</b>	kg	1,300/1,550	1,510/1,760/2,050
* Optional 44-2,000			

# Conventional Multi-Purpose Precision Lathes

26/27

DA 210 AC  
DA 260 AC



## Dependability and Ease of Use

- ▶ Infinitely variable main drive in conjunction with two-speed gearbox
- ▶ Digital display of main spindle speed
- ▶ Emergency Stop 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
<b>Working Range</b>			
▶ 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
▶ Width of bed	mm	330	330
▶ Cross slide travel	mm	330	330
▶ Top slide travel	mm	130	130
▶ Cross section of turning tool (height x width)	mm	25 x 25	25 x 25
<b>Main Drive</b>			
▶ Drive power at 100 %	kW	5.5	5.5
<b>Main Spindle</b>			
▶ Spindle nose according to DIN 55027 (DIN ISO 702-3)	size	6	6
▶ Spindle diameter in front bearing	mm	83	100
▶ Spindle bore	mm	52	71
▶ Taper in spindle nose	mm	metric 57	metric 76
▶ Speed range	rpm	20-2,500	20-2,500*
▶ Number of speeds		2	2
<b>Feed Range</b>			
▶ Longitudinal	mm/rev	0.072-2	0.072-2
▶ Transverse	mm/rev	0.036-1	0.036-1
<b>Tailstock</b>			
▶ Quill diameter	mm	65	65
▶ Quill travel	mm	120	120
▶ Quill taper	MK	4	5
<b>Thread Cutting Range</b>			
▶ Metric threads	mm	0.5-14	0.5-14
▶ Inch threads	TPI	56-2	56-2
<b>Workpiece Weights</b>			
▶ With chuck max.	kg	150	200
▶ With tailstock max.	kg	500	800
▶ With steady rest max.	kg	700	1,000
<b>Weights</b>	kg	1,450/1,700	1,650/1,900/2,200

\* Optional 44-2,000



# The CNC Precision Lathes

28/29

DZ40 CNC



DZ45 CNC  
DZ65 CNC



## Precision

- ▶ Rigid substructure filled with concrete
- ▶ Linear measuring scale on X-axis
- ▶ High quality, heavily rib 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

## Siemens Sinumerik 840D Control

- ▶ 12.1" TFT flat panel screen
- ▶ Floppy disk drive
- ▶ CNC full-range keyboard
- ▶ PCU 50 module with 1 GB user memory at DZ45/65
- ▶ NCU 720 module with 3 MB user memory at DZ35/40
- ▶ Network interface to enable optional tele-diagnosis

## Productivity

- ▶ Powerful, dynamic axis and spindle drives
- ▶ Fast rapid traverse speeds
- ▶ Digital drive technology
- ▶ High repetition accuracy through direct path measurement system in the X-axis
- ▶ Easy to service

## Complett machining of workpieces

- ▶ C-axis for main spindle and NC-subspindle
- ▶ Live tooling for axial and radial machining
- ▶ NC-subspindle with 42 mm capacity in draw and thrust tube at DZ45/65
- ▶ NC-subspindle with 32 mm capacity in draw and thrust tube at DZ35/40

		DZ40 CNC				DZ45 CNC					DZ65 CNC				
Working Range		AR	ARY	AG	AGY	R	AR	ARY	AG	AGY	R	AR	ARY	AG	AGY
► Maximum swing over bed	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
► Max. turning diameter	mm	180	180	180	180	240	240	240	240	240	240	240	240	240	240
Main Drive		Spindle Motor				Spindle Motor					Spindle Motor				
► Power at 60 % duty cycle	kW	11.6	11.6	11.6	11.6	21.5	21.5	21.5	21.5	21.5	27	27	27	27	27
► Spindle speed	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 according to DIN 55026 (DIN ISO 702-1)	size	5	5	5	5	5	5	5	5	5	6	6	6	6	6
► Chuck diameter	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	30/30/20	30/30/20	30/30/20	30/30/20	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															
► Center fixture	MT	4	4			4	4	4			4	4	4		
► Supporting force	daN	270	270			530	530	530			530	530	530		
Subspindle		Spindle Motor				Spindle Motor					Spindle Motor				
► Spindle nose according to DIN 55026 (DIN ISO 702-1)	size			4	4				5	5				5	5
► Chuck diameter	mm			130	130				160	160				160	160
► Bar capacity in draw/thrust tube	mm			32	32				42	42				42	42
► Power at 60 % duty cycle	kW			11.6	11.6				17	17				17	17
► Spindle speed	rpm			8,000	8,000				6,000	6,000				6,000	6,000
► Torque at 60 % duty cycle	Nm			65	65				85	85				85	85
Tool Turret															
► Number of tool stations (not live/live)		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			
► Reference circle diameter	SW			300	300			300	300	300			300	300	300
► Tool shank 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 according to DIN 69880	mm	25	25	25	25	30	30	25	25	25	30	30	25	25	25
► Power at 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
Control		Sinumerik 840 D SL	840 D SL	840 D SL	840 D SL	840 D	840 D	840 D	840 D	840 D	840 D	840 D	840 D	840 D	840 D
Dimensions															
► 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			
► Center line 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 Radial Drilling Machines

## VOM50



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

It's the best choice for your drilling jobs – even for hard to reach places.

With the flexibility of 7 axes, drilling jobs can be executed in any position. The user-friendly placement of control elements and simple operation ensure stress-free work.

Technical Data		VOM50
Working Range		
▶ Max. drilling diameter in steel	mm	50
▶ Max. drilling diameter in gray cast iron	mm	65
▶ Max. thread cutting in steel, strength up to 600 N/mm²	M	48
▶ Vertical arm travel, max.	mm	1,250
▶ Horizontal arm travel, max.	mm	900
▶ Spindle reach, max./min.	mm	2,070/1,170
▶ Distance from spindle nose to base plate, max./min.	mm	1,555/305
Drilling Spindle		
▶ Swivelling range of drilling head	°	360
▶ Taper in spindle	MT	5
▶ Spindle travel, max.	mm	350
▶ Number of spindle speeds		15
▶ Spindle speed range	rpm	16 – 800
▶ Number of sleeve feed rates		6
▶ Feed rate range of sleeve	mm/rev	0.05 – 0.5
Power of main drive	kW	4.0
Overall power consumption	KVA	7.5
Main Dimensions and Weight		
Bed Dimensions		
▶ Length	mm	2,610
▶ Width	mm	1,050
▶ Height	mm	260
Max. Working Dimensions		
▶ Length	mm	5,740
▶ Width	mm	4,540
▶ Height	mm	3,400
Machine weight incl. standard equipment	kg	6,570



# The Radial Drilling Machines

34/35

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 drilling, boring, reaming and thread cutting of large-sized workpieces. They are used for one-off as well as series manufacturing and are also suitable for integration into production lines.

Technical Data		VO75	VO100	VO104
<b>Working Range</b>				
► Max. drilling diameter in gray cast iron with strength up to 250 N/mm <sup>2</sup>	mm	90	110	110
► Max. thread cutting in steel with strength up to 600 N/mm <sup>2</sup>	M	75 x 4	76	76
► Max. thread cutting in in gray cast iron with strength up to 250 N/mm <sup>2</sup>	M	85 x 4	100	100
► Vertical arm travel max.	mm	950	1,155	1,535
► Drilling head travel on radial arm max.	mm	1,641	2,015	3,470
► Spindle outer diameter	mm	100h6	110h6	110h6
► Spindle nose	MT	6	6	6
► Spindle stroke 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 feeds		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 power of machine	kVA	9.3	12.8 (16.8)	12.8 (16.8)
► Spindle working range max./min.	mm	2,000/386	2,565/550	4,000/530
► Distance spindle nose/ mounting plate max./min.	mm	1,803/473	2,200/570	2,720/710
► Machine length	mm	3,700	4,500	6,010
► Machine width	mm	1,456	1,456	2,050
► Machine height	mm	4,600	4,600	5,130
► Machine weight incl. standard equipment	kg	6,900	12,100	19,500

# WEILER Training Software for the E-Series

## WEILER Teleservice

36/37

### Programming and Learning on a PC



#### WEILER PC-Version

- ▶ The screen on the PC is identical with the screen on the machine
- ▶ Simple creation of programs for turned parts with contours of any complexity
- ▶ Offline training software
- ▶ Programs can consist of WEILER cycles and DIN (ISO) blocks
- ▶ Simulation either as wire or solid model
- ▶ Import workpiece contours from DXF files (CAD drawings)
- ▶ Programming parallel to machine operation, consequently less machine standstill periods
- ▶ The ready-to-run program can be transferred to the machine control via USB or Ethernet interface, or data carrier



#### Teleservice

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

# WEILER Committed to Sustainability and Energy Efficiency



Environmental pollution, climate change, fast increase in demand for energy and resources, finite supply of fossil fuels, increasing energy costs are phrases and issues that have been with us for 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 ourselves and our customers extremely seriously.

## WEILER

- Conserves resources during production
- 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 CO<sub>2</sub> emissions (savings of 30% compared to 2005)

- "Made in Germany" high degree of vertical integration as well as parts sourcing from regional suppliers not only ensures quality – it also prevents global parts tourism.

## WEILER Products Conserve Resources

### In the Product Conception

- Finite element based module design for optimum module rigidity and at the same time reduction of the moving mass
- Conception and design of the quality relevant machine components to ensure long-term accuracy and retention of value.
- Machines conceived for ease of set-up and maintenance
- Use of re-usable materials

### In the Products Themselves

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

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

38/39



... after years of hard work creating value and the inherent wear...

## Service

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



... your WEILER also deserves a new lease of life

## General Overhauls

- Specialist refurbishment in the original WEILER production process
- Geometric acceptance according to DIN 8605/06
- 6 months warranty from WEILER

Any questions? We welcome your call:

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E-mail: [service@weiler.de](mailto:service@weiler.de)



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