

# TECHNICAL DATA

## Standard equipment

- LED machine light in the rear wall
- Taper sleeve
- Fixed centring tip
- Multisuisse quick-change steel holder
- Movable chuck protection hood with limit switch monitoring
- Movable splash guard
- Chip pan extractable
- Longitudinal fixed stop
- Central lubrication system
- 5 reserve shear pins for lead screw
- Set of operating keys

## Special options

- 15" WEILER touchscreen WTS
- Multisuisse quick-change steel holder size B (Praktikant)
- Three and four-jaw chucks
- Faceplates
- Various types of chuck / pull collets
- Electrically monitored protection for working with chuck / pull collets when the chuck guard is open
- Hollow spindle stop
- Follow rest with slider jaws
- Steady rest with roller or slider jaws
- Travelling centring tip
- Lever drilling device for tailstock
- Tailstock - inclined turret head
- Coolant system
- Additional machine lamp
- e-LISSY
- Electronic multiple stops
- Graphical support for taper and radius turning (WTS)
- Special voltage over series transformer
- Full splash guard with laminated glass pane
- Power point 230 V
- Further accessories upon request

## Electrical equipment

- Operating voltage 3 x AC 400 V N/PE/50 Hz
- Control voltage 24 V
- Contactor and drive control in the base of the lockable control cabinet
- All safety-relevant components are electrically locked
- Dual-channel safety system
- Restart protection in case of power failure or EMERGENCY STOP
- EMERGENCY STOP integrated into the base and headstock cover
- Safety circuit for left and right rotation of the main spindle
- Entering the permissible main spindle speed after switching on the machine
- Controls integrated centrally into the headstock cover
- e-TIM consisting of: Timer-controlled standby operation – automatic shutdown of the machine after a preset time, intelligent drive management – recovery of the braking energy to the power grid, machine status energy management – automatic shutdown of all auxiliary units not required

Working range		Primus VCPlus	Praktikant VCPlus	Condor VCPlus
Distance between centres	mm	500	650	800
Centre height	mm	140	160	180
Swing over bed	mm	280	320	360
Swing over cross slide	mm	150	190	190
Main spindle				
Spindle head DIN ISO 702-3 (DIN 55027)	size	5	5	6
Spindle diameter in front bearing	mm	70	70	90
Spindle bore	mm	43	43	57
Inner taper of main spindle	metr.	ME 50	ME 50	MK 6
Main drive				
Drive power 100 % duty cycle	kW	5,5	8	10,5
Speed range	min <sup>-1</sup>	25 – 5.000	25 – 5.000	25 – 4.000
Number of gears		1	1	1
Number of speeds		stepless	stepless	stepless
Feed drive				
Number of feeds		stepless	stepless	stepless
Feed range longitudinal/transverse	mm/rev	0,01 – 6/ 0,003 – 2	0,01 – 6/ 0,003 – 2	0,01 – 6/ 0,003 – 2
Thread cutting range				
Metric threads (metric, inch, module, Dp)	mm	0,1 – 20	0,1 – 20	0,1 – 20
Input capability	mm	0,001	0,001	0,001
Tailstock				
Quill diameter	mm	40	40	50
Quill travel	mm	85	85	110
Inner taper of the quill	MT	3	3	3
Dimensions				
Length/Width/Height	mm	1.530/900/ 1.700	1.680/900/ 1.700	2.000/970/ 1.730
Weight	kg	1.050	1.100	1.500

We reserve the right to make technical changes | 07123 · 5.0915.23.90.01.02

# THE NEW GENERATION OF CONVENTIONAL LATHES

## WEILER VCPlus

### Innovative lathes for training and toolmaking



Photograph shows options

User videos are available  
On the WEILER Channel at



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## Primus VCPlus | Praktikant VCPlus | Condor VCPlus



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# THE HIGH-PRECISION COST-SAVING MACHINES USING "GREEN" TECHNOLOGY

## Machines for training and toolmaking

The WEILER VCPlus series combines the highest technical quality – in the form of superior long-term precision – with highly efficient, transparent operating concepts for improved training and production.

The new generation of WEILER lathes is the perfect solution for one-off and small series production thanks to its unique operating concept. In combination with a wide range of diverse tooling systems, the VCPlus series is ideal for training and industrial operations.

### The VCPlus operating concept

All functions important for conventional turning at a glance. This allows quick and easy production of simple contours such as cones and radii.

### Uncomplicated turning

The spindle speed and the feed are infinitely variable. An economical and intelligent solution for all daily applications without compromising safety. For optimal machining conditions.

9" screen – clear presentation – everything at a glance! (optional 15" touchscreen WTS15)



WEILER design: perfect orientation to practice

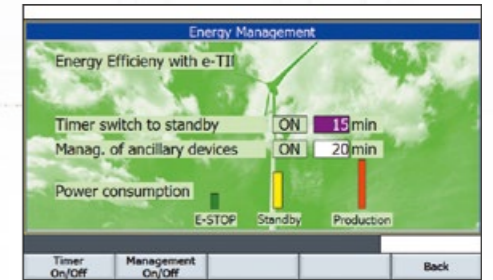
"Green" technology: Standby operation and recovery of braking energy



GS certified  
Guaranteed maximum safety for the machine and original accessories

Easy to maintain thanks to easy access

Photograph shows options



### E-TIM: Reducing energy consumption – what is not needed is switched off!

Individually adjustable timers for components that are not required and feeding back the braking energy to the company grid



PRIMUS VCPlus



CONDOR VCPlus

PRAKTIKANT VCPlus



### Safety

In the conventional area, WEILER trusts the testing and certification system of DGUV (German Social Accident Insurance). How we guarantee maximum safety for the operator:

- Dual-channel safety systems
- Lead and feed screw cover
- GS certified
- Chuck guard tested by bombardment with flying parts

# EXCELLENT BASE – SUBTLE DIFFERENCES: THE VCPLUS MACHINES FROM WEILER



## PRIMUS VCPlus

The space-saving entry-level model in the VCPlus series. Everything that is needed for superior training.

**Centre distance**  
500 mm

**Centre distance**  
280 mm

**Spindle bore**  
43 mm

**Drive power**  
100 % ED: 5,5 kW

**Overall speed range**  
25–5.000 min<sup>-1</sup>



## PRAKTIKANT VCPlus

The all-rounder is ideal for training in actual production environments.

**Centre distance**  
650 mm

**Centre distance**  
320 mm

**Spindle bore**  
43 mm

**Drive power**  
100 % ED: 8 kW

**Overall speed range**  
25–5.000 min<sup>-1</sup>



## CONDOR VCPlus

Large and sturdy design. Learning on a machine for real-world assignments.

**Centre distance**  
800 mm

**Centre distance**  
360 mm

**Spindle bore**  
57 mm

**Drive power**  
100 % ED: 10,5 kW

**Overall speed range**  
25–4.000 min<sup>-1</sup>

Both displays in comparison	VCPlus display	WTS15
Screen	9"	15" touch-screen
Import drawings, videos and sketches		x
Switching the operating screens by swiping		x
Control panels can be freely configured, placed and scaled		x
Three axes (Z and Zo offset or separable)	x	x
Metric/imperial switching	x	x
Radius/diameter switching	x	x
Oriented spindle stop	x	x
Electronic turning against the stop	x	x
Tool/equipment memory for 99 tools	x	x
Zero-point offset	x	x
Constant cutting speed with speed limitation	x	x
Entering the permissible main spindle speed after switching on the machine	x	x
Added speed and feed rate control using a precision potentiometer (override)	x	x
Input of any feed and thread pitch	x	x
Electronic limit switching during thread cutting	x	x
Automatic display of the maintenance intervals	x	x
Power display of the main spindle in per cent (graphical) and kW	x	x
Context help menu for operator support	x	x
It is possible to hide the axis positions	x	x
<b>Options</b>		
Multiple stops longitudinal/transverse in both axis directions 16 20	16	20
Network connection		x
Radius turning with graphical support		x
Taper turning with graphical support	x	x
eLISSY access authorisation	Over separate chip writer	Integrated into WTS15
HDMI port for external monitor		x
Torque monitoring		x
Angular positioning of the main spindle	x	x

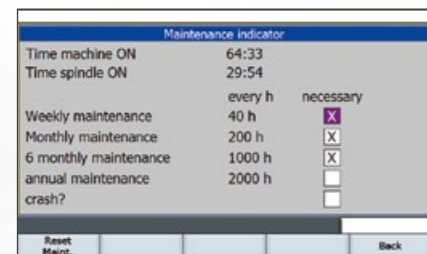
# TWO OPERATING CONCEPTS – MANY OPTIONS

## WEILER VCPlus displays

Clear layout – easy to understand

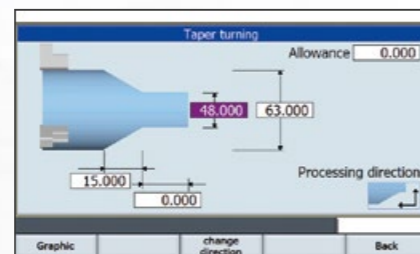
### All relevant information at a glance

The 9" colour screen provides a matchless overview of everything needed for machining. Flat menu layouts allow quick access to all functions. The entry of information is supported by graphic elements and a help menu.



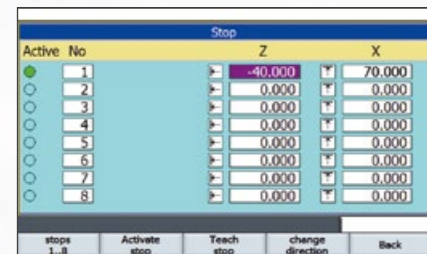
### Maintenance indicator

The WEILER VCPlus indicator helps the user to keep the machine maintained perfectly. Reminders make it easier to keep to the optimal maintenance time.



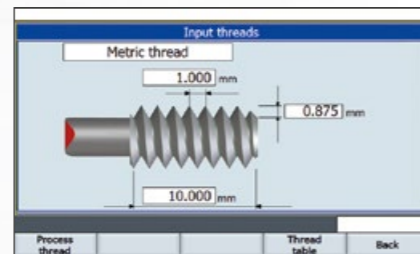
### Taper turning

Easy turning of outer and inner tapers with visual help for pre-turning



### Software extension: Multiple stops

Optionally up to 16 software stops in both axes and +/- directions



### Thread cutting

Cutting new threads or recutting existing ones: The thread pitches can be entered in increments of 0.001 mm.



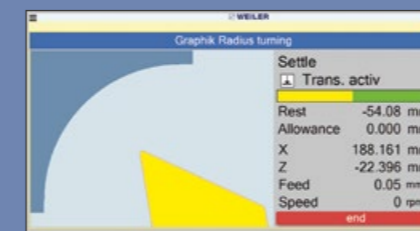
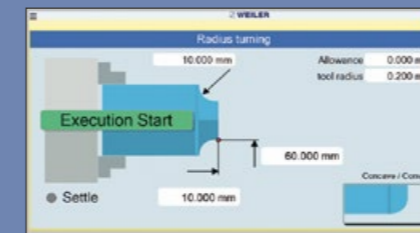
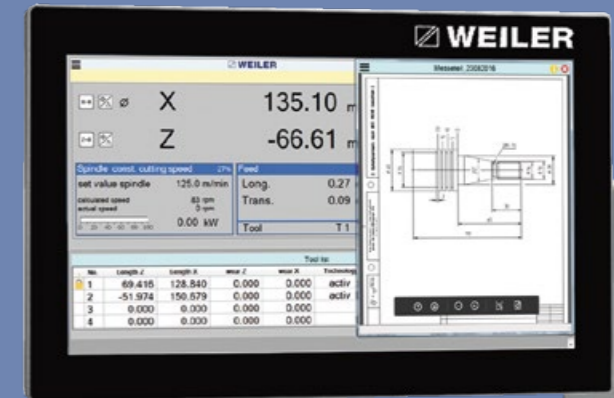
### Authorisation software eLISSY:

Configuration of the machine according to the level of training

## WEILER touchscreen WTS15

Get there faster (option)

The high-resolution 15" touchscreen makes operation a pleasure. Direct selection of functions without detours over submenus. Windows such as tool lists or stops can be displayed additionally and side by side.



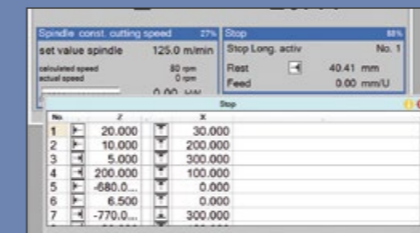
### Taper and radius turning

Visually supported radius and taper turning along the contour. No shaped steel or turning the top slide.



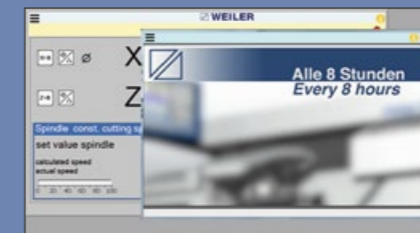
### Drawings can be uploaded over USB or network drive

Enlarging or reducing the drawings directly on the touchscreen; multiple windows can be opened at the same time.



### Turning against the stop

Up to 20 programmable stops in all axes and directions using direct input or teach-in.



### Playing videos for training and maintenance

The users can obtain detailed information directly on the machine about which maintenance must be carried out and when.



### e-LISSY – software-based

e-LISSY is integrated into the display and can be configured directly on the machine: perfect adaptation of the machine to individual training progress.