

Vertical  
turning cell **V-Series**

Fast. Compact.  
Productive.



Modular double- /multi spindle  
turning cell  
with fast handling system  
for soft and hard machining

## V-Series – Compact design

A characteristic feature of the V-Series is the loading and unloading as well as the component transport through a high-speed handling unit for the complete machining of symmetric components up to a diameter of 200 mm.

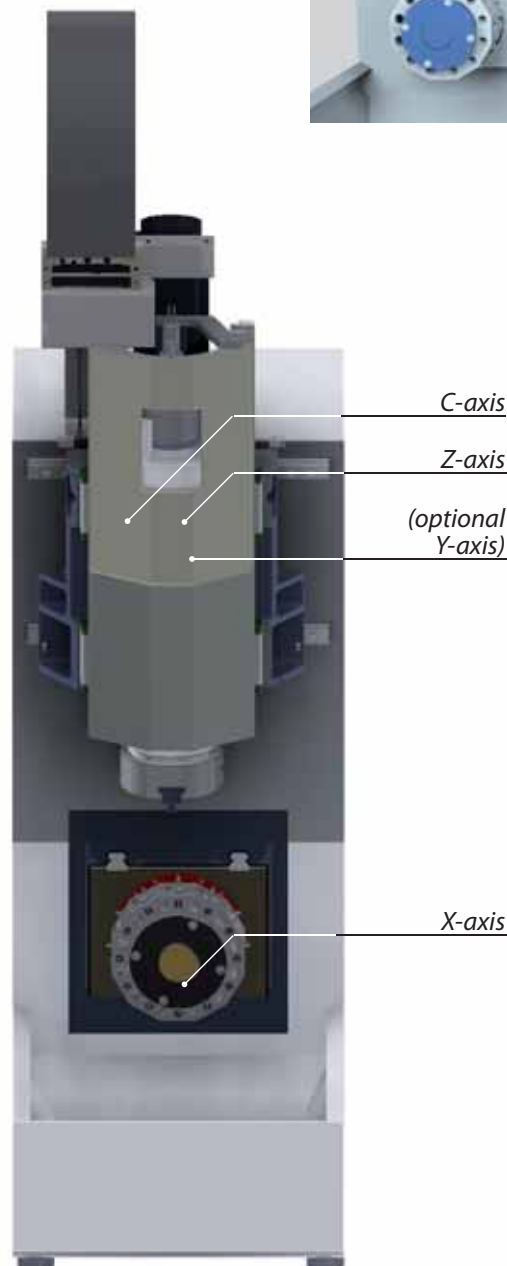
Based on our thermally stable mineralite cast machine column, the Z axis movement as well as the optionally available Y axis is carried out by the motor spindle. The X axis is controlled by movement of the VDI 40 turret.

Because of the modular designed bed (900 mm), part machining is carried out utilizing a minimal floor space and extremely quick part transfer. This proven system can be extended at any time to optimize volume increase or process change.



*Integrated automation:  
NC-controlled handling unit*

*At the same time as the machining of the parts in the turning cell is taking place, additional operations such as deburring, measuring, brushing, marking etc. can be done.*



## V-Series – Highspeed Double spindle turning cell VD 20 with handling system

The double spindle turning cell VD 20 is typically used for twin machining of the same operation (OP10/OP10). Components up to a diameter of maximum 200 mm can be centrally loaded and unloaded between the two spindles, utilizing the high speed handling

unit. In this configuration the identical machining will be executed by the independent spindles.

As an option, the VD20 is available for two sided machining operations (OP10/OP20). In this setup, the maximum diameter of the components is 150 mm. The loading and unloading as well as the turn over function is carried out by the high speed handling unit.



## V-Series – Productivity

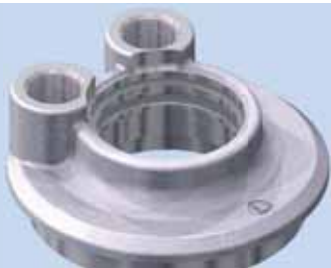
### Triple turning cell V20 *trio*

The VD 20 trio will be used for two-sided complete machining with very different cycle times of the sides 1 and 2 or for the machining of difficult additional operations.

done in the third turning cell. This saves money, reduces the floor space needed and optimizes the workflow.

The complete VD 20 trio will be operated by only one control unit with up to two operator – panels.

Due to the very quick and simple handling of the components, time intensive operations can be divided up by using the third module. This creates a balanced cycle time. Additional operations, that can't be placed in a classical double spindle machine, can easily be



## V-Series – Technical specifications

			V20	VD20	V20 trio
<b>Working space</b>	Max. chuck diameter	mm	250	250	250
	Max. workpiece diameter	mm	200	200	200
<b>Number of spindles</b>			1	2	3
<b>Main spindle</b>	Spindle speed	min -1	6000 / (4.500)	6000 / (4.500)	6000 / (4.500)
	Spindle power ED 100% (S1)	kW	26 / (28,3)	26 / (28,3)	26 / (28,3)
	Torque ED 100% (S1)	Nm	150 / (300)	150 / (300)	150 / (300)
	Spindle nose	DIN	55026 - A6	55026 - A6	55026 - A6
<b>C-axis</b>	Positioning accuracy	arcsec	10	10	10
<b>Number of turret(s)</b>			1	2	3
<b>Turret</b>	Number of tool positions		12	12	12
	Turret switching time	sec.	0,2	0,2	0,2
	Tool holder	DIN 69880	VDI 40	VDI 40	VDI 40
	Driven tools / live tools		optional	optional	optional
	Speed	min -1	10000	10000	10000
<b>Feed axis Z</b>	Rapid traverse	m/min	50	50	50
	Travel	mm	370	370	370
	Ball screw	mm	D 40x20	D 40x20	D 40x20
<b>Feed axis X</b>	Rapid traverse	mm	30	30	30
	Ball screw	mm	D 40x10	D 40x10	D 40x10
<b>Y axis</b>	Travel	mm	+/- 40	+/- 40	+/- 40
	Ball screw	mm	D 50x5	D 50x50	D 50x5
<b>Dimensions</b>	Length	mm	1800	2650	4450
	Depth	mm	2800	2800	2800
	Height	mm	2900	2900	2900
<b>Control system</b>	Siemens 840 D sl				

## Our product range

Vertical Turning

Impact cutting

F-Series: Flexible turning cells

Custom machines  
Transfer lines

P-Series: Pick Up lathes

Automation

V-Series: Vertical turning cells

Engineering  
with passion

