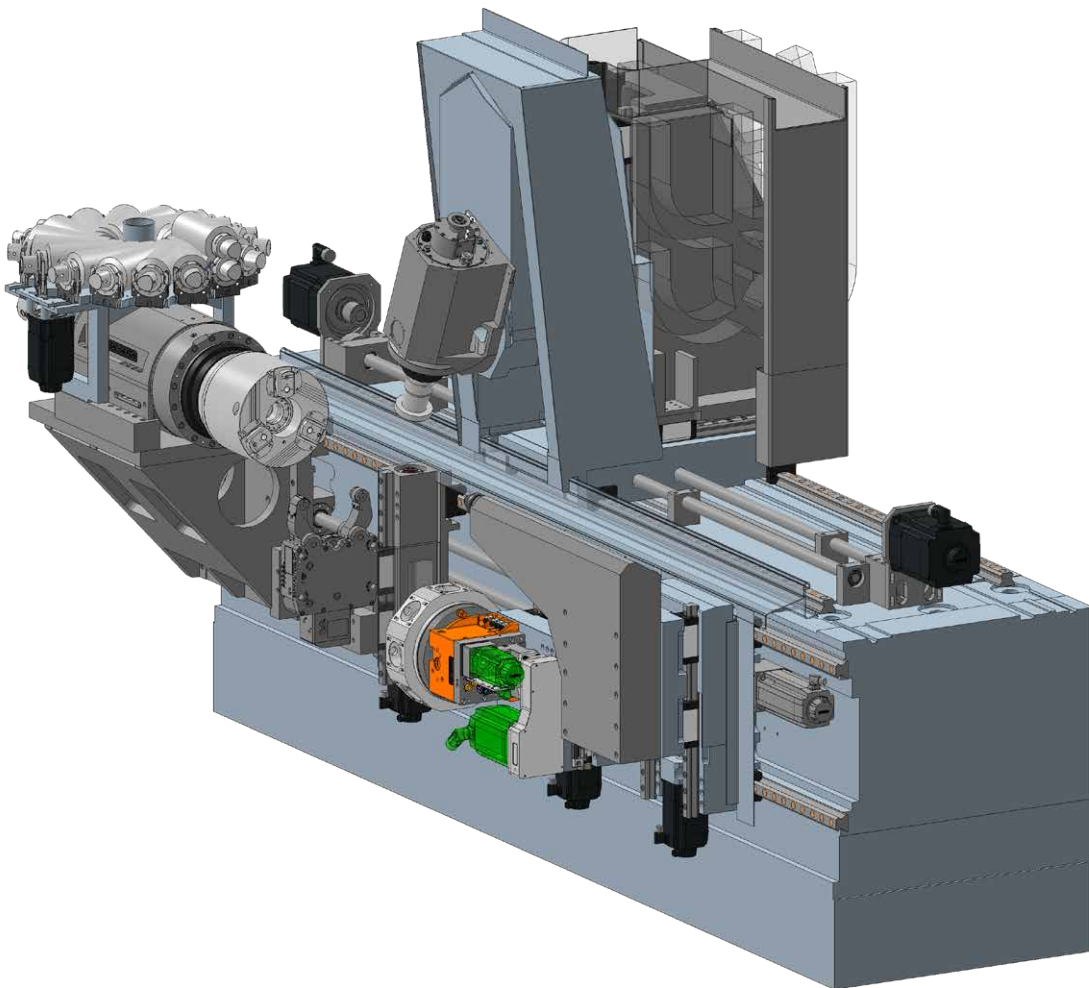




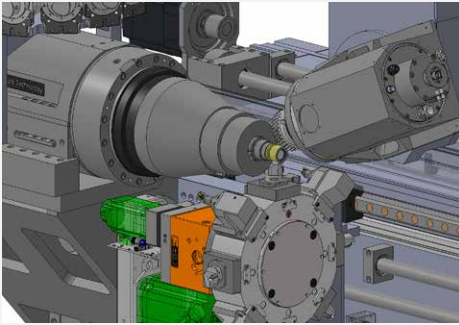
V300 S

Horizontal Multi-Technology Machine for
Long Shaft Machining, Turning, Milling, Hobbing, Skiving

The modular system of the V300 enables the realization of robust, rigid and precise machine variants with high availability.

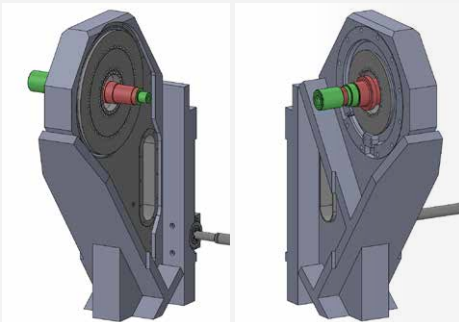


Highlights



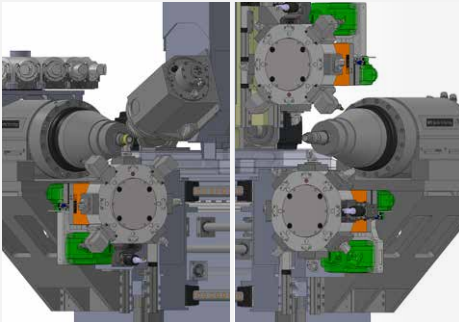
Turning, milling and gear cutting of shafts in one set-up

Skiving and hobbing up to module 6 with the robust motorized milling spindle.



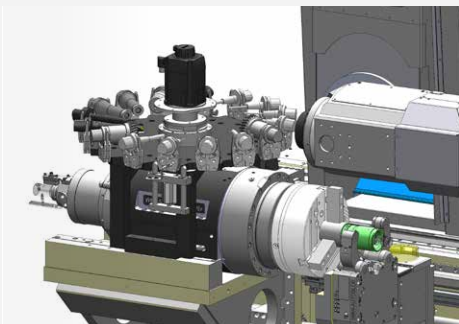
Center drive technology

highly efficient complete machining of shafts by simultaneous machining of both shaft ends by turning, milling and gear cutting



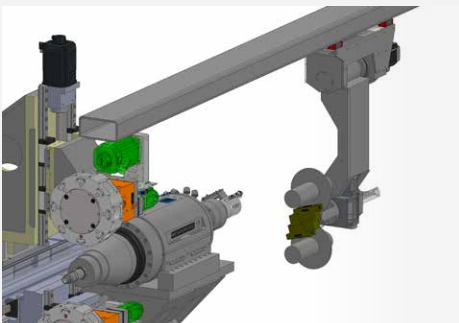
6-side machining

with robust and powerful motorized milling spindles and turrets on main and counter spindles



Automatic tool change in 7 sec.

by disc magazine at the work area - supported by background magazine if necessary



Integrated automation for fast Workpiece change

Workpieces



E-rotor shaft

Material	20 MnCr5
Workpiece dimensions	ø 58 × 303 mm
Processing time	05:55 min
Highlight	6-sided complete machining incl. gear cutting



Gear shaft

Material	16MnCr5
Workpiece dimensions	ø 88 × 343 mm
Processing time	07:45 min
Highlight	6-sided complete machining incl. gear cutting



Truck transmission shaft

Material	16MnCr5
Workpiece dimensions	ø 275 × 385 mm
Processing time	05:15 min
Highlight	Complete turning fully auto- matic



Truck transmission shaft

Material	42CrMo4
Workpiece dimensions	ø 186 × 462 mm
Processing time	08:30 min
Highlight	6-sided complete machining incl. gear cutting



Truck transmission shaft

Material	16MnCr5S
Workpiece dimensions	ø 125 × 500 mm
Processing time	03:00 min
Highlight	Complete turning machining in OP10 and OP 20

Technical Specifications

Powerful Milling Spindle with B-swiveling axis; ATC with 16 tools

Retractable steady rest: Switching between steady rest and headstock

Retractable tailstock: Axial machining with milling spindle

Powerful lower turret

Machine dimensions

length without (with) chip conveyor	[mm]	4500 (6550)	
height	[mm]	2850	
depth without (with) e-cabinet chiller	[mm]	2950 (3100)	
weight	[kg]	21000	

Max. workpiece dimensions

spindle nose to tailstock tip distance	[mm]	1600	
max. workpiece length (assumed chuck height of 200 mm)	[mm]	1350	
max. chuck diameter	[mm]	315	
max. Workpiece diameter	[mm]	250	

W1: Upper ZYXB slide with milling spindle

Z1 Upper slide Z travel	[mm]	2250	
Y1 Upper slide Y travel	[mm]	300	
X1 Upper slide X travel	[mm]	460	
B1 Upper slide B travel	[°]	+ / -105	

W5: Lower ZX steady rest slide

Z5 Lower slide Z travel	[mm]	1550	
X5 Lower slide YX travel	[mm]	215	

W3: Lower ZX turret slide

Z3 Lower slide Z travel	[mm]	1550	
X3 Lower slide YX travel	[mm]	215	

W4: Lower XZ slide for tailstock

Z4 Lower slide Z travel	[mm]	1350	
X4 Lower slide YX travel	[mm]	215	

Axis force / feed

Slides

max. acceleration	[m/s ²]	5	
max. feed speed upper ZYXB slide TC1	[m/min]	40	
max. feed speed lower slide	[m/min]	30	
continious / max. feed force	[N]	7500 / 15000	

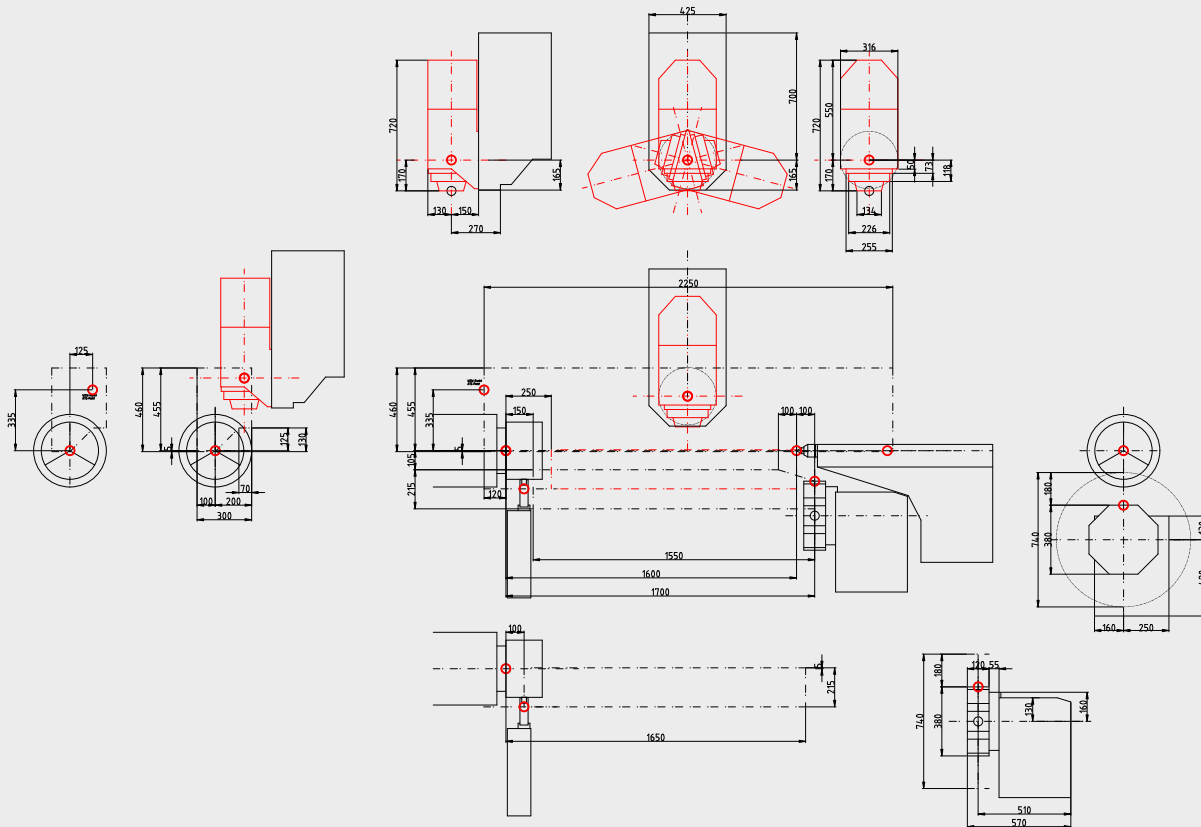
B-Axis

max. rot. Speed	[1/min]	40	
continious / max. torque	[Nm]	1200 / 2200	
clamping torque	[Nm]	2500	

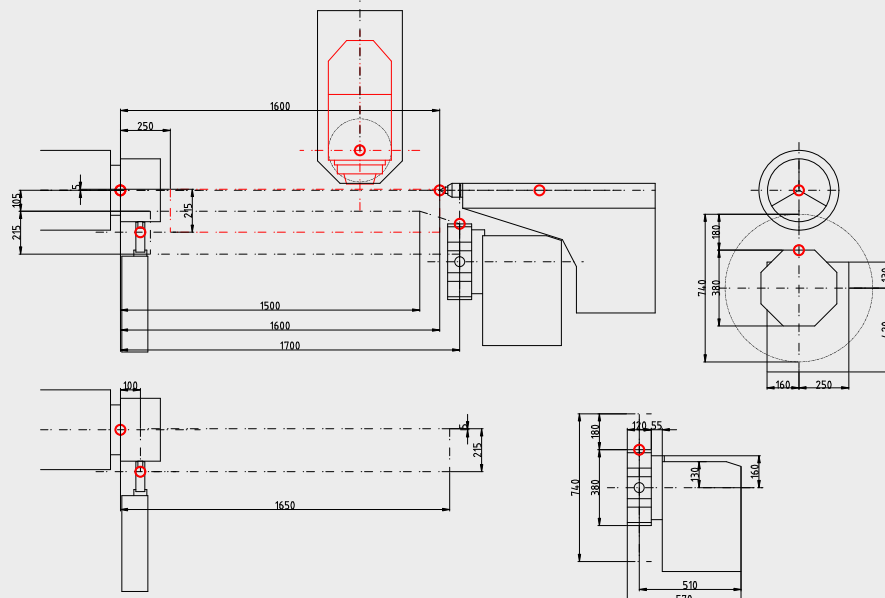
Spindles			
Turning spindle 1 (1093-6WV11), main or counter spindle, grease lubrication	[1/min]	6000	
front bearing ID	[mm]	100	
continious / max. torque	[Nm]	100 / 130	
continious / max. power	[kW]	17 / 22	
center drive width (=minimum workpiece length)	[mm]	200	
Turning spindle 2 (1147-8WS1), main or counter spindle, grease lubrication	[1/min]	3500	
front bearing ID	[mm]	150	
continious / max. torque	[Nm]	820 / 1100	
continious / max. power	[kW]	58 / 65	
Milling spindle 202B, C8 (HSK100), grease lubrication	[1/min]	4500	
front bearing ID	[mm]	120	
continious / max. torque	[Nm]	136 / 210	
continious / max. power	[kW]	24 / 32	
clamping torque for turning / MultiTool-Operation	[Nm]	900	OPTION
Milling spindle AS180, HSK63/C6, oil-air-lubrication	[1/min]	20000	
front bearing ID	[mm]	80	
continious / max. torque	[Nm]	85 / 130	
continious / max. power	[kW]	25 / 35	
clamping torque for turning / MultiTool-Operation	[Nm]	600	OPTION
Spindles for inner / outer grinding available on request			
ATC			
Tool disc magazin			
no. of tools C8 / HSK63	[-]	16	
max. tool diameter / length (depends on the size of neighbouring tools)	[mm]	120 / 300	
max. tool weight	[kg]	10	
Higher tool capacity by background ATC (on request)			
no. of tools HSK63 / C6	[-]	60 / 90 / 120	
no. of tools HSK100 / C8	[-]	24 / 48 / 72	
max. tool dimensions / weight		see above	
Turret (example)			
VDI 40 Turret			
no. of tools / interface	[-]	12 x VDI 40	
max. tool length upper / lower slide	[mm]	240 / 180	
continious / max. torque	[Nm]	25 / 45	OPTION
continious / max. power	[kW]	5 / 10	OPTION
tool drive max. rot. speed	[1/min]	4000	OPTION
CDI-, CAPTO-Interfaces on request			

Work area

AXIS DIAGRAMM / WORKING AREA UPPER ZYXB SLIDE WITH MILLING SPINDLE AND XZ-TAILSTOCK-SLIDE



AXIS DIAGRAMM / WORKING AREA LOWER W5 XZ-STEADY-REST- AND W3 XZ-TURRET-SLIDE



Contact us:



Pittler T & S GmbH
Johannes-Gutenberg-Straße 1
63128 Dietzenbach
Germany

Tel. +49 (0) 6074 4873-0
Fax +49 (0) 6074 4873-294
info@pittler.de
dvs-technology.com/pittler

Members of the DVS TECHNOLOGY GROUP

DVS MACHINE TOOLS



BUDERUS Schleiftechnik GmbH | [dvs-technology.com / buderus-schleiftechnik](https://dvs-technology.com/buderus-schleiftechnik)
I.D. grinding – O.D. grinding – Bore honing – Hard turning



PITTLER T&S GmbH | dvs-technology.com/pittler
Vertical turning center and Pick systems – Gear cutting for complete machining



PRÄWEMA Antriebstechnik GmbH | dvs-technology.com/praewema-antriebstechnik
Gear honing – Gear grinding – Hobbing/Fly-cutting – Chamfering



rbc robotics GmbH | dvs-technology.com/rbc-robotics
Camera-guided robot automation systems



Werkzeugmaschinenbau Ziegenhain GmbH | dvs-technology.com/wmz
Turning & Combined machining of shafts – Motor spindles

DVS SERVICE & TOOLS



DVS TOOLING GmbH | dvs-technology.com/dvs-tooling
Tool solutions and technology support for PRÄWEMA gear honing



NAXOS-DISKUS Schleifmittelwerke GmbH | dvs-technology.com/naxos-diskus
Conventional grinding tools – CBN and diamond tools



DISKUS WERKE Schleiftechnik GmbH | diskus-werke.dvs-gruppe.com
Maintenance – Complete overhauls – Repairs



DVS Service GmbH | dvs-technology.com/dvs-service
Maintenance – Complete overhauls – Repairs – Digital solutions

DVS PRODUCTION



DVS Precision Components (Taicang) Co. Ltd.
Precision powertrain components in series production for passenger cars and trucks on DVS machines

DVS INTERNATIONAL SALES & SERVICE



DVS Technology America, Inc. | dvs-technology.com
DVS Sales & Service in USA, Canada & Mexico



DVS Technology (Taicang) Co., Ltd. | dvs-technology.com
DVS Sales & Service in China