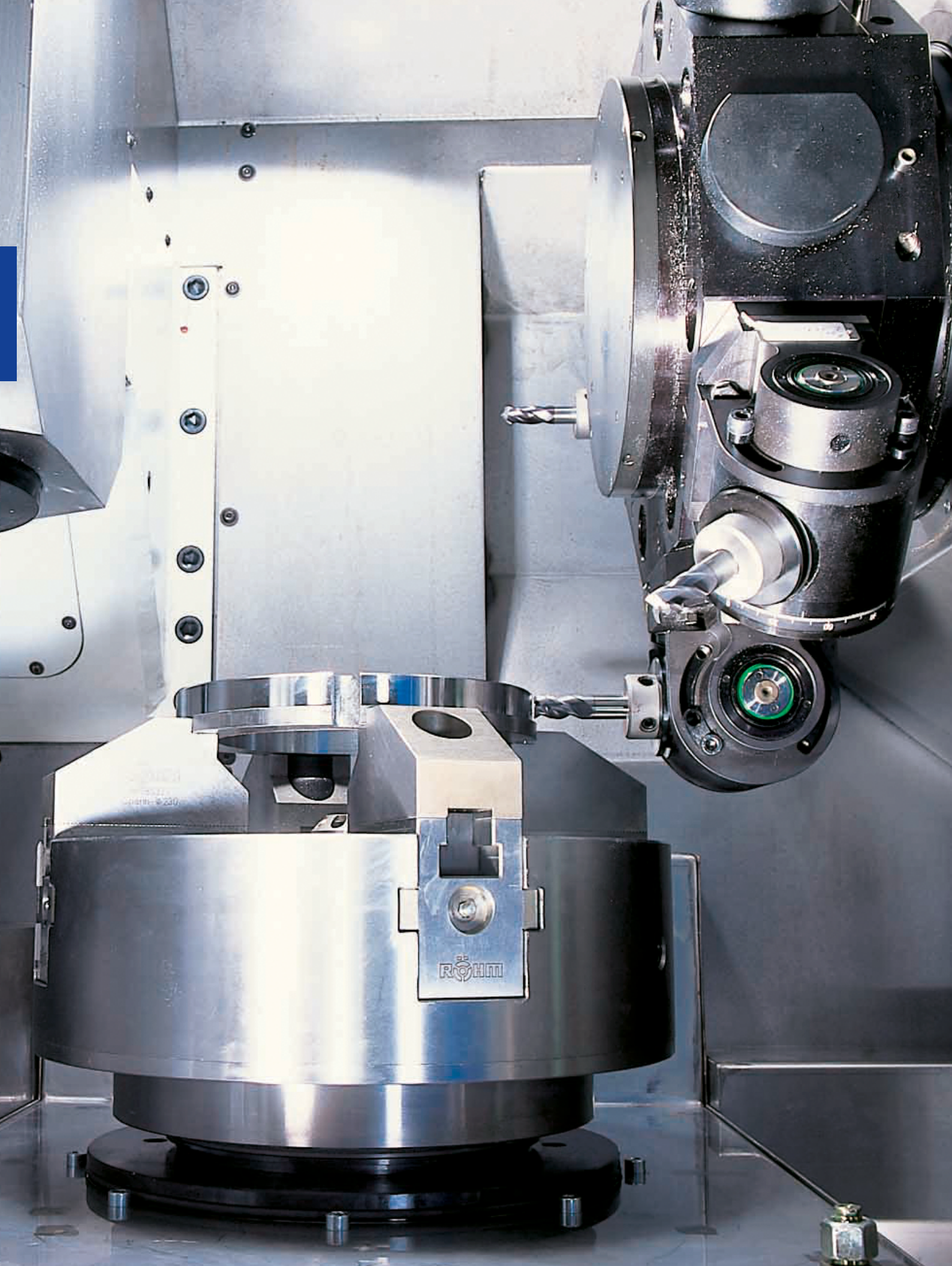




Modular Machining Platform PV SL N1 / PV SL 2 / PV SL 3



Together... Advantage identified and used

The entire process chain – one contact for turning, gear cutting and grinding.

The PITTLER PV³ is based on the large vertical model range of the DVS TECHNOLOGY GROUP.

The Members use the relevant modules of the platform as base for their core technology and create customized solutions.

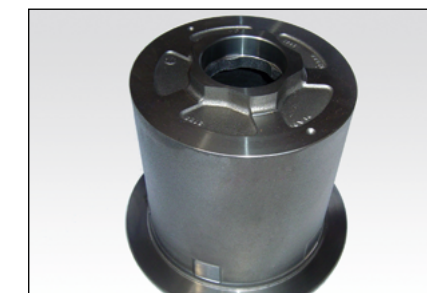
PITTLER T&S GmbH

Global markets need integrated solutions. In cutting procedures technology, the DVS TECHNOLOGY GROUP has therefore created the base to provide the very highest degree of precision, reliability and economy in the areas of turning, gear cutting and grinding. Renowned, independent companies develop and manufacture, under the roof of the DVS TECHNOLOGY GROUP, customized solutions for world-wide application, with the objective of improving the competitiveness of our customers.

PITTLER – a name with a global reputation

More than 125 years of tradition in machine tool manufacturing prove that PITTLER has been able to offer pioneering products that are interesting for the market at all times. To start with, revolver turret lathes, then the multi-spindle automatic lathes and finally the frontoperated lathes and vertical lathes achieved world renown.

PITTLER products were, at all times, the guarantee for progressive manufacturing technology. Today – in the age of globalization – there are new challenges. New trends are being set with innovative cutting technology and modern process combinations. Therefore, PITTLER, together with other companies of the DVS TECHNOLOGY GROUP has developed modular machine platforms. In cooperation with our customers, solutions optimized for the respective machining tasks ensure a competitive edge.



Benefit of the customer from this synergistic effect

- Reduced training expenses
- Advantages in service and maintenance
- Same spare and wear parts
- Matched chaining and loading

Vertical Pick-up

Tradition creates an obligation. PITTLER T&S GmbH in Dietzenbach near Frankfurt couples tradition with high-tech innovation. The focus is on influencing the production costs to make them more advantageous, and hence, to achieve a significant reduction in the per-piece costs with PLC-capable workpiece quality.

Modular product platform

The jointly developed modular product platform of the DVS TECHNOLOGY GROUP realises the application of different machining technologies from one platform, but also – and this is new – their combination as a multifunctional production facility. Beside turning, also drilling, thread-cutting, spot-facing, milling, grinding, gear cutting as well as hard polishing and burnishing is possible. Its own quality assurance and process assurance modules as well as material flow components round off the offer.

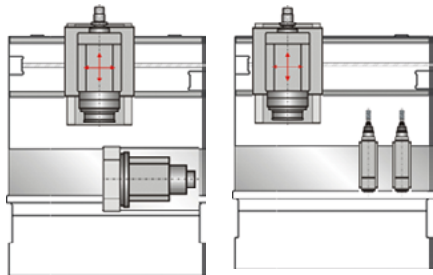
PITTLER's competencies are in the machining of jobs in the diameter range from 50 to 5,000 mm. There are three machine platforms available for this purpose.



From the single-spindle lathe to the lathe machining centre

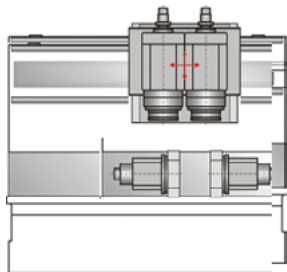
PV SL/1-1

Standard version, narrow design 8 or 12 stations. Tool revolver or tool block for machining in hardened material; ball screw feed drives in X- and Z-axis.
Bed length 1,200 mm



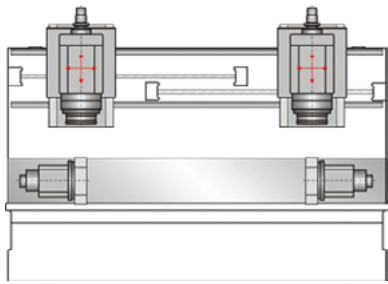
PV SL/2-1

Economical simultaneous machining of 2 identical operations; tool revolver with additional NC-axes.
Bed length 1,800 mm



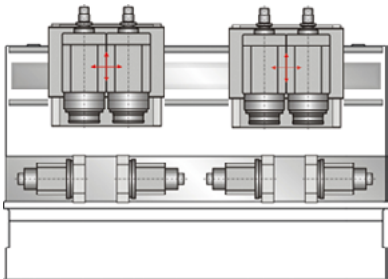
PV SL/2-2

Two-spindle design with independent 2-cross saddle for sequential or parallel operation; feed drive optionally ball screw or linear motor.
Bed length 2,400 mm



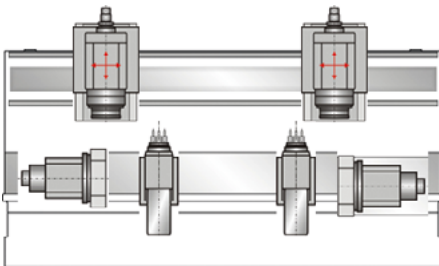
PV SL/4-2

Medium and large series manufacture; double-twin design; most economical N1 design for the simultaneous processing of 2 x 2 identical operations or sequential operations (OP 10 + OP 20) of one tool pair each; tool revolver with additional NC-axes.
Bed length 3,000 mm



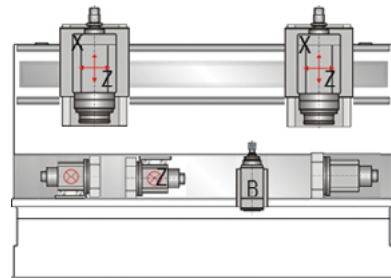
PV SL/2-2

Two-spindle machine for sequential or parallel machining; additional operations like multi-spindle boring in middle-sized and large batches. Alternative: two-spindle drilling with tool turret for programmable pitch circle.
Bed length 3,000 mm



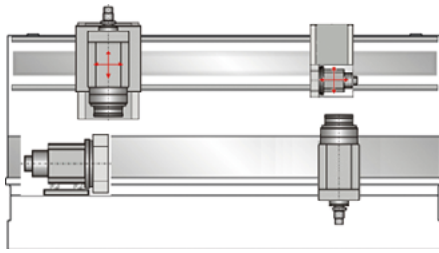
PV SL/2-2

Lathe machining centre with additional NC-axes for the parallel-to-the-axis sequential operation; axes: X1 – X2 – X3 – Z1 – Z3 – Y – B.
Bed length 3,000 mm



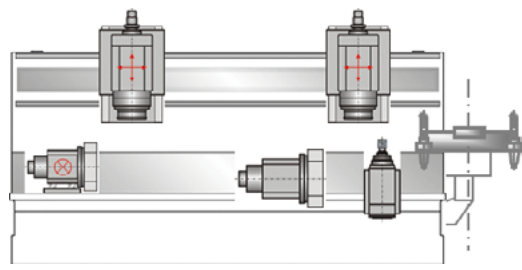
PV SL/2-2

Lathe machining centre with 3 slides and additional NC-machining units > 2 slides; OP 10 work simultaneously on 1 spindle OP 20.
Bed length 2,400 mm

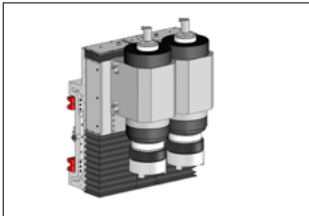


PV SL/2-2

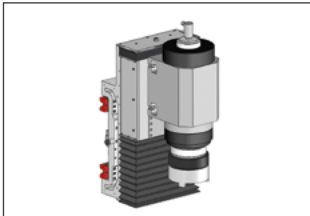
Flexible lathe machining centre with additional NC-axes and application-customised tool store; for parallel-to-the-axis and solid angle machining in sequence.
Bed length 3,000 mm



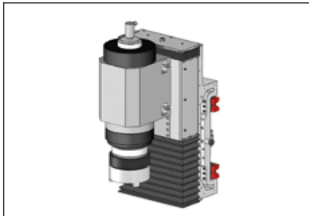
Modules in focus



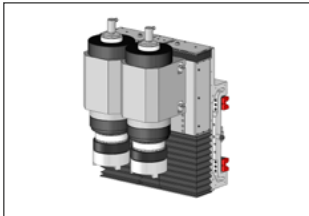
4-2
+ 4-spindle design for 2 x sequential or 4 x parallel operation



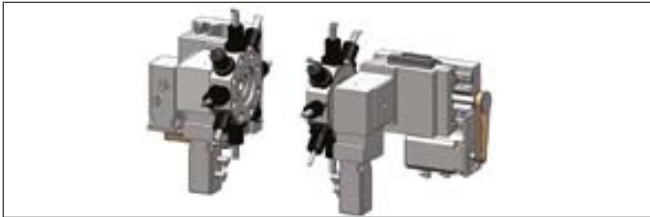
2-2
+ Two-spindle design for sequential or parallel operations



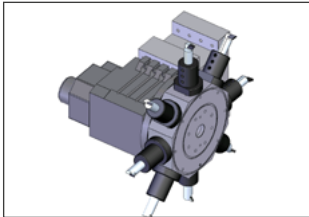
1-1
Single-spindle standard design



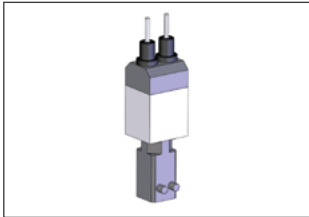
2-1 Twin
simultaneous machining 2 x identical operation



Tool turret on independently controlled NC-slides; combinable into a twin or single-spindle design
Option: driven tools



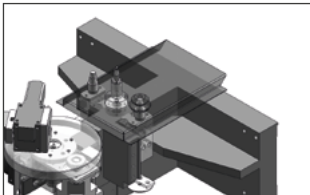
8- or 12-stations tool turret
Option: driven tools



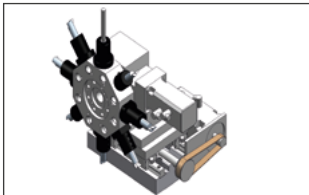
Multi-spindle drilling head for integrated drilling and de-burring operation



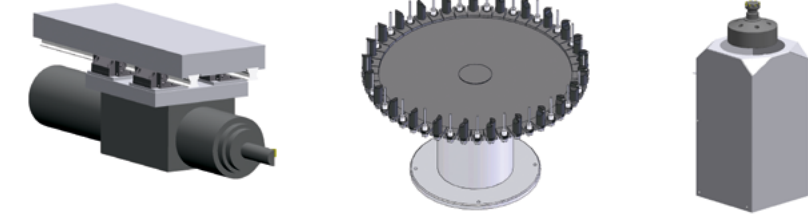
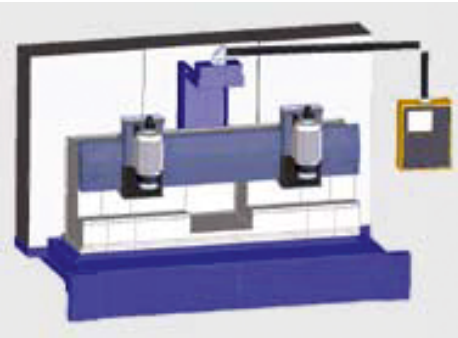
Palette transport belt



Integrated swivelling gripper for sequential and parallel machining; Anti-collision secured pick-up and set-down station; production time parallel chip-less additional processes and integrated post-process measurement



Tool turret with driven tools on additional Y-axis

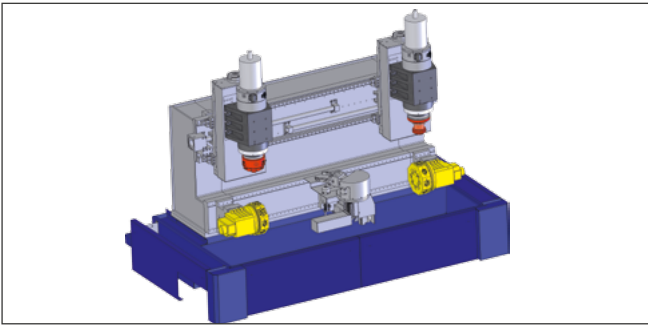
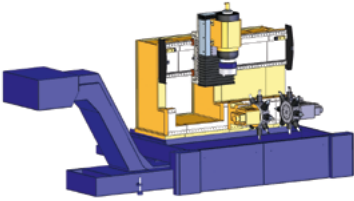


Integrable units as Y- or X1-axis, supplied application-based via tool magazine

PITTLER's strength – your applications

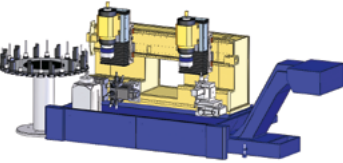
Operator's favourite

- All operating elements on the front side of the machine
- Workpiece feeding and removal (expandable with storage)
- Operating and control display
- SPC discharge
- Large, wide-opening doors for wear-related tool changing and safe retooling
- Automatically integrated quality assurance during tool changing and retooling



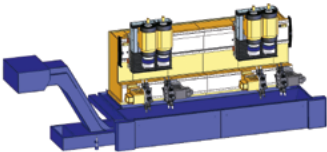
Production planner's favourite

- Integrated processes through flexible NC controlled units for turning, drilling, thread cutting, milling and grinding, as well as processes not involving material removal



Controller's favourite

- Most economical 4-spindle manufacture in programmable parallel or sequential operation



Technical Data

Headstock		PV SL N1		swing diameter PV SL 2		PV SL 3	
Swing ø	mm	250		450		630	
Spindle flange ø	mm	140	170	170	220	220	380
Thrust bearing ø	mm	90	120	120	140	140	240
Power at 100 % ED	kw	17	52	36	72	39	72
Torque at 100 % ED	Nm	100	254	384	820	600	1375
Speed	min ⁻¹	4500	4800	5500	4000	4000	3000
Max work piece length	mm	200	200	250	250	300	300
Max work piece weight	kg	15	30	30	50	40	60

The above parameters are for the standard model, the specific parameters can be adjusted according to customer's actual demand.

Worldwide Service

PITTLER machines are used everywhere, where high performance is required. To assure this request dependable in the long term, a customer-oriented service is an important part of our product.

The target of all our service portfolio is to increase the output of our customers as well as fulfil the customers expectation faster and better. To archive this target, we offer a great variety of service products, which are developed together with our customers and keep constantly improved.

For the Life Time of the Machine we offer the following service:

- Repair
- Maintenance
- Remote diagnostic
- Spare part supply
- Training
- Production support
- Retrofit



Training



Maintenance / Service

Mitglieder der DVS TECHNOLOGY GROUP

Members of the DVS TECHNOLOGY GROUP

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Vertikal-Drehbearbeitungszentren & Pick-up-Systeme – Verzahnen in der Komplettbearbeitung
Vertical turning center & Pick-up systems – Gear cutting for complete machining



PRÄWEMA Antriebstechnik GmbH | www.praewema.de
Verzahnungshonen/-scheifen – Verzahnungsfräsen – Anspitz-/Hinterlegungsfräsen
Gear honing – Gear grinding – Hobbing/Fly-cutting – Chamfering



WMS Werkzeugmaschinenbau Sinsheim GmbH | www.wms-sinsheim.de
Service-Dienstleistungen – Generalüberholungen – Reparatur von Baugruppen
Maintenance – Machine Retrofit – Repairs



WMZ Werkzeugmaschinenbau Ziegenhain GmbH | www.wmz-gmbh.de
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Turning & Combined machining of shafts – Motor spindles

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