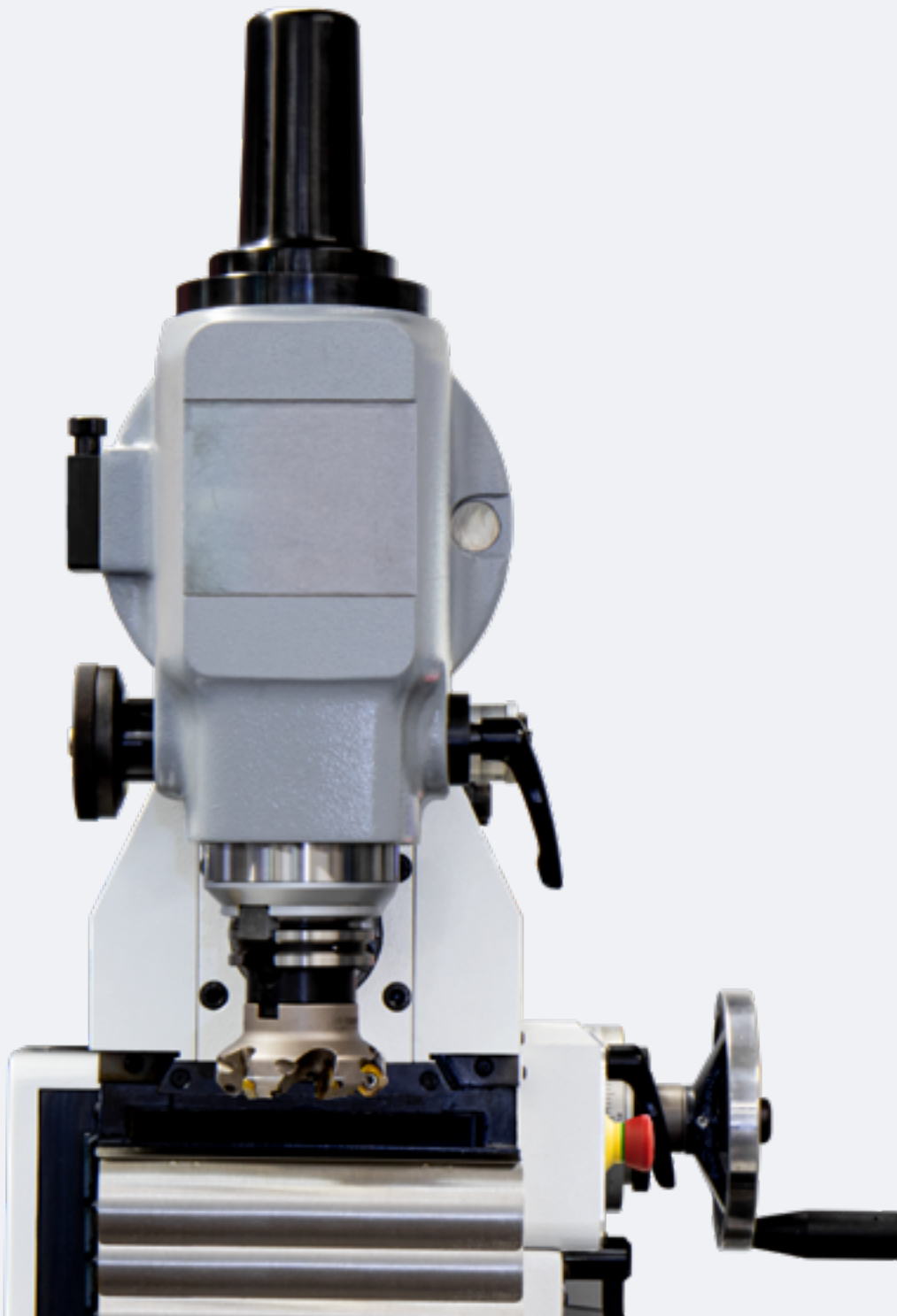


Manual Classics. Re-engineered.

FPS 300M

FPS 500M-hydro



What defines us.

A strong team through experience.

FPS Werkzeugmaschinen, founded in 1994 by former service and sales employees of DECKEL AG, the once leading and world-renowned manufacturer of universal machine tools, milling and drilling machines.

We have always endeavoured to maintain and further develop the quality that has become a tradition at DECKEL, the inventor of the conventional milling machine.

In over 30 years of company history, FPS has grown into a renowned company in the field of universal milling and drilling machines with the following specialisations:

- Development and manufacturing of manual and NC milling and drilling machines
- General refurbishment of DECKEL milling machines
- Service, maintenance and spare parts



Made in
Germany.
Made for you.

Two classics. In a new guise.

FPS 300M



Axis travel		
X-axis	Y-axis	Z-axis
300 mm	160 mm	340 mm

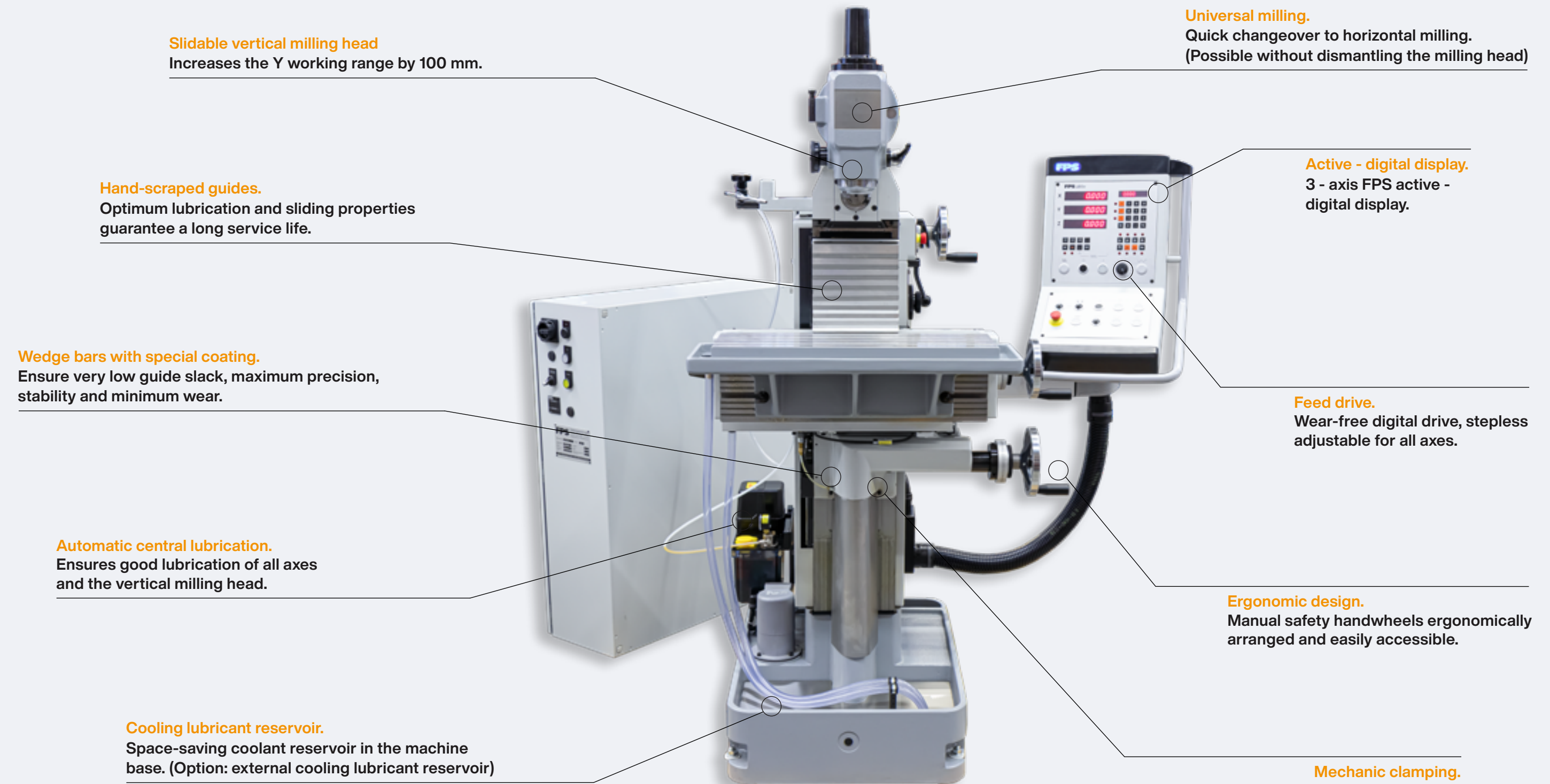
FPS 500M-hydro



Axis travel		
X-axis	Y-axis	Z-axis
500 mm	400 mm	400 mm

Highlights.

FPS 300M



FPS 300M

The heiress of
DECKEL FP1.



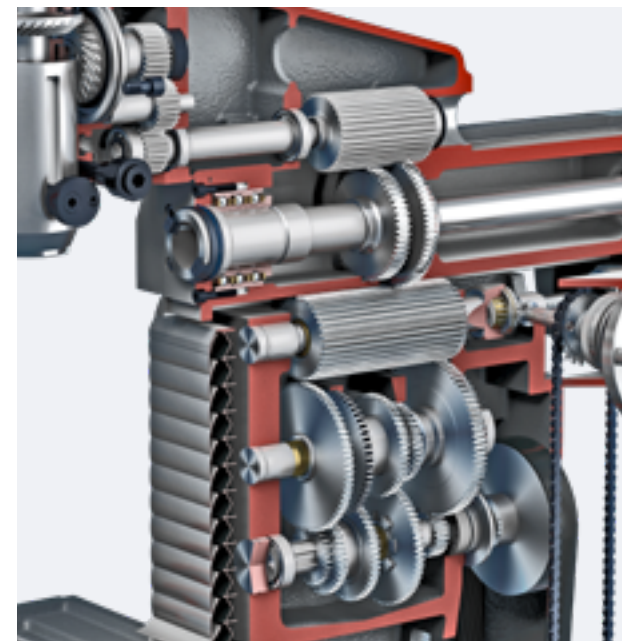
The new classic,
compact, handy, universal.



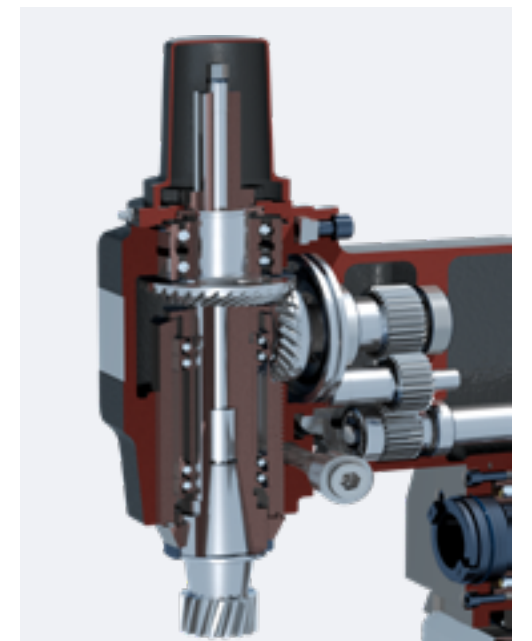
Easy to maintain
all important units are directly accessible at the rear.



3 axis FPS active - digital display
Incremental chain measurement and absolute distance measurement positioning with LEDs for direction specification on the machine.

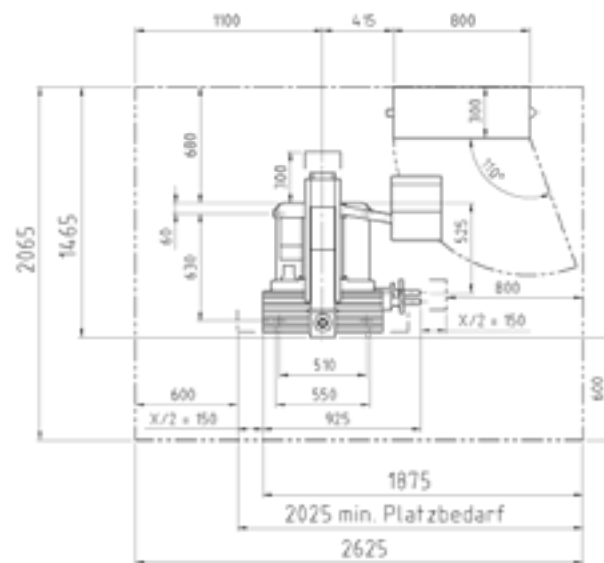


8-stage gearbox
with 16 speed steps ensure a high torque on the milling spindle and thus guarantee maximum cutting performance with maximum precision.



Milling spindle
Sturdy shoulder mounted milling spindle, can also be used vertically as a manually extendable drilling quill approx. 60 mm.

Installation surface.



Basic equipment.

- ☒ Direct measuring system in all axes
- ☒ Swivelling milling- and splash protection
- ☒ Horizontal milling spindle
- ☒ Coolant equipment space-saving in machine base - 15 liter
- ☒ Automatic central lubrication
- ☒ Clamping system with safety discharge vertical and horizontal
- ☒ Mechanic safety handwheels in all axes
- ☒ Milling head swivelling and with telescoping quill
- ☒ Kusa cycle switch for gear switch
- ☒ Collision protection coupling in Y-axis
- ☒ Electronic overload protection for all axes
- ☒ Swivelling milling- and splash protection

Further options.

- ☐ Chip pan
- ☐ LED machine lamp
- ☐ Steel lamella bellow to protect the Z guide
- ☐ Universal table
- ☐ Counterholder with counter bearing
- ☐ External coolant reservoir
- ☐ Chip / splash guard (flexible installation on the fixed table)
- ☐ Minimum quantity lubrication
- ☐ Attachable rotary table, type 6017
- ☐ Further accessories and tools on request

Technical data.

FPS 300M		
Working area	X-axis	300 mm
	Y-axis	160 mm
	Z-axis	340 mm
	movable milling head on Y-axis	100 mm
	Space requirement w × d × h	1.735 x 1.465 x 1.760 mm
Fixed table	Clamping surface	600 x 240 mm
	T-slots	4 / 12H7 / 45 mm
	Table load	200 kg
Work spindle	Vertical	manually telescopic ca. 60 mm
	Horizontal	
	Manual swivelling milling head	± 90°
Tool holder	ISO 40 DIN 69871	
Clamping system	Mechanic clamping system	
	M16 (Standard) DECKEL S20x2 (Option)	
Main drive Three-phase current - Brake motor	Power (100%/25% duty cycle)	1,4 kW / 1,8 kW
	Speed via geometrically stepped gearbox (16 speed steps)	40 to 2.000 rpm
	Feed speed steplessly adjustable	5 to 500 mm/min
Feed drive Digital drive	Rapid traverse	1,5 m/min
	Handwheel turns	2,5 mm/U
Connection values	Mains connection	3 x 400V AC 50Hz
	Max. fuse	20 A gG / gL
	Electrical supply	TN-S
Switch cabinet electronics	CE-compliant in accordance with the current regulations of the employers' liability insurance associations	
	BGVA 3/DIN-EN 60204-1	
Control unit	Swivelling control panel	FPS Aktiv - Digital display
Weight	Total weight of the machine incl. fixed table, milling head and switch cabinet	
	approx.. 910kg	

Technical changes and errors reserved.

Highlights.

FPS 500M-hydro

Universal milling.
Quick changeover to horizontal milling.
(Possible without dismantling the milling head)

Slidable vertical milling head
Increases the Y working range by 150 mm.

Ergonomic design.
Manual safety handwheels ergonomically
arranged and easily accessible.

Highest accuracy.
Less heat input due to direct drive - consistently high accuracy
even with long machining times.

Saves space.
Switch cabinet now permanently mounted on
the machine to reduce the installation space.

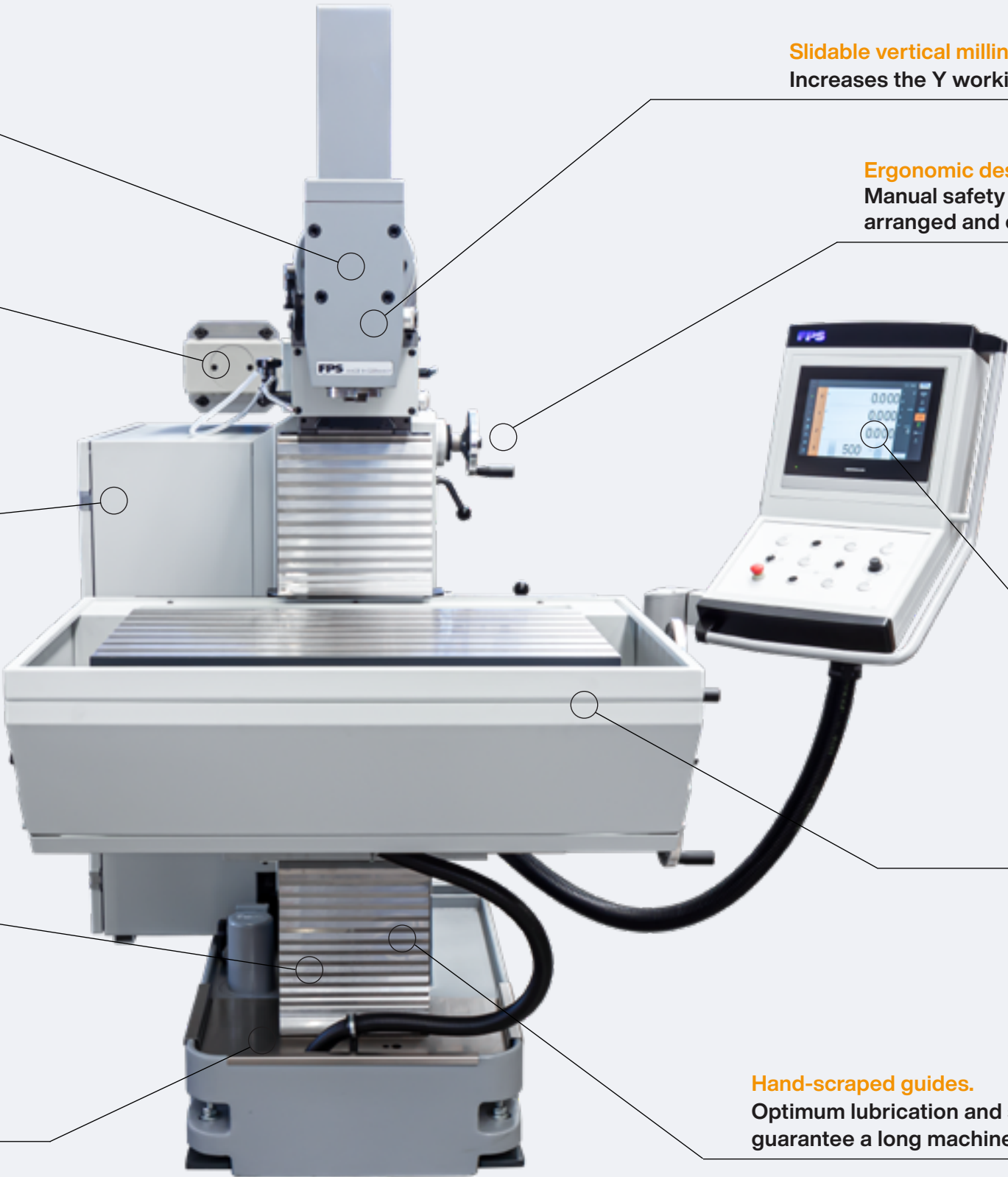
Touch - Aktiv - Digital display.
Heidenhain Positip 8016

Wedge bars with special coating.
Ensure very low guide slack, maximum
precision, stability and minimum wear.

Travelling chip tray.
with chip hatch for easy
removal of chips.

Cooling lubricant reservoir.
Space-saving coolant reservoir in the machine
base. (Option: external cooling lubricant reservoir)

Hand-scraped guides.
Optimum lubrication and sliding properties
guarantee a long machine life.



FPS 500M-hydro

A classic with the latest technology and a new look.



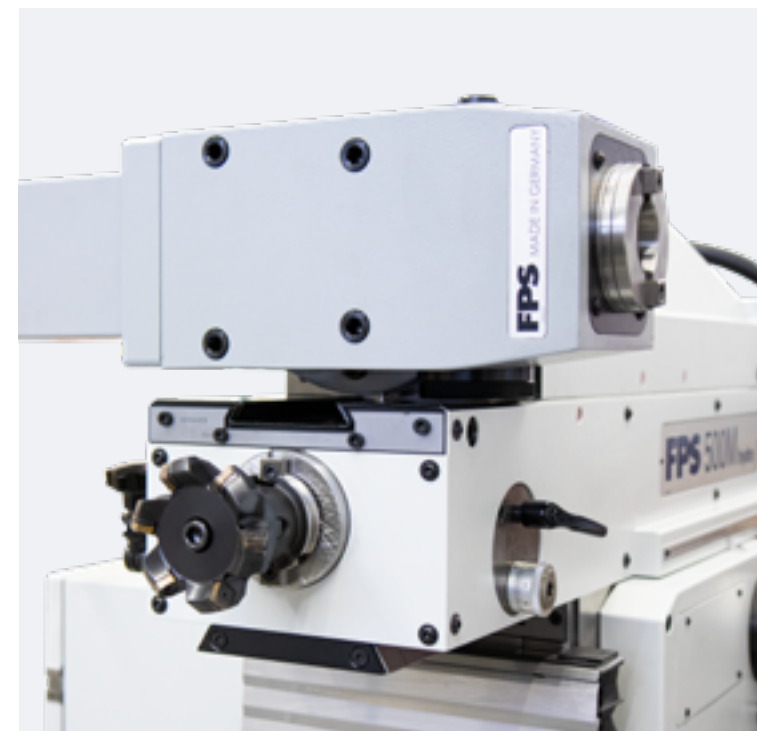
Compact, conventional, universal.



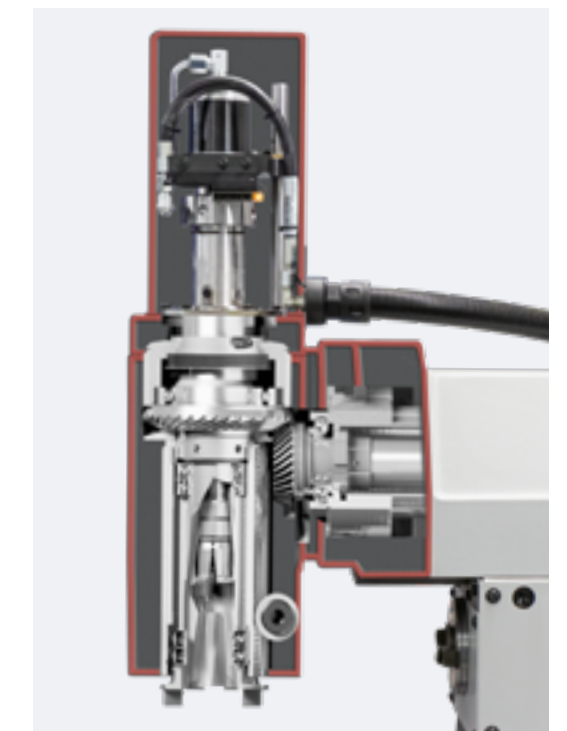
Option: Splash guard cabin



Heidenhain Positip 8016
Position data display, dialogues, inputs and graphic functions. Tool memory, distance-to-go mode with input of the target position in absolute or incremental dimensions.

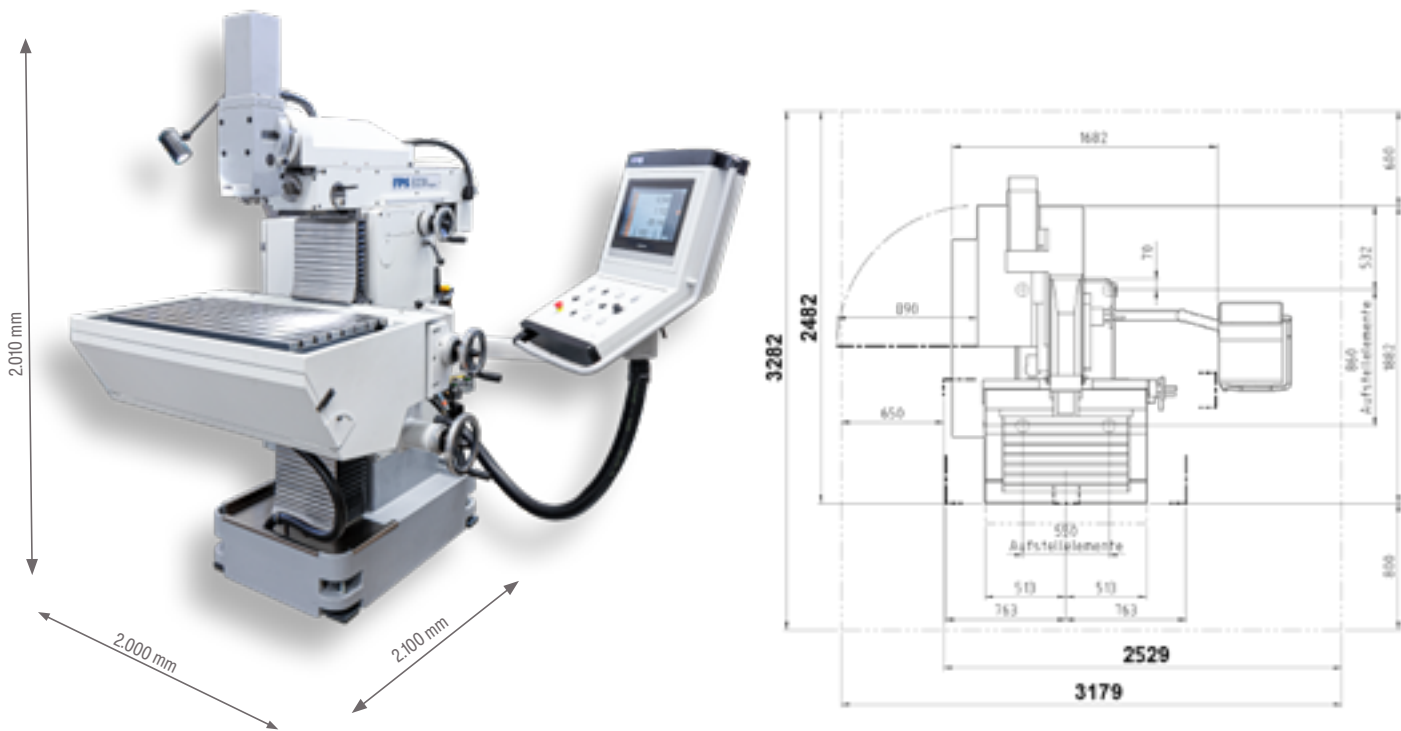


Option: extendable horizontal quill



Hydraulic clamping system
with tool holder ISO 40 DIN 69871 and clamping system DIN 69872

Installation surface.



Basic equipment.

- ☒ Direct measuring system in all axes
- ☒ LED machine lamp
- ☒ Steel lamella bellow to protect the Z guide
- ☒ Travelling chip tray with hatch for emptying chips
- ☒ Automatic central lubrication
- ☒ Mechanic safety handwheels in all axes
- ☒ Milling head swivelling and with telescoping quill
- ☒ Swivelling milling- and splash protection
- ☒ Coolant tank space-saving in machine base - 25 liter
- ☒ Electronic overload protection for all axes

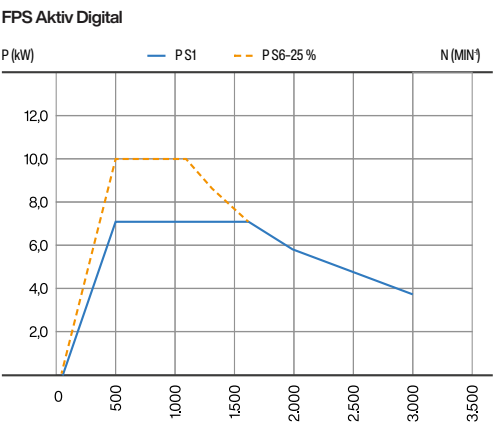
Further options.

- ☐ Chip pan
- ☐ Horizontal milling spindle (optional: extendable quill)
- ☐ Universal table
- ☐ Counterholder with counter bearing
- ☐ External coolant reservoir
- ☐ Splash guard cabin (permanently mounted, instead of travelling chip tray)
- ☐ Minimum quantity lubrication
- ☐ Attachable rotary table, type 6017
- ☐ Further accessories and tools on request

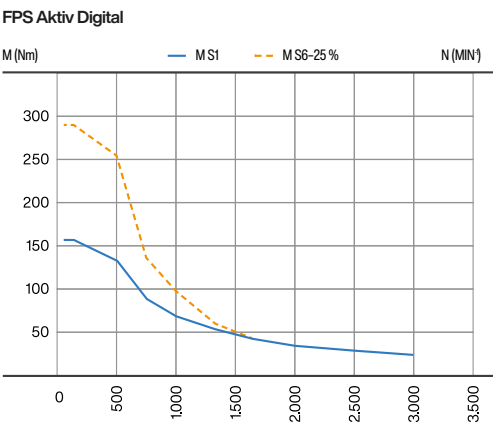
Technical data.

		FPS 500M
Working area	X-axis	500 mm
	Y-axis	400 mm
	Z-axis	400 mm
	movable milling head on Y-axis	150 mm
	Space requirement w × d × h	2.300 x 2.100 x 2.010 mm
Fixed table	Clamping surface	800 x 480 mm
	T-slots	7 / 14H12 - Center t-slot 14H7 / 63 mm
	Table load	300 kg
Work spindle	Vertical	manually telescopic ca. 80 mm
	Horizontal (Option)	manually telescopic ca. 100 mm (Option)
	Manual swivelling milling head	± 90°
Tool holder		ISO 40 DIN 69871
Clamping system	Mechanic clamping system	
		DIN 69872 (Standard) DIN 2080 (Option)
Main drive Three-phase current - Brake motor	Power	7,0 kW
	Torque	156 Nm
	Speed via geometrically stepped gearbox (16 speed steps)	20 to 3.000 rpm
Feed drive Digital drive	Feed speed steplessly adjustable	0 to 500 mm/min
	Rapid traverse	1,5 m/min
	Handwheel turns	2,5 mm/U
Connection values	Mains connection	3 x 400V AC 50Hz
	Max. fuse	50 A gG / gL
	Electrical supply	TN-S
Switch cabinet electronics	CE-compliant in accordance with the current regulations of the employers' liability insurance associations	BGVA 3/DIN-EN 60204-1
	Connection type:	fixed connection
Control unit	Swivelling control panel	Heidenhain Positip 8016 (Touch - Aktiv -Digital Display)
Weight	Total weight of the machine incl. fixed table, milling head and switch cabinet	
		ca. 1.600kg

Performance diagram



Torque diagram



Service.

Hotline.

One of our passions.

The quality of a company is not only reflected in the quality of its products. Equally important are qualified service, maintenance and training offers. At FPS, this means that the free hotline, staffed by technical specialists, can answer your questions and complex tasks relating to our own FPS machines as well as DECKEL and DMG machines.

If the challenge is more complex, our service technicians will be on site in no time. With more than 10,000 spare parts groups in stock, the machines can usually be brought back into operation quickly.

In addition, FPS offers fair maintenance contracts which mean that many unplanned downtimes can be avoided.



Training.

Expert knowledge conveyed in a practical way.

In our training center, we pass on our knowledge, our experience and some practical solutions to the next generation of machining experts. We have been supporting our customers in all areas of application technology for decades. Naturally with our FPS product range, but also with DECKEL and DMG milling machines. As a result, we are very familiar with both traditional approaches and the latest possibilities for innovative functions. We convey the best of this in our training courses.

Individual training courses.

In addition to standard training courses, we also offer individually tailored, customer-specific training courses on request. All courses can be held at the FPS training center or at your premises.

Company.

Our team.

What makes us special.

Our soul.

Each of our machines combines the collective expertise and passion of our team of 200 employees. From the development team to assembly, sales, our service team, the back office, our trainees and the management, they all have a part in making the day-to-day work of our customers and their employees easier and better.

Development team.

The development of a configurable series product is all about continuity, reliability and consistency. It is important to understand the product and its areas of application in depth. This is not about short-term innovations, but about sustainable development work.



Sustainability.

For us, more than just a word.

Company.

Made in Germany is not just a seal of approval for us. Machine tools made in Germany are among the most sustainable products in the industry. We obtain a large proportion of the electricity we need from our photovoltaic system. Investments in new plant technology, such as a new paint shop, help to reduce emissions. We close this sustainability cycle with the environmentally friendly disposal of waste.

New machines.

Installing the latest, energy-efficient technology is a matter of course for us. 80% of the parts installed are manufactured in-house and are supplemented with the use of consumption-optimized components such as LED lighting. We help to reduce CO2 emissions by constantly renewing our machinery and using regional suppliers to keep transportation routes short. FPS stands for durable machines with a spare parts supply of more than 10 years.

Discover our new
Dualmaster series.

Dualmaster with CNC control.



FPS 425M-NC

Learn more at: mnc.fpsgermany.com



FPS 630M-NC

Dualmaster with straight cut control.



FPS 500M^{digital}

Learn more at: mdigital.fpsgermany.com



FPS 630M^{digital}



**Made in
Germany.**
Made for you.



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