

## 900 SERIES Tilting Spindle Moulder





Moulder spindle Quick change system



Rearward tilting spindle



Table opening: 320 mm



Table extensions



"X-Roll" slot and tenoning table

# F 700 M

# Vibration free stability for perfect results

With the new F 700 M tilting spindle moulder, Felder is not only offering an affordable solution for all woodworking shops, but also the ideal complement to CNC supported processing. With a solid cast iron table for vibration free stability, you will be ready for every challenge of modern woodworking.

F 700 M



## 700 SERIES Tilting Spindle Moulder



## Unique:





"Power-Drive" F2
Full electronic
adjustment



Rearward tilting spindle



Table opening: 230 mm



"Easy-Glide" Tilting guide system



Moulder spindle Quick change system



Precision Spindle moulder fence "230", Multi-adjustment system

## F 700 Z

## Ready for every challenge

Are you looking for versatility, high quality and performance and want to be able to carry out standard moulding work, slot and tenons or curved moulding work, all at a fair price?

Then the F 700 Z is the right machine for you! This universal machine concept offers a wide range of standard features such as the moulder spindle quick change system and a wide range of optional features to further increase your productivity. The high

quality format sliding table guiding technology "X-Roll" comes with a 10 year Felder guarantee and offers amazing operating smoothness and is completely maintenance free. The "x" design of the position of the roller bearings ensures that they move smoothly along hardened guides.

Unique:





"Easy-Glide" Tilting guide system



## 700 SERIES Tilting Spindle Moulder





Moulder spindle

Quick change system



Precision Spindle moulder fence "230", Multi-adjustment system



Table opening: 230 mm



Rearward tilting spindle



"X-Roll" slot and tenoning table

# F 500 M /F 500 MS

## For convincing spindle moulding results

An unbeatable offer for discerning wood-workers: The large, solid, ribbed cast iron table, stable table extensions (F 500 MS), a professional spindle fence and height adjustable spindle aggregate with dual support, offers professional results at a great price.





## **500 SERIES** Spindle Moulders





## Unique:





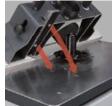
MF spindle system



Table opening: 180 mm



Safety bar guides (optional equipment)



**MULTI-fine adjustment** system (optional)



Switch for forward and reverse run

### Tilt segment "Easy-Glide"



The patented tilt segment "Easy-Glide" used in the Felder 700 and 900 series saw and spindle moulder aggregates and also Format-4, fulfils the highest requirements in business and industry.

A precise, guided, double-sided support, guarantees maximum load bearing and tolerance free tilting and is absolutely maintenance free. A special, highly durable synthetic material situated in the guide of the tilting segment ensures extremely smooth movement and long-lasting precision. The tilting guide system, a synthetic material tried and tested in aerospace and lock construction, works without the requirement of lubrication and is totally resistant to dust. With a 6 year factory guarantee, this Felder component offers reliability for many years to come.



#### This is why:

- > Precise, double sided guide support
- > Maximum load bearing capacity
- > Play-free tilt
- > Unaffected by dust
- > Completely maintenance free
- > Completely lubrication free



Cast iron tilt segments
Precise, double sided guide support



#### The FELDER "900" spindle aggregate

Decades of machine construction experience combined with modern production techniques is reflected in every detail of the heavy-duty 900 Series spindle aggregate.

- > Spindle useable height of up to 140 mm (160 for Ø 40 and 50 mm)
- > Moulder spindle quick-change system
- > Simple speed change from the front of the machine
- > Collet chuck spindle for router tools with a speed of 15,000 rpm
- Electronic height adjustment with digital LED display
- > Electronic angle adjustment with digital LED display
- > Dovetail guidance system of the height adjustment
- > 2 bearing seats for spindle
- > Heavy cast iron unit with excellent vibration absorption
- > Maximum power transmission achieved through the POLY-V belts and counter surface
- > Variable speed control 1,500-10,000 rpm
- > Digital rotation speed display



The high speed router spindle can be used for all routing tools with a shaft  $\varnothing$  6–16 mm. Rotation 15,000 rpm, with full motor power of up to 13.5 HP.





The Felder 700 Series spindle aggregate sets standards that are unparalleled.

- > 115 mm spindle useable height above the table (140/160 mm)
- > Moulder spindle quick-change system
- > Simple speed change from the front of the machine
- > Collet chuck spindle for router tools with a speed of 15,000 rpm
- > Electronic height adjustment with digital LED display
- Electronic angle adjustment with digital LED display
- > 4 speeds: 3,500/6,500/8,000/10,000 rpm
- > Rearward tilt 0° to 45°
- > Precise, double sided guide support
- > Dovetail guidance system of the height adjustment
- > Heavy cast iron unit with excellent vibration absorption



High-speed router spindle Use of the Felder high speed router spindle for router bits or high speed tools at 15,000 rpm.





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### Moulder spindle control with accuracy to a tenth of a millimetre Top class FELDER operating comfort

### Comfortable precision with "Power-drive" F1



Spindle moulder adjustment accurate to a tenth of a mm at the touch of a button, creep mode for fine adjustment. Red LED display shows actual value of the spindle moulder height. Spindle tilt using a handwheel and integrated digital clock. 900 Series machines also have a digital display for the current rotation speed.

Machine equipment options	Handwheel with digital display	"Power-Drive" F1	"Power-Drive" F2
F 500 M	0	=	=
F 500 MS	0	÷	=
F 700 Z	S	0	0
F 700 M	S	S	0
F 900 Z	S	S	0
F 900 M	S	S	0

S ... Standard equipment O ... Option - ... not available



#### Constant repeat accuracy with "Power-Drive" F2





The fully electrical "Power-Drive" control offers exact adjustment and repeat accuracy. The saw blade height and the angle settings can be adjusted at the turn of a knob, the fine setting adjustments are carried out to tenth of a millimetre accuracy using a push button. An LED display screen shows the actual current value in real time directly on the control panel. 900 Series machines also have a digital display for the current rotation speed.



### Moulder spindle tilting

Smooth and easy





Correct spindle tilting "rearwards" with maximum operating comfort:

- > Working safely
- > Suitable for any workpiece size
- > Problem-free power feeder use
- > Impeccable machined surface
- > Optimal chip removal



Forward tilting spindles can be dangerous and have serious handling disadvantages:

- > Increased risk of accidents
- > Limited workpiece height
- > Power feeders can not be used
- > Inferior workpiece finish
- > Poor or even impossible chip removal



### Spindle shaft quick change system

Professional productivity for every workshop



Unique in its class: Moulder spindle change in next to no time – the new MF spindle shaft change system from Felder brings professional productivity into every workshop.

Routers and spindles with various diameters (30, 32, 35, 50 mm and  $1\frac{1}{4}$ ") can be changed quickly and easily without having to change the current settings. Regardless of its position, the moulder spindle can be released with a few simple movements and then securely fixed again.

The spindle shaft quick change system is available on all of the spindle moulder and combination machines from the Felder 500 series if ordered when the machine is first built.

- > Moulder spindle change in next to no time
- > Different moulder spindle diameters
- Use of router bits

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### Quick-change system for moulder spindle

Changing of the spindle shaft with minimal effort





#### The moulder spindle quick-change system

The almost unlimited applications of your new machine is enhanced even further by the Felder spindle quick change system. Spindles with pre-mounted tools for serial moulding work and spindles with differing diameters can be swapped over in seconds. A particular highlight is the Felder high speed router spindle that can be used for router cutters and run at 15,000 rpm.

For maximum stability and durability the Felder spindle has been designed with 2 high quality, high precision bearings!

#### Advantages of the FELDER spindle quick change system:

- > Quick, easy change between different types of spindles
- > Ability to use 30, 32, 35, 40, 50 mm and 1 1/4", diameter spindles
- > Use of the Felder high speed router spindle for router bits or high speed tools at 15,000 rpm.
- > Automatic repeatable setting for series production work



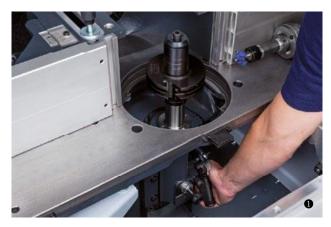








Fig. Example of use F 700

When changing the spindle, the tried and tested moulder spindle quick change system ensures maximum productivity. Spindle moulders with different diameters and pre-mounted tools for serial moulding work can be swapped over and used in seconds.

- Loosen the belt
- ② By pulling out the pin that blocks the spindle from turning you can lift the spindle shaft straight out
- 3 Pull the pin out once again when you want to put in a new spindle
- 4 Tighten the belt again finished!

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### Spindle moulder fence "230" with MULTI-fine adjustment system

Easy operation from above





The dual extraction system from the spindle fence and the chip collection under the moulding table, ensures that the machine stays clean and excellent results are achieved.



#### The precision spindle moulder fence "230"

The fence is suitable for tools with a diameter up to max.  $\varnothing$  230. The fine adjustment of the outfeed fence can be set between -5 to +25 mm. The extraction of the dust is done via the integrated extraction connection.

Machine equipment options	F 500 M	F 500 MS	F 700 Z	F 700 M	F 900 Z	F 900 M	
Spindle fence "220", 320 mm fence plates	S	-	-	-	-	-	
Spindle fence "230", 400 mm fence plates	0	S	S	S	-	-	
Spindle fence "230", 550 mm fence plates	-	=	=	=	S	S	

S ... Standard equipment O ... Option - ... not available



#### **MULTI-fine adjustment system**

The MULTI-fine adjustment system guarantees the parallel guiding of the fence and enables the quick adjustment of the moulder fence to the tool diameter.

## Its quicker with the MULTI-fine adjustment system!

- > Automatic repeat setting after removing the fence
- Parallel guiding of the moulder fence
- > Quick and accurate adjustment
- > Measurement scale for depth of cut



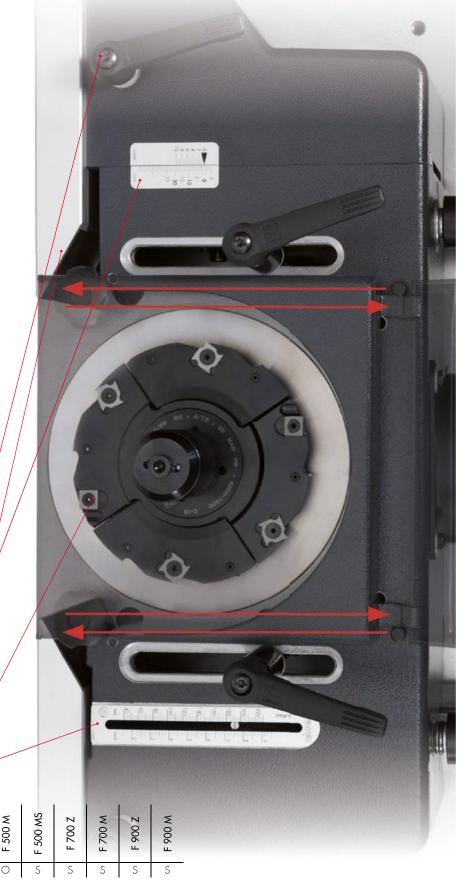
Single handed quick locking of the spindle fence plates

Hardened anodised aluminium fence plates are standard. The outfeed fence plates can be adjusted using the scale to any position between -5 and +25 mm.

Spindle moulder tooling Ø up to 230 mm

Easy operation from above

MULTI-fine adjustment system for the moulder fence "230"	(



S ... Standard equipment O ... Option

### Slot and tenoning perfection

High quality components ensure reliability



#### Tenoning and slotting perfection

Large dimensioned and designed with high use in mind, the aluminium format sliding table "hovers" on the "X-Roll", a highly developed guiding technology for Felder sliding tables. The X shape ("X-Roll") design of the rollers distributes the load optimally on all sides. The linear surface of the steel rollers running on the hardened and ground guiding surface guarantees unbeatable precision and smoothness. "X-Roll" ensures that you get the quality and precision that you expect from your new tilting spindle moulder. And here is another reason to decide to invest in a machine from Felder: 10 year factory guarantee, underlines the reliability of the "X-Roll" system.



#### This is why:

- Extremely smooth, durable guiding system. The roller bearings have no single point of contact!
- Dust resistant construction of the guiding system, ensuring clean and dust free guides
- > Hardened and ground guide tracks



#### As and when required:

Adapt your working surface to the workpiece Ever since 1969 the Felder table extensions have proved themselves a thousands times over. In just a few seconds and without tools you can increase the support length of your machine by up to 2,000 mm.



#### Outrigger and slot and tenoning table

Large dimensioned workpieces such as the rebating of doors can be processed with this high quality accessory with perfection.



Machine equipment options	F 500 M	F 500 MS	F 700 Z	F 700 M	F 900 Z	F 900 M
Slot and tenoning table 1,000 mm	-	-	S	-	-	-
Slot and tenoning table 1,300 mm	-	-	-	-	S	-
Slot and tenoning table 2,050 mm	-	-	0	-	0	-
Slot and tenoning table 2,500 mm	-	-	-	-	0	-

 $S \dots Standard \ equipment \qquad O \dots Option \qquad - \dots \ not \ available$ 



### Long, solid machine table

Reliability even when processing heavy workpieces



#### Pull out support

The sturdy front pull out support extends the work surface by up to 400 mm.



Long, solid machine table Made from cast iron which ensures vibration-free stability, even when processing heavy workpieces.

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## **The Spindle Moulders**





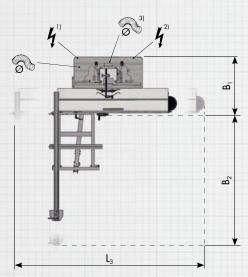
		F 500 M	F 500 MS
Table opening		180 mm	180 mm
Moulder spindle tilt		-	-
Ø 30 mm spindle s	haft	S	S
Rotation speed 3,0	00/6,000/8,000/10,000 rpm	S	S
	500/8,000/10,000 rpm	-	-
Speeds: 3,500/4,	500/6,000/8,000/10,000 rpm	ē	=
Variable speed con	trol up to 10,000 rpm	ē	=
High-speed router s	pindle	E	E
4.0 HP (3.0 kW) S	6/40 %	S	-
5.5 HP (4.0 kW) S	6/40 %	0	S
7.5 HP (5.5 kW) S	6/40 %	ē	=
10.0 HP (7.35 kW	/) S6/40 %	=	-
13.5 HP (10.0 kV)	/) S6/40 %	=	-
Working height		890 mm	890 mm
Machine table		1,000 x 550 mm	1,000 x 550 mm
L <sub>1</sub>		1,000 mm	1,000 mm
$\overline{L_2}$		-	2,000 mm
	1,000 mm*	ē	=
L <sub>3</sub> **	1,300 mm*	<del>-</del>	-
L-3	2,050 mm*	-	-
	2,500 mm*	-	-
B <sub>1</sub>		700 mm	770-1,096 mm
$B_2$		-	-
Extraction connection-Ø Spindle fence/spindle aggregate below table level		120 mm	120 mm

<sup>\*</sup>Scope of movement with outrigger table attached, \*\*Details of the maximum travelling distance depending on the length of the sliding table.

S... Standard equipment O... Option -... not available E... not possible to retrofit

### Space requirement

Scale 1:50



Symbolic image F 700 Z, F 900 Z

11 Mains connection F 900 Z

22 Mains connection F 700 Z

33 Extraction connection Ø Spindle fence





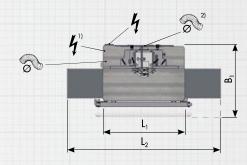






F 700 Z	F 700 M	F 900 Z	F 900 M
230 mm	230 mm	320 mm	320 mm
90°-45°	90°–45°	90°-45°	90°–45°
S	S	S	S
-	-	-	-
S	S	-	-
=	=	S	S
-	=	0	0
0	0	0	0
-	-	-	-
S	S	-	-
0	0	S	S
0	0	0	0
-	-	0	0
890 mm	890 mm	890 mm	890 mm
970 x 442 mm	1,146 x 765 mm	1,140 x 510 mm	1,146 x 756 mm
-	1,200 mm	-	1,200 mm
-	2,200 mm	-	2,500 mm
2,182 mm	=	-	=
-	=	3,090 mm	=
4,360 mm	÷.	4,465 mm	T.
-	-	5,373 mm	-
870 mm	874-1,197 mm	970 mm	890-1,210 mm
1,492-2,256 mm	-	1,492-2,256 mm	-
120/80 mm	120/80 mm	120/80 mm	120/80 mm

Further information about the technical data, individual configuration options and all noise level values can be found on the internet at www.felder.at



Symbolic image F 500 M, F 500 MS, F 700 M, F 900 M

1 Mains connection (option)

2 Extraction connection © Spindle fence