## FELDER®

# CF 741 A PERFECT COMBINATION OF 5 STAND ALONE MACHINES



# FELDER®



#### FELDER<sub>®</sub>

#### **CF 741**

# A perfect combination of 5 stand alone machines



Solid wood



Panel material



Everything you need for perfect woodworking results in just two and a half square metres: the Felder CF 741 woodworking system combines the advantages of five stand-alone machines and brings high performance, precision and the shortest change-over times to every workshop. Planing, moulding, cutting and drilling a top quality workshop in one machine. The operating comfort is increased even further with the Professional package, ensuring simple processing of larger workpieces.

#### **Variations**

Models & Your Advantages







#### **CF 741**

- » Planing width 410 mm
- » Cutting length: 1,300-2,500 mm
- » Spindle fence for tool  $\varnothing$  max. 230 mm
- » Quick-change system of the moulder spindle, standard
- » Mortising unit attachment (optional)
- » "Power drive" control (optional)

#### CF 741 professional

- » Planing width 410 mm
- » Cutting length: 2,050-2,500 mm
- » Spindle fence for tool Ø max. 230 mm
- » Quick-change system of the moulder spindle, standard
- » Mortising unit attachment (optional)
- » "Power drive" control (optional)

#### **CF 741 S professional**

- » Planing width 410 mm
- » Cutting length: 2,500-3,200 mm
- » Spindle fence for tool Ø max.230 mm
- » Quickchange system of the moulder spindle, standard
- » Mortising unit attachment (optional)
- » "Power drive" control (optional)

#### ... Your decision for Felder, a risk-free decision

- » The right machine for every budget
- » Complete reliability in professional use
- » Tailor made machine solutions
- » High quality cast iron machine table and aggregates
- » Innovative detail solutions derived from 65 years of experience - already included in the standard configuration
- » First class manufacturing and finishing standards
- » Intuitive application concepts
- » Modern, distinct design
- » Quality and precision from AUSTRIA
- » Powerful and efficient
- » Complete package: Comprehensive service support



# The most important highlights at a glance



#### X-Roll - precision guiding system

Since 1990, this linear guiding system, which has undergone continuous development, has proven its worth exclusively in machines from Felder. 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.



#### Silent-Power®

Exclusive for planer/thicknessers from the Felder Group The Silent-Power® spiral blade cutterblock cuts noise levels during planing by well over half and provides a continuous pulling cut for tear-free planing patterns in any type of wood. With this revolutionary new development from Format4 you are obtaining all of the advantages of a spiral cutterblock at considerably lower operating, investment and adjustment costs. The benefits of the Silent-Power® spiral cutterblock at a glance.



Quickest changeover time from planing to sawing, moulding and vice versa



#### Power-Drive (moulder spindle)

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. Red LED digits display the current position in real time on the control panel.



#### Power-Drive (planer)

The fully electrical "Power-Drive" planer table control offers the most precise adjustment and repeat accuracy. With a turn of the knob, you can quickly adjust the thicknessing height, then fine-adjust using the button. With the integrated LED-display, you can easily see the current actual value.



#### "Power-Drive" (saw blade)

Similarly, the saw blade height and angle settings can be set to an accuracy of a tenth of a millimetre. For fine tuning there is also a push button and a clear LED display screen to show you the actual current value.



### **Details**

#### The MULTI-fine adjustment system

Spindle fence "230" for max. tool Ø of 230 mm, MULTI adjustment system for spindle fence "230" for parallel alignment and quick adjustment.

#### Spindle 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.





#### Spindle moulder unit «700»

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

- » 115 mm useable spindle height above the table (140/160 mm)
- » Quick-change system for moulder spindle
- » Change the speed simply from the front of the machine
- » Collet chuck spindle for router tools with a speed of 15,000 rpm
- » Electrical height adjustment with digital LED display
- » Electrical angle adjustment with digital LED display
- » 4 rotating speeds 3,500, 6,500, 8,000, 10,000 rpm
- » Rearward tilt 0° to 45°
- » Precise double trunnion system
- » Dovetail guidance system of the height adjustment
- » Excellent vibration absorption from heavy cast iron unit



#### Quick-change system for moulder spindle

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 shaper production work



#### Table opening 230 mm

The large spindle table opening offers you maximum working safety: Large dimensioned panel raising tools as well as slot and tenoning tooling can be used below the table surface.



#### "Easy-Glide" – 6-year guarantee!

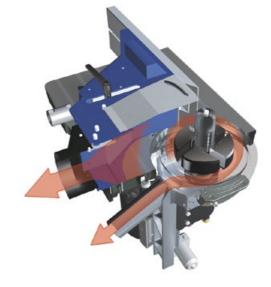
The patented tilt segment 'Easy-Glide' fulfills the highest requirements in businesses and industries. A precise, forced guided, double suspension guarantees maximum load bearing, zero backlash tilting, and is absolutely maintenance free. A special, highly durable synthetic material situated in the guide 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 reliabilty for many years to come.





**Safety Bar Guides** 

The safety bar guides, great for "end-grain" work (optional).



#### Dual dust extraction for spindle moulder

The dual dust extraction for the shaper via the shaper fence and the chip collection bin under the cutterhead ensures clean and trouble free operation.



#### Slot and tenoning

Large dimensioned and designed with high use in mind, the slot and tenoning table "hovers" on the "X-Roll", a highly developed, state-of-the-art guiding technology. 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" will guarantee you the quality and precision that you expect from your new panel saw. Another reason to choose Felder: Ten year factory guarantee to underline the reliability of "X-Roll".



#### Moulder spindle tilt 90°-45°

The Felder rearward tilting Spindle is the correct way for easy and safe operation:

- » Working safely
- » Suitable for any workpiece size
- » Problem-free power feeder application
- » Impeccable workpiece finish
- » Optimal chip removal



#### Power feeder

The use of a power feeder ensures that standard work when moulding can be carried out cleanly and precisely.



#### Tilt Bracket

With the Felder tilt away device, the power feeder unit always stays on the machine and can be used at any time.





#### **INCREDIBLY** QUIET

#### For the sake of your health and your employees

The Silent-Power spiral blade cutterblock reduces noise levels cutterblock provide up to by 50 % (10 db A) when compared with conventional systems.



#### **20 TIMES LONGER BLADE LIFE**

#### saves money

The tungsten carbide cutters in the Silent-Power spiral blade twenty times the cutting edge service life of HSS cutters.



#### **FOUR CUTTING EDGES**

#### More "planer knives" at the same price

Each tungsten carbide knife (on the Silent-Power spiral blade cutterblock) has four cutting bevels. Quickest change of the cutter with a simple single "turn".



#### **LOWER POWER CONSUMPTION**

#### save power costs

Regardless of the planing width, the Silent-Power cutterblock uses significantly less power than comparable systems.



#### TEAR-FREE **PLANING RESULTS**

#### Real spiral-knife technology

Continuous, pulling cut thanks to the compact arrangement of all cutting edges with optimized cutting angle on the Silent-Power spiral blade cutterblock.



#### LARGE **CHIP SPACE**

#### smallest chipping volumes

The chipping flow optimized chip clearance of the Silent-Power spiral blade cutterblock and the short cutting bevels guarantee the best possible chip transport and the lowest chip volumes



#### **IN-HOUSE PRODUCTION**

#### Innovation made in Austria

The Silent-Power spiral blade cutterblock is manufactured 100% in the factory in Hall i. T., Austria. Local craftsmanship and uncompromising manufacturing standards guarantee the top quality "Made in Austria".



#### **PATENTED SINCE 2012**

#### Often copied, but never equalled

Almost 10 years ago, the Silent-Power spiral blade cutterblock has set new standards on the market in terms of noise reduction, quality and efficiency and it is still unmatched today.



#### Stability for high performance

The solid cast iron cutterblock housing is built for heavy duty work. The serrated steel infeed roller and the microserrated steel outfeed roller guarantee a perfect transport of the workpiece through the machine. Both steel rollers are large dimensioned and non-wearing. On request, we can equip your CF 741 with a rubberised feed roller. This allows the compensation of greater differences in thickness and allows you to plane workpieces of varying thicknesses at the same time. The combination of cutterblock, transport feed rollers and type of wood are essential for perfect jointing results. The new Felder CF 741 can be customised and adapted to your specific needs.



#### Change the blades in record time

Simple blade settings, carried out incredibly quick - accurate to a tenth of a millimetre, standard with FELDER! Resin-free clamping screws and the self-setting cutters allow you to change the knives in less than two minutes. As a result, complicated adjustments and expensive setting gauges are no longer necessary. The advantages at a glance

- » Knife change in less than two minutes
- » Selfsetting blades for high precision when changing the blades
- » No resin buildup on the clamping screws
- » Extremely smooth operation due to the enclosed design
- » Maximum durability of the knives



#### The Felder planer fence

The planer fence can be tilted to any position from 90° to 45°. There is an end stop at both the 90° and 45° positions.





#### **Planer Guard EURO Standart**

The space saving planer guard integrated into the machine chassis stabilizes the workpiece when jointing and beveling.



#### Comfort planer guard

Maximum work safety and unparalleled ease of use: The spacesaving dressing guard integrated into the machine stand stabilises the workpiece during dressing and joining operations.



#### Dust extraction hood.

Heavy chip loads are no problem for the chip extraction hood due to its efficient design and large dimension.



#### 2 stage gear

Thicknessing feed speeds can be set to either 6m/min or 12m/min.

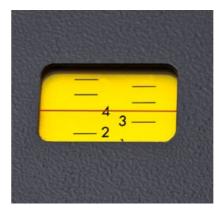


#### Open planer table

Fastest changeover from planing to thicknessing through simultaneous, spring-assisted opening of the planer tables.

#### Setting the depth of cut

The depth of cut can be continuously adjusted up to 4 mm. The magnifying glass guarantees exact reading of the



#### Thicknesser height adjustment

Thicknessing table adjustment accurate to within a tenth of a millimetre with handwheel and integrated digital display. Max. thicknessing height 230 mm.



#### Mortising unit attachment

The mortising unit is mounted to the planer side. On request, the mortising unit can be ordered with a transport unit which allows easy mounting and removal of the mortiser.





#### The Felder Saw Unit "104"

Manufactured entirely from cast iron, the new Felder "104" saw unit fulfils the highest demands of modern woodworking.

- » 104 mm cutting height with a 315 mm saw blade diameter
- » Electronic height adjustment of the saw blade ("Power -Drive" K1)
- » Electrical height and angle adjustment of the saw unit with LED display ("Power-Drive" K2)
- » Precise height adjustment via precision linear guides
- » Optimal dust extraction with the completely enclosed, below table extraction system
- » Large scale, double ball bearing saw arbour



#### Scoring unit

For chip free cuts in laminated panels. The saw blade can be mechanically or electrically driven and can be adjusted in both height and lateral position.



#### **Grooving work**

Felder -Series -700- saw units also allow you to carry out grooving work. Thanks to the removable circular saw flange and detachable table insert, you can use adjustable dado tools specially developed by Felder.



#### Remote ON switch on sliding table

On request, we can equip your "700" with start buttons for the main and scoring blades located directly on the sliding table – How about that for convenience!



#### Circular saw shaft

The electronically balanced, double-bearing saw arbor is driven via Poly-V belts. This combination results in an almost perfect transmission of power to the saw blade.

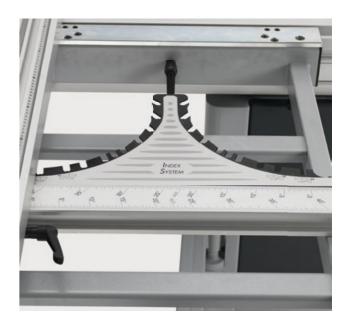


#### Outrigger table

The solid outrigger table makes it possible to process large and heavy workpieces. Eight ball bearing guide rollers in the outrigger telescopic arm ensure maximum precision and smoothness. For customised perfection in woodworking, you can optionally equip your Felder saw with a 1.100 Felder outrigger or 1.300 professional edition. The telescopic crosscut fence with coupling system and ergonomically designed scale or read-off optics on the stops guarantee precise adjusting and makes it possible to perform cross cuts up to 2,600 mm. The crosscut fence can tilt from 90°-45° and comes standard with one fence stop. A fixed reference position is provided at 90°. If desired, a workpiece roller can be mounted at the end of outrigger.

#### Precision miter guide index system outrigger table

No time wasted trying to find the correct angle and one hundred percent precision in adjustment and positioning, without any reading errors, are just some of the advantages of the precision mitre index system. Highly precise index points enable the exact production of polygons such as e.g. 5.625° (32 sides), 11.25° (16 sides), 22.5° (8 sides). Additional index points at 15° 20°, 25°, 30°, 35°, 40° and 45° can be used when the crosscut fence is both at the front and at the back of the outrigger. Every index position is provided with length compensation. The highly precise Felder mitre index system is adjusted at the factory and every index position can also be individually fine adjusted. The index system integrates itself well into the machine design and will increase your productivity for an amazingly low investment amount.





#### Outrigger table with floor support roller

- » For rip and formatting cuts of large panel material
- » Height adjustable floor rails, total length 4.5m consists of 3 segments



#### **Crosscut fence**

The 1.100 mm crosscut fence for mitre cuts between +45° and -45° can be mounted directly onto the aluminium sliding table without the use of any tools. An end stop allows for quick and precise 90° degree cuts. The beveled miter scale with hairline readout is visible from the operating area and thus allows exact reading of the required crosscut value. The large crosscut fence stops are constructed in such a way that a small tongue on the stop fits perfectly into a groove on the fence. This keeps the stop firmly in place for both straight and tight angle mitred cuts.



#### Rip fence

The rip fence is easy and smooth to adjust, with a singlehanded clamping mechanism. The optional fine adjustment makes precise measurements possible. The rip scale is easy to read and perfectly integrated into the machine table.



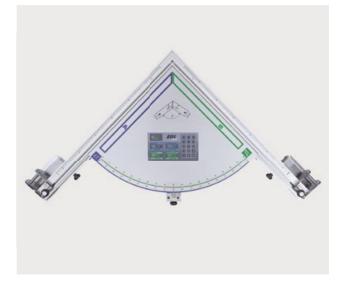
#### **Table Extension**

Aluminium table extension with p-coupling single lever clamping system for quick and easy assembly without tools.



#### **Crosscut stop**

Optional: Digital crosscut fence stops with settings to an accuracy to a tenth of a millimetre.



#### **EGL 1350**

UNIQUE The patented Felder double cut miter gauge enables you to produce miter cuts of any angle for various workpiece widths! This is how easy it works: Type in the desired total angle g and the workpiece widths A and B on the keyboard of the integrated computer – Read off the setting values a + b and set the double mitre gauge! The crosscut fence stops on the fence guides can be adjusted up to 1,350 mm using the scale. The vernier scales compensate for the length, allowing you to set and cut the exact required length.



#### Stop scale

The beveled miter scale with hairline readout is visible from the operating area and thus allows exact reading of the required crosscut value.



#### Pneumatic workpiece holder

- » Easy clamping of workpieces with maximum flexibility. Can be used on all panel saws and spindle moulders that are equipped with a sliding table.
- » Easy set up due to magnetic fittings
- » Safety cylinder ensures maximum working security
- » Pressure bar function is possible with every sliding table length
- » Clamping height 95 mm
- » Clamping force approx. 300 kg



#### **Technical specifications**

Electri	ics	CF 741	CF 741 professional	CF 741 S professional
001	3x 400 V motor voltage	S	S	S
002	3x 230 V motor voltage	W	W	W
003	1x 230 V, 4.0 HP (3.0 kVV)	0	0	0
004	50 Hz motor frequency	S	S	S
005	60 Hz motor frequency	W	W	W
006	4.0 HP (3.0 kW)	S	S	
007	5.5 PS (4.0 kW)	0	0	S
800	5.5 HP (4.0 kW)	0	0	0
009	10.0 PS (7.35 kW)	0	0	0
10	Star-delta start is necessary from 7.5 HP and 3x230V	0	0	0
11	Switch for forward and reverse run	S	S	S
12	Switch contact for the control of an extractor	0	0	0
14	3-phase CEE coupling for additional equipment with time-delayed connection (essential for the use of a power feeder)	0	Ο	Ο

Cutterblock				
30	Planing width in mm	410	410	410
32	Planer fence plate 1.485 m	S	S	S
33	Planer fence plate 1.485 m andonised	0	S	S
34	Additional table for jointer fence	S	S	S
36	Standard EURO planer guard	S	S	S
37	Comfort EURO planer guard	0	0	0
38	2-knife Felder-system cutter-block	S	S	
39	4 knife Felder-system cutter-block	0	0	S
40	4 knife Standard cutter-block using traditional single sided planer knives	0	0	0
41	3-knife TERSA cutter-block	0	0	0
44	Silent-Power® spiral cutter-block	0	0	0
-	Overall planer table length in mm	1.650	1.650	1.650
-	Number of knives – Silent-Power spiral cutterblock	63	63	63
-	Infeed planer table length in mm	800	800	800

Thick	nesser and feed gears;			hanne
50	Thicknessing width in mm	404	404	404
51	Digital display of the thicknessing height in mm;	S	S	S
52	Digital display of the thicknessing height in inches	0	0	0
53	Electrical height adjustment and digital display on the thicknessing table ("Power-Drive" D1)	0	0	0
56	2-speed synchronised feed 6 m + 12 m/min;	S	S	S
-	Minmax. thicknessing height in mm	3-230	3-230	3-230
-	Min. workpiece length in mm	190	190	190
-	Max. depth of cut (mm)	4	4	4

Saw	and scoring unit	CF 741	CF 741 professional	CF 741 S professional
201	Electrical height and angle adjustment of the circular saw with a digital LED display (#119)	0	0	0
23	Electrically driven scoring unit with 1 x 230 V; $\varnothing$ 100 mm with a Main circular saw blade- $\varnothing$ 300 mm (#003)	0	Ο	0
69	Saw blade tiltable 90°-45°, 140 mm maximum cutting height with a saw blade diameter of 315 mm, rotation speed of 4800 rpm	S	S	S
71	Scale for sawblade angle on the handwheel	0	0	0
73	Sliding bridge for stop between circular saw and planing table	0	0	0
74	Scoring unit mechanically driven, $\varnothing$ 100 mm with main saw blade $\varnothing$ 300 mm	0	0	0
75	Scoring unit electrically driven, Ø 100 mm with main circular saw blade Ø 300 mm	0	0	0
80	EURO II standard saw guard	S	S	S
82	Dado capability for tooling up to 3/4" (19.5 mm) width	0	0	0
84	Fine adjustment of the rip fence	S	S	S

pina	le moulder unit and spindle fence			
100	30 mm diameter spindle, 140 mm useable spindle height above the table	0	0	0
101	40 mm $\varnothing$ moulder spindle, 160 mm useable height above the table	0	0	0
102	50 mm $\varnothing$ moulder spindle, 160 mm useable height above the table	0	0	0
103	30 mm $\varnothing$ spindle, 115 mm useable spindle height above the table	S	S	S
104	50 mm $\varnothing$ moulder spindle, 115 mm useable height above the table	0	0	0
105	11/4", $\varnothing$ moulder spindle, 115 mm useable height above the table	0	0	0
106	$35~\mathrm{mm}$ Ø moulder spindle, $115~\mathrm{mm}$ useable height above the table	0	0	0
107	32 mm $\varnothing$ moulder spindle, 115 mm useable height above the table	0	0	0
108	Highspeed router spindle 15,000 rpm instead of a 30 mm $\varnothing$ moulder spindle	0	0	0
109	Manual moulder spindle tilt 90° – 45°	S	S	S
110	Scale for tilting moulder spindle on the handwheel (!119)	0	0	0
112	Spindle moulder fence 230 for max. tooling diameter 230 mm (400 mm fence plates)	S	S	S
113	MULTI-fine adjustment system for the spindle moulder fence "230" (#112)	0	0	0
115	Aluminium fence plates	S		
116	Anodised aluminium fence plates	0	S	S
117	Anodised aluminium fence plates and safety bar guides (#112)	0	0	0
118	Electrical height adjustment with digital LED display ("Power-Drive" F1) (#110)	0	0	0
119	Elektrische Höhen- und Winkelverstellung Fräse mit LED-Anzeige (#201)	0	0	0
123	EURO spindle moulder guard	S	S	S
125	Sicherheitslineale "Integral" 500 mm	0	0	0
	Frästischöffnung in mm	230	230	230

194 Rolling carriage for heavy professional bore support (#190)



Forme	at sliding table, slot and tenoning table	CF 741	CF 741 professional	CF 741 S professional
131	Format sliding table M, cutting length 1.300 mm	S		
132	Format sliding table M, cutting length 2.050 mm	0	S	
133	Format sliding table, cutting length 2.500 mm, anodised, edging shoe	0	0	S
134	X Format sliding table, cutting length 2.800 mm, anodised, edging shoe			0
135	XL Format sliding table, cutting length 3.200 mm, anodised, edging shoe			0
136	Anodised sliding table	0	S	S
139	On and off switch on the sliding table	0	0	0
141	Format sliding table M, cutting length 1.550 mm	0		
Outri	gger table and longitudinal stops			
159	Outrigger table 1.100 for sliding table 1.300–2.050 mm	0	S	
160	Outrigger table 1.300 for sliding table 1.300-2.500 mm	0	0	S
161	Outrigger table 1.500 for sliding table 2.500–3.700 mm			W
164	1.100 mm crosscut fence for all sliding table lengths	S	0	0
165	Telescopic extension for crosscut fence from 1.100 mm to 2.000 mm (#164)	0	0	0
166	Outrigger crosscut fence 2.600 mm "X-Roll" system (#159/160)	0	S	S
168	Outrigger crosscut fence 2.600 mm "X-Roll" system instead of 1.100 mm crosscut fence $(#159/160)$	0		
169	Outrigger crosscut fence 3.200 mm "X-Roll" system (#159/160) with 2 crosscut stops instead of 2.600 mm (#166/168+159/160)	0	Ο	Ο
170	Precision mitre guide index system for outrigger crosscut fence	0	0	0
171	1.900 mm digital crosscut fence, 1 digital flip stop, extendable to 3.200 mm for outrigger 1.500			Ο
172	3.200 mm digital crosscut fence, 2 digital flip stops, for outrigger 1.500			0
173	Precision miter guide with cutting length compensation for $1.300/1.500$ outrigger	0	Ο	0
Morti	sing unit			
190	Bore support, heavy-duty professional version	0	0	0
191	Mortising chuck clamping range 0-16 mm	0	0	0

General		CF 741	CF 741 professional	CF 741 S professional
13	Prepared for minimum transport width 800 mm	0	0	0
-	Thicknesser extraction connection-Ø in mm	120	120	120
-	Extraction connection-Ø in mm Spindle fence/below table level spindle aggregate	120/80	120/80	120/80
-	Extraction connection $\varnothing$ in mm saw/saw guard	120/50	120/50	120/50
-	Working height in mm	890	890	890
-	Weight kg (with standard configuration)	960	1.030	1.120
-	Min. transport width in mm	1.500	1.500	1.500
-	/viin. transport wiath in mm	1.300	1.300	1.300

Important accessories				
210	Rolling carriage	0	0	0
211	Coupler system for the table extension of the thicknesser table	0	0	0
212	Power feeder tilt-away device	0	0	0
223	IPPC palette	0	0	0

Transport				
221 Container transport p	preparation	0	0	0



#### **Product range**























Panel Saws





















Spindle Moulders

F 900 Z

F 700 M

F 700 Z F 500 MS

F 500 M

KF 700 S professional KF 700 professional KF 700

KF 500 professional KF 500





AD 941

AD 741







D 951 D 963



Combination machines











Planers









Dowel Boring Machine, Drilling Machine and Horizontal Mortiser









Bandsaws

Wide Belt









FW 1102 perform FW 1102 classic FW 950 classic

Brushing Machine



Belt and Edge Sanders









G 480



G 380 G 360













Edgebanders

































EUK EUK

### FELDER®

#### FELDER Quality and precision in a nutshell

Since 1956, a guarantee for perfect results with excellent ease of use and reliability in regular professional use. Woodworkers are always enthusiastic about the individual and solid solutions for small and mid-sized businesses.

#### **FELDER GROUP**

KR-Felder-Straße 1 A-6060 HALL in Tirol

- Tel. +44 1908 635000
  <u>www.felder.uk</u>
  <u>Contact</u>
- Tel. +353 906625756www.felder.ieContact
- Tel. 1800 274 3040 www.felder.in Contact
- Tel. +43 5223 58500 <u>www.felder.int</u> Contact