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PREMIUM-EDGE BANDERS





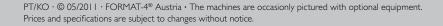
FORMAT-4 Mechanical engineering

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Immediate-Info:







Top quality and long-lasting precision, made in Austria An edgebander from the Felder-Group will help ensure the success of your business!

Our experience – means that you can be confident in your decision! For more than 50 years, we have committed ourselves to developing, producing and selling first-rate woodworking machines. Today, Felder-Group machines are amongst the bestselling in the world.

Our concepts will help you to increase your profits!

Tailor-made machine specifications and high quality service are the Felder concepts that will help to improve the productivity and revenue of your business. Whether it be in the field of cabinet-making, crafts workshop or high-end industry, we are the right partner for you!

The quality and precision of our machines will guarantee long-term satisfaction!

Felder and Format-4 products are designed and manufactured exclusively in the Felder factory in Hall in Tirol in Austria. Highly qualified employees, modern manufacturing technologies and quality control processes according to Six-Sigma ensure the operational and long-term precision of every woodworking machine from the Felder-Group.

Technical advice, perfect products and service from one single provider!

The Felder-Group is your contact person, from the smallest panel saw through to an interconnected industrial machine network! Call us now, you won't be disappointed.



FORMAT-4[®] is a brand of Felder KG. We have been developing and producing first-rate woodworking machines and accessories since 1956.













perfect 610 and perfect 710 "Premium" edgebanders

Productivity, versatility and precision in one!

Regardless of whether you are using coiled or strip materials, the new Format-4 "perfect" models deliver extremely impressive machining results.

The solid machine chassis and heavy duty units combined in an attractive design ensure the highest level of precision. An absolute highlight of every "perfect" model is the accuracy of the position settings of the individual units. The e-motion is equipped with individual machining programs that can be stored and reused, ensuring precise results especially when you require a quick changeover of material or edging.

A wide choice of optional units are available, to enable you to perfectly adapt your machine to your production requirements.



4 Machines – 2 Series – 2 Control Systems



perfect 610 x-motion

- → Control panel with 5.7" colour touch screen
- → Manual unit adjustment
- → Tape thickness 0,4–10 mm
- → Workpiece height 8–60 mm
- → 12 m/min feed speed
- → 4 free spaces for additional machining units
- \rightarrow Part automation possible

Option: x-motion-plus Package

- + 10.4" colour touchscreen
- + Unlimited storage space for work programmes
- + Motor-driven multifunction spindle moulder unit



perfect 610 e-motion

- → Control panel with 10.4" colour touch screen
- → Electronically positionable units
- → Tape thickness 0,4–10 mm
- → Workpiece height 8–60 mm, Position-guided
- → 12 m/min feed speed
- → 4 free spaces for additional machining units

perfect 710 x-motion

- → Max. 60 mm corner rounding unit capacity
- → Control panel with 5.7" colour touch screen

FORMAN

- → Manual unit adjustment
- → Edging thickness 0.4 to 10.0 mm
- → Workpiece height 8–60 mm
- → 12 m/min feed speed
- → 4 free spaces for additional machining units
- → Part automation possible

Option: x-motion-plus Package

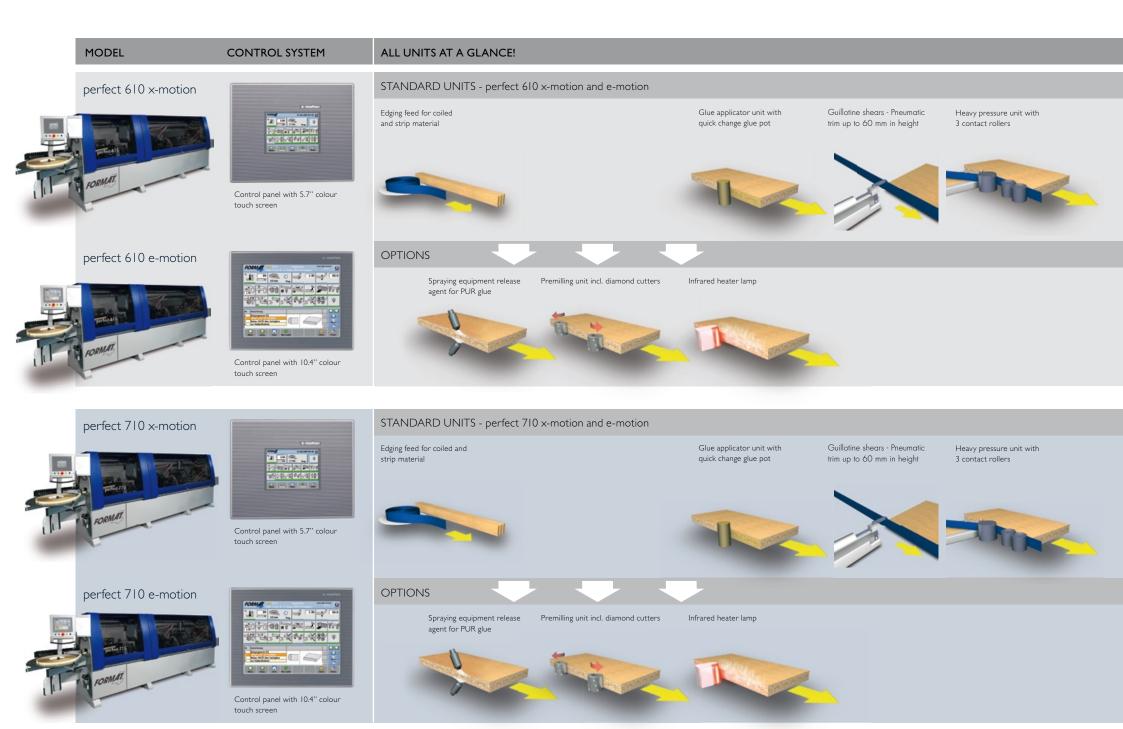
- + 10.4" colour touchscreen
- + Unlimited storage space for work programmes
- + Motor-driven multifunction spindle moulder unit

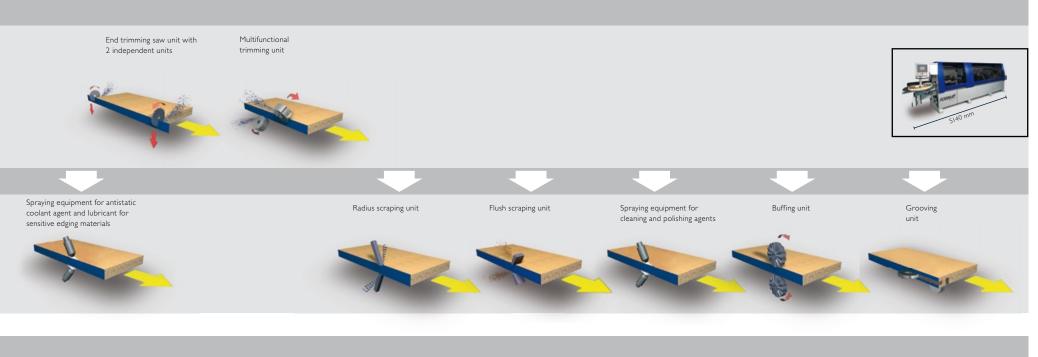
perfect 710 e-motion

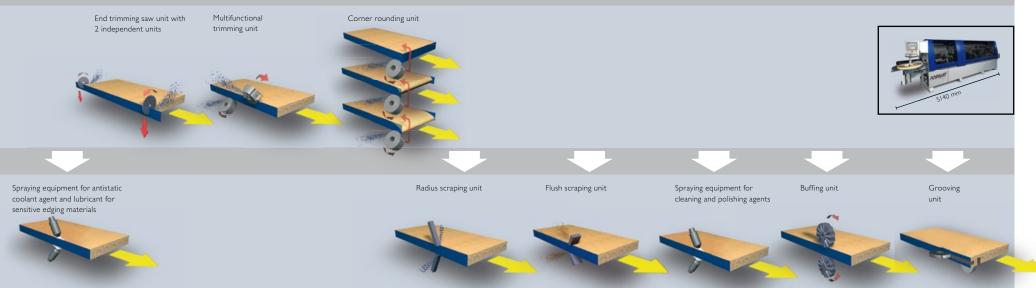
- → Max. 60 mm corner rounding unit capacity
- → Control panel with 10.4" colour touch screen

FORMA

- → Electronically positionable units
- → Edging thickness 0.4 to 10.0 mm
- → Workpiece height 8–60 mm, Position-guided
- → 12 m/min feed speed
- → 4 free spaces for additional machining units







x-motion Control system

perfect 610/710 x-motion: Control panel with 5.7" colour touch screen





Functions:

- → 4 operational programs for a quick selection of the materials
- → Easy, self-explanatory representation of the units and their functions
- → Glue heating parameter settings (temperature, idle and operating)
- → Unit selection
- → Selection of the contact pressure of the pressure rollers
- → Fine adjustment of the distance parameters
- → Setting adjustment of the trimming length of the protruding edges at the front and the back of the workpiece
- → Plain text error messages
- → Maintenance schedule
- → Odometer for total meters of material used and much more...

e-motion Control system

perfect 610/710 e-motion:

Control panel with 10.4" colour touch screen





Functions:

- → User-defined program storage
- → Control of the electronically positionable units
- → Fine adjustment of the units to 1/100 mm from the control panel
- → Easy, self-explanatory representation of the units and their functions
- → Glue heating parameter settings (temperature, idle and operating)
- \rightarrow Unit selection
- → Selection of the contact pressure of the pressure rollers
- → Fine adjustment of the distance parameters
- → Setting adjustment of the trimming length of the protruding edges at the front and the back of the workpiece
- → Plain text error messages
- \rightarrow Maintenance schedule
- → Odometer for total meters of material used and much more...

e-motion highlights: Motor-driven adjustment as a standard

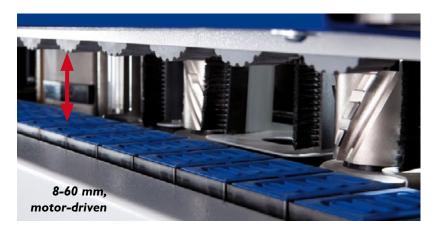
Premilling fence



As a standard, the premilling fence is motor-driven and moves to the desired depth of cut. The depth of cut, from 0 to 3 mm, can easily be selected using the colour touchscreen.

Upper spring-loaded pressure bar

Adjustment to workpiece height is electronic (as a standard) and is selected using the control panel.

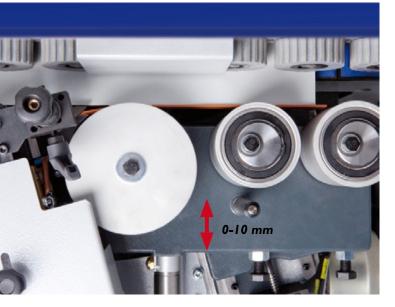


Glue pot is pneumatically preloaded and application-controlled

The pneumatically preloaded, applicationcontrolled glue pot prevents glue residue from sticking to the end edge (option).



Pressure rollers



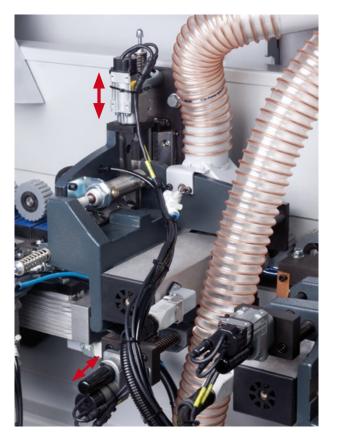
After selecting the edge thickness using the colour touchscreen, the pressure rollers are automatically set to the correct p osition.

Pneumatic, tilting sawing module



The sawing module can easily be adjusted for bevel cuts from 0° to 15° using the colour touchscreen.

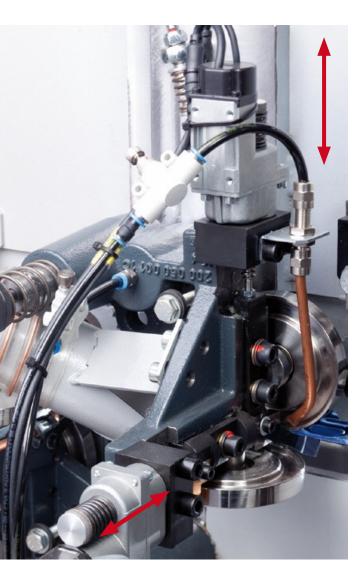
Multifunctional trimming unit



The motor-driven change of axis height and depth guarantees 100 % setting repeatability. Any adjustments can be made using the colour touchscreen, with an accuracy of 1/100 mm.

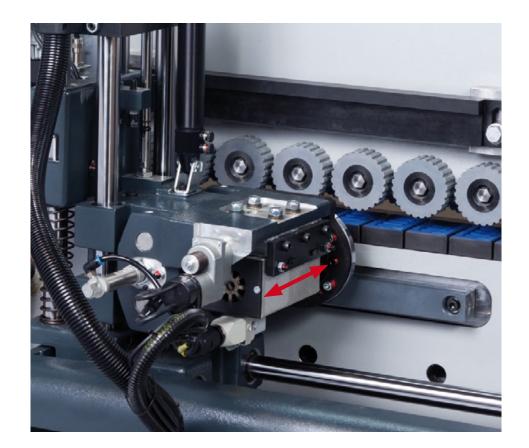
e-motion highlights: Electronic adjustment as a standard

Radius scraping unit



A unique feature is electronic adjustment of the height and depth of the radius scraping unit. The unit automatically adjusts itself to the correct edging thickness, which guarantees perfect edgebanding results.

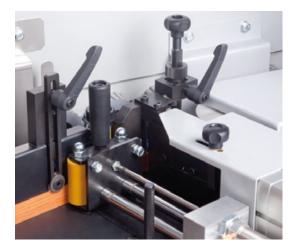
Corner rounding unit



As an option, the depth of the motor-driven corner rounding unit can be adjusted using the colour touchscreen. Thus, it is no longer necessary to manually adjust the corner rounding unit when changing edging material.

Highlights

Edging feed and guillotine scissors for coiled and strip material up to 60 mm thick





Depending on the requirement, coiled material 0.4 to 3.0 mm thick and strip material up to 10 mm thick can be used for workpieces up to 60 mm in thickness. An infrared sensor recognises whether edging material is available to be machined. The guillotine scissors for cutting the coiled material are set to a maximum of 3x 64 mm.

The magazine, which automatically feeds the strip material via the pin grip roller, has a holding capacity of 120 mm. The height settings on the pressure bar and the contact pressure manometer placed next to the edge infeed ensure quick changeover times.



Glue application unit Short heating time, quick change system



The "perfect" edgebander requires only 8 minutes to reach operating temperature! The Teflon coated glue pot and its tool-free quick change system is suitable for EVA (ethylene vinyl acetate copolymers) and PUR (Polyurethane resin) hot melt adhesive granulates.

The fine adjustable glue cylinder ensures that the correct amount of the glue required is applied and can adapt perfectly to different edging materials.







Highlights

Pressure rollers Perfectly glued edging



The first pressure roller, which is solid and adjustable, presses the edging material to the workpiece. The adjustable control prevents the glue from smearing and the edging tape from being "squashed". The two conical moulding pressure rollers complete the glue bond at the top and bottom. Two contact pressure settings can be selected from the control panel: less pressure for when strip material is processed and higher pressure for processing coiled material.

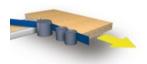
Two pneumatic contact pressure settings can be selected from the control panel: a strip cylinder with low pressure and a roller cylinder with high pressure. All e-motion models have an electronically positionable pressure roller unit as a standard.

End cutting unit Precise cuts for every application



The end trimming unit consists of two independent saw units with high-frequency motors (12,000 rpm). Linear guides ensure maximum precision. The end trimming unit tilts from 0° to 15°. Depending on the equipment, tilting is regulated manually or pneumatically via the control panel (e.g. 15° bevel cut, only forward, only backward, or forward and backward).







Multifunctional trimming unit Innovative precision with quick setup



The multi-functional flush, radius and thin-edge bevel trimming unit consists of two independent trimming units with high frequency motors (12,000 rpm). Linear guides guarantee the highest possible precision with little maintenance required. The easy adjustment and setup of the unit means that it is extremely quick to change between different edge thicknesses and profiles. Depending on the equipment option chosen, the multifunction unit can either be adjusted manually or pneumatically, controlled via the control panel.





Precise dial gauges on the x-motion models ensure that all the units are set up quickly and precisely. On all of the e-motion models, the setting of the electronically positionable units is carried out on the colour touch screen.

Corner rounding unit An indispensable level of productivity



No more time-consuming further processing of the workpiece! The Format-4 corner rounding unit "finishes" workpiece corners (incl. soft forming and post forming materials) for edging materials 0.4 to 3.0 mm thick and up to 60 mm in height, with a feed rate of 12 m/min.

The solid cast iron construction, linear guides and a high-quality spindle with a starting clutch ensure long-term precision. The corner rounding unit is controlled from the control panel, naturally with the option of choosing which corners need to be rounded (only on the front of the workpiece, only on the back, or both on the front and on the back).

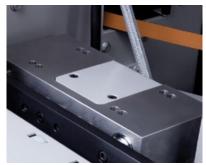




Options

Premilling unit Ensures a perfect ''finish''





The two diamond-tipped, application-controlled spindle heads rotate in opposing directions, ensuring a perfectly straight workpiece edge to which the edge material can be glued. The premilling unit guarantees that chipped or torn edges are a thing of the past, each and every time.

After entering the exact dimensions, the premilling unit executes a perfect edge cut on your panels.

Maximum depth of cut is 3 mm; manual adjustment on x-motion models. The depth of cut can be electronically positioned on all of the e-motion models as a standard.

Radius scraping unit The perfect ''finish'' - a quality option

The radius surface receives a light scraping, removing any remnants from the trimming process and ensuring a smooth "finish". The fine adjustment is manual. The radius scraper unit can be disengaged either manually or pneumatically from the control panel, depending on the model.

On all of the e-motion models, the fine adjustment is carried out on the colour touch screen.

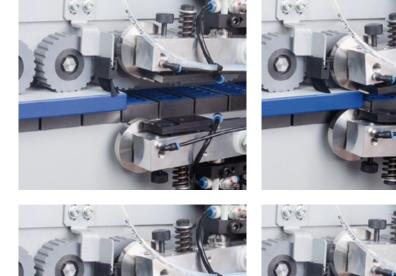








Electronically controlled glue scraping unit The perfect "finish" - a quality option





For a perfect surface "finish". The light scraping function of the surface scraper knives removes all glue residues from the glue bond on the workpiece surface. One more step towards the perfect and completely

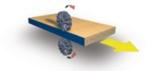
finished workpiece.



Buffing unit The perfect "finish" - a quality option



Super "finish" for ABS and PVC edging material. The machine can, on request, be equipped with spraying equipment to apply polish onto the workpiece.



Optional additional finishing units

Spraying equipment and spray for the perfect "finish", leaving a workpiece requiring no further processing

Low consumption guaranteed due to application controlled spray nozzles to apply separation solution for PUR glue, antistatic solution and lubricant for sensitive edging materials and cleaning agents and polish for clean workpieces and a perfect "finish".





Workpiece feed protection





A pneumatic cylinder on the feed side releases workpieces into the machine one after the other. The user does not need to pay attention to light signals. This workpiece feeding system ensures maximum production reliability.

Glue pot is pneumatically preloaded and application-controlled

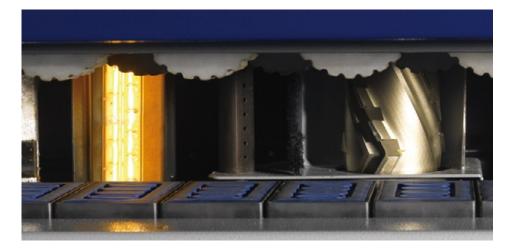


The glue pot is pneumatically preloaded and application-controlled. This prevents glue residue from sticking to the end edge, which no longer needs to be cleaned. Additionally, the glue pot can easily be engaged and disengaged using the control panel.

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Infrared lamp so the edging adheres better onto cold workpieces



The operation controlled, high quality quartz infrared lamp warms the edge surface in front of the glue unit. This guarantees that the edging adheres to cold workpieces.

"Nesting" Package



The "Nesting" Package optimises the processing of workpieces with bowl bores or surfaces with acute angles.



Horizontal multi-dancer rollers

When processing sensitive edging materials, the horizontal multi-dancer rollers (instead of a scanning head) prevent any damage during the edgebanding process.

Options

New: 2 feeder speeds for greater productivity

As an option, your edgebander can be equipped to have 2 feeder speeds. The feeder speed, either 12 m/min or 20 m/min, can easily be selected using the colour touchscreen. This automatically increases the throughput of your edgebander.



New: Grooving unit for horizontal and vertical grooves

The new grooving unit in the "perfect 710" ensures even greater productivity. It has a vertical function for back grooves and a horizontal function for tongue-and-groove joints - no need to use a spindle moulder on the workpiece. The type of function vertical or horizontal, can be manually set in just a few seconds. The settings for groove position and groove depth (0-15 mm) can easily be selected from the colour touchscreen with a 1/100 mm accuracy. Special grooving saw blades are used according to the desired groove depth (4-7.5 mm)







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Premelting unit for EVA hot melt adhesive

The premelting unit consists of a melting unit with a 4 kg granulate container situated on top of a glue pot (equipped with a liquid level sensor). If the liquid level in the glue pot drops, the controls send a request for additional glue to the granulate container. The requested granulate is pneumatically pressed by the high-performance heated plate, melts and flows into the glue pot. The new Format-4 premelting unit ensures that there is always fresh, true-colour glue in the glue pot. This helps avoid inconvienient down time for additional glue warm-up phases. The granulate container and the glue pot are equipped with a quick-change system as a standard. In addition, special cleaning programs facilitate quick glue or glue colour changes.







New: Request-based user data acquisition

This software package enables individual user administration, including password protection. The number of users is unlimited, with the option of restricted access. In addition, work reports from each user can be individually read, evaluated and calculated in detail.

x-motion-plus Package



x-motion-plus Touch screen control panel

Functions:

- → Unlimited storage space for user-defined work programmes
- → The multifunction spindle moulder unit can be moved with 1/100th mm accuracy (motor-driven movement) using the control panel
- → Fine adjustment of the spindle moulder unit with 1/100th mm accuracy using the control panel
- → Glue temperature adjustment
- → Automatic glue temperature decrease
- ightarrow Odometer for total meters of material used
- ightarrow Display of the maintenance intervals
- → Plain text error messages
- → and many more.

Automatic positioning for flush and radius trimming or bevelled cuts with an accuracy of 1/100th mm using the control panel and unlimited storage space on a 10.4" colour touchscreen = x-motion-plus



Flush trimming





Bevel trimming



The x-motion-plus Package enables automatic setup of the multifunction spindle moulder unit. In addition, fine adjustment can be carried out from the control panel with an accuracy of I/I00th mm. All settings can be saved as work programmes. When a particular type of edging material is called up again, the unit automatically moves to the saved setting.

"Loopex" Workpiece Return

Economical single-user operation with "Loopex" Maximise productivity for greater revenue from the edgebander

- Increase in productivity
- Greater workflow efficiency
- Automatic increase in device capacity
- Workpiece return to a comfortable working height
- 50 % space saving with "Loopex" as opposed to a conventional return system

The "Loopex" workpiece return system is permanently connected to the edgebander. The workpieces are automatically transported from the machine via a conveyor belt synchronized with the so-called "manipulator".

The conveyor belt consists of 6 conveyors that can be individually adapted to the material dimensions.

Guides and substructure are made using the aluminum profile technique and can meet the greatest demands. The "manipulator" is equipped with an automatic rotating device. Parts wider than 1000 mm are automatically rotated by 90°, thus reducing the footprint of the entire "Loopex" workpiece return system by more than 1500 mm - a significant advantage over other systems. Transfer from the belt conveyor to belt conveyor is carried out by the

"manipulator"; the workpiece comes back to the user on the conveyor belt. Thanks to the latest vacuum technology, the handling of the workpieces is completely damage- and collision-free.

The conveyor consists of a smooth PVC belt with a width of 800 mm. The solid support structure is made of steel profiles and therefore offers maximum stability, even for large, heavy workpieces.

Technical Information

Maximum panel size (L x W x H) 2800 x 1500 x 60 mm Minimum panel size (L x W x H) 140 x 70 x 8 mm Maximum panel weight 100 kg



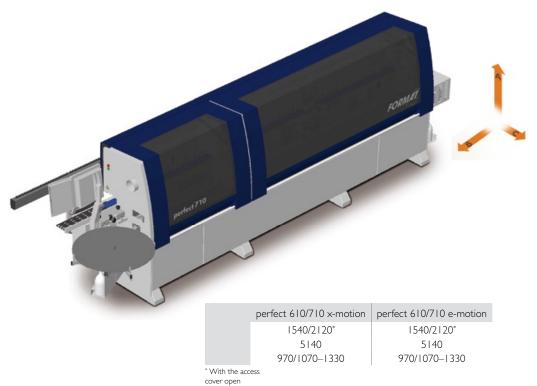
Technical data, Equipment options to suit your personal needs:

		perfect 610 x-motion	perfect 710 x-motion	perfect 610 e-motion	perfect 710 e-motion
POS	Electrics				
001	3x 400 V motor voltage, 50 Hz motor frequency	S	S	S	S
002	3x 230 V motor voltage, 60 Hz motor frequency	0	0	0	0
	Working dimensions				
	Min. workpiece width (mm)	70	70	70	70
	Min. workpiece length (mm)	140	140	140	140
	Min. workpiece height (mm)	8	8	8	8
	Max. workpiece height (mm)	60	60	60	60
	Processing of 0.4–3.0 mm coiled material	S	S	S	S
	Processing of 0.4–10 mm strip material	S	S	S	S
	Units				
	Control panel with 5.7" colour touch screen	S	S	-	-
	Control panel with 10.4" colour touch screen	-	-	S	S
075	x-motion plus control panel with 10.4" colour touch screen	0	0	-	-
072	Recording of operating hours for several users	-	-	0	0
	Solid steel machine chassis	S	S	S	S
062	Pull-out workpiece support – to assist in the processing of larger workpieces	S	S	S	S
	Manual height adjustment of the workpiece feed pressure rollers with 2 offset lines of rollers for equal pressure distribution on the workpiece	S	S	-	-
	Motor driven adjustment of the workpiece feed pressure rollers with 2 offset lines of rollers for equal pressure distribution on the workpiece	-	-	S	S
	Chain feeder with a speed of 12 m/min and rubber grip pads, for maximum grip on the workpiece	S	S	S	S
060	Chain feeder with a speed of 12 and 20 m/in and rubber grip pads for maximum grip on the workpiece	0	0	0	0
064	Pneumatic-mechanical infeed gate, to prevent the premature feeding of the workpiece	0	0	0	0
	770 mm diameter workpiece support roller, running on ball bearings	S	S	S	S
	Feeding guide with rollers for processing fragile material	S	S	S	S
040	Premilling unit with two 1.1 kW independant motors running at 12,000 rpm and diamond tipped cutters, depth of cut manually adjustable between 0–3 mm, 2 diamond tipped cutters included (\emptyset = 60 mm, H= 64 mm, Z 2+2)	0	0	-	-

		perfect 610 x-motion	perfect 710 x-motion	perfect 610 e-motion	perfect 710 e-motion
041	Premilling unit with two 1.1 kW independant motors running at 12,000 rpm and diamond tipped cutters, motor driven positio- ning of the depth of cut between 0–3 mm, 2 diamond tipped cutters included (\emptyset = 60 mm, H= 64 mm, Z 2+2)	-	-	0	0
043	Infrared heat lamp for pre-heating board edges	0	0	0	0
	Edge feed for coiled and strip material 0.4–10 mm thick, with edge thickness recognition via an infra-red sensor	S	S	S	S
	Guillotine trimming unit for the precutting of PVC/ABS edgeband material 0.4–3.0 mm thick	S	S	S	S
	Teflon coated 1.5 kg capacity glue pot with quick change system, glue application via an adjustable glue roller	S	S	S	S
065	Preparation for retrofitting a premelter	0	0	0	0
066	Premelter for glue granulate, 3.5 kg capacity; 0.4 kg glue pot with glue level sensor and quick change system	0	0	0	0
073	Pneumatically feed-controlled glue unit	0	0	0	0
	Manually controlled pressure unit with 1 large motor driven roller and 2 conical rollers operating pneumatically	S	S	-	-
	Motor driven positioning of the pressure unit with 1 large motor driven roller and 2 conical rollers operating pneumatically	-	-	S	S
	End trimming unit with 2 independant motors, each with 0.50 kW and 12,000 rpm, both manually tiltable between $0^\circ-15^\circ$	S	S	-	-
070	End trimming unit with 2 independant motors, each with 0.50 kW and 12,000 rpm, both pneumatically tiltable between $0^\circ15^\circ$	0	0	S	S
	Multi functional trimming unit for radius and flush trimming and bevel trimming of thin edges with 2 independant motors, each with 0.75 kW and 12,000 rpm, manual edge thickness adjust- ment and manual disengage function via an eccentric handle	S	S	-	-
	Multi functional trimming unit for radius and flush trimming and bevel trimming of thin edges with 2 independant motors, each with 0.75 kW and 12,000 rpm, motor driven positioning of the edge thickness adjustment and pneumatic disengage function via the control panel	-	-	S	S
050	Pneumatic disengage mechanism of the multi-functional trimming unit	0	0	-	-
051	Multi-functional trimming unit with vertical reference rollers for the processing of workpieces with hinge bores	0	0	0	0
054	Multi-dancer roller instead of scanning head combination milling cutter unit for sensitive edge materials	0	0	0	0



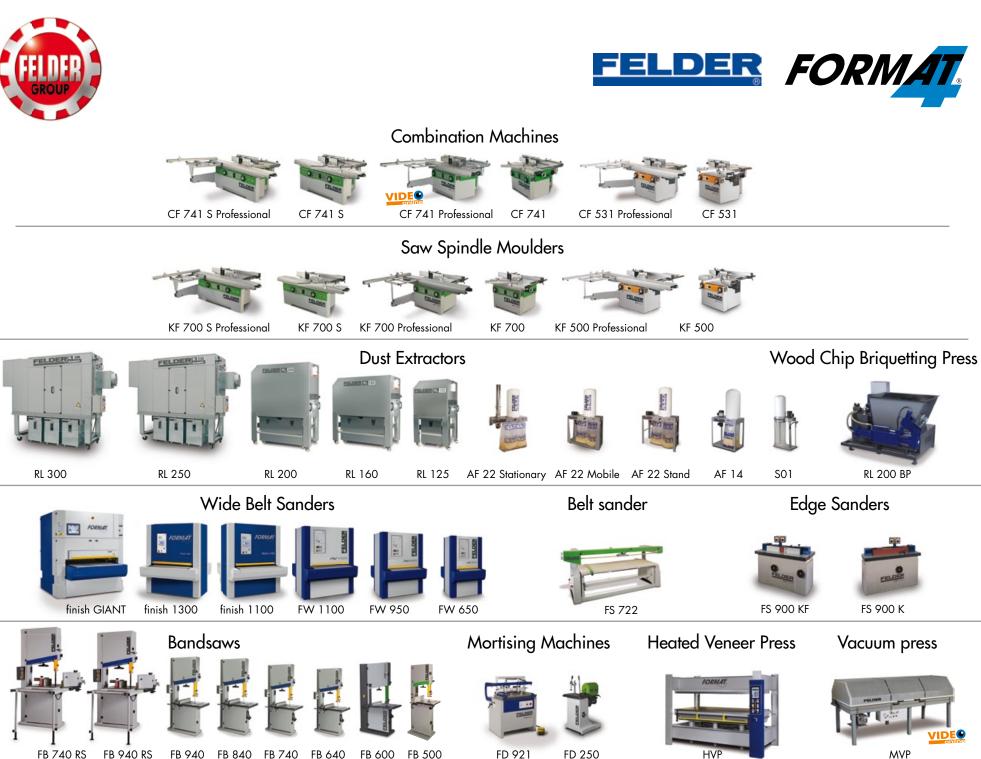
		perfect 610 x-motion	perfect 710 x-motion	perfect 610 e-motion	perfect 710 e-motion
	Corner rounding unit for soft- and post forming pieces for processing edges of between 0.4 and 3.0 mm in thickness and 10–60 mm in height	-	S	-	S
071	Motor adjustment and positioning of corner-rounding cutters	-	-	-	0
	4 free spaces for additional processing units	S	S	S	S
	Finishing units				
010	Radius scraping unit for R= 2 mm, mechanically controlled	0	0	-	-
011	Motor driven positioning of the radius scraping unit incl. pneumatic disengage mechanism	-	-	0	0
012	Pneumatic disengaging mechanism of the radius scraping unit	0	0	-	-
020	Glue scraping unit, pneumatically controlled	0	0	0	0
074	Grooving saw unit for horizontal or vertical processing (only available with x-motion plus or e-motion controls, not available with Pos. 20)	0	0	0	0
030	Buffing unit with 2 motors	0	0	0	0
032	Spraying unit for cleaning fluids situated before the polishing units	0	0	0	0
042	Spraying unit for separation solution positioned at the front of the machine (PUR-Glue)	0	0	0	0
52	Spraying of anti-static agents (not possible with option 53)	0	0	0	0
53	Spraying of lubricants (not possible with option 52)	0	0	0	0
	Tailor made equipment options				
W	Tool preparation R= 3 mm instead of R= 2 mm	W	W	\sim	W
	Transport				
229	Container packing	0	-	0	-
230	Container packing	-	0	-	0
	Important Accessories				
	200-103 - Change paste tank for perfect 610/710 for 1.5 kg EVA granulate, with Teflon coatings	0	0	0	0
	200-102 - Filter unit with water separator and two fine up- stream filters with contamination indicators for maintenance unit for wall assembly	0	0	0	0



Machines + tools for woodworking



ENG



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