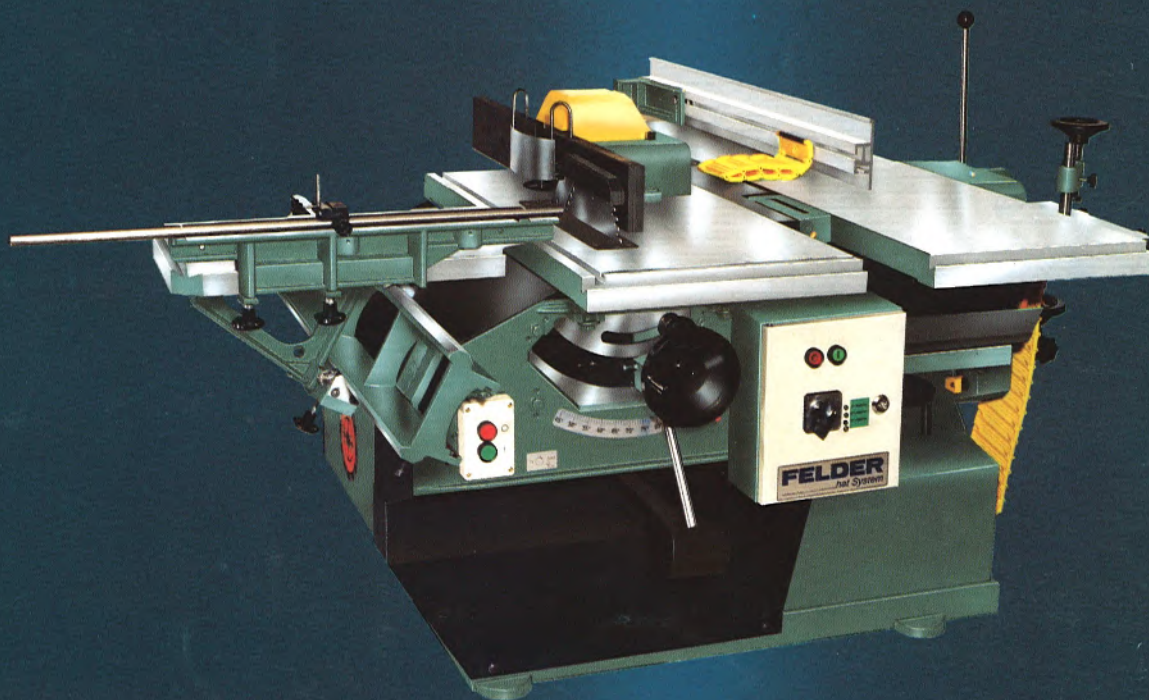


FELDER

BF4 31/41

**The Complete
Woodworking System**



FELDER BF4 31/41

The Complete Woodworking System

The BF-4 is the combination woodworking machine which offers the first viable alternative to individual machines in a production setting, both for its universal usefulness and its industrial capacities, precision, and performance. Durability, vibration-free stability, a broad application range, maximum accuracy and the shortest possible set-up times are achieved through the following:

- Massive, vibration-free construction with all-cast base, structural and support components.
- Reduced maintenance through the exclusive use of ball-bearings throughout the machine.
- Change-overs in just seconds through FELDER's unique set-up mechanisms and fully electronic motor controls.
- Extraordinary precision through state-of-the-art machining and quality control.
- Reduced shaper tooling costs through increased flexibility and capacities of the tilting spindle designs.
- Universal, precise use of the table saw through dual locking tilting arbor mechanism.
- Support for large workpieces through the patented FELDER Table Extension System.



Jointing and Surfacing

The jointing/surfacing function is made particularly easy on a FELDER System because of the perfectly flat and smoothly finish-ground worktables. Jointing is performed using the precision fence, which adjusts from 90 to 45 degrees: a stop is provided at the 90 degree position. Cutting depth is adjustable from 0 to 5 mm using a handwheel underneath the infeed table. The outfeed table is also adjustable.

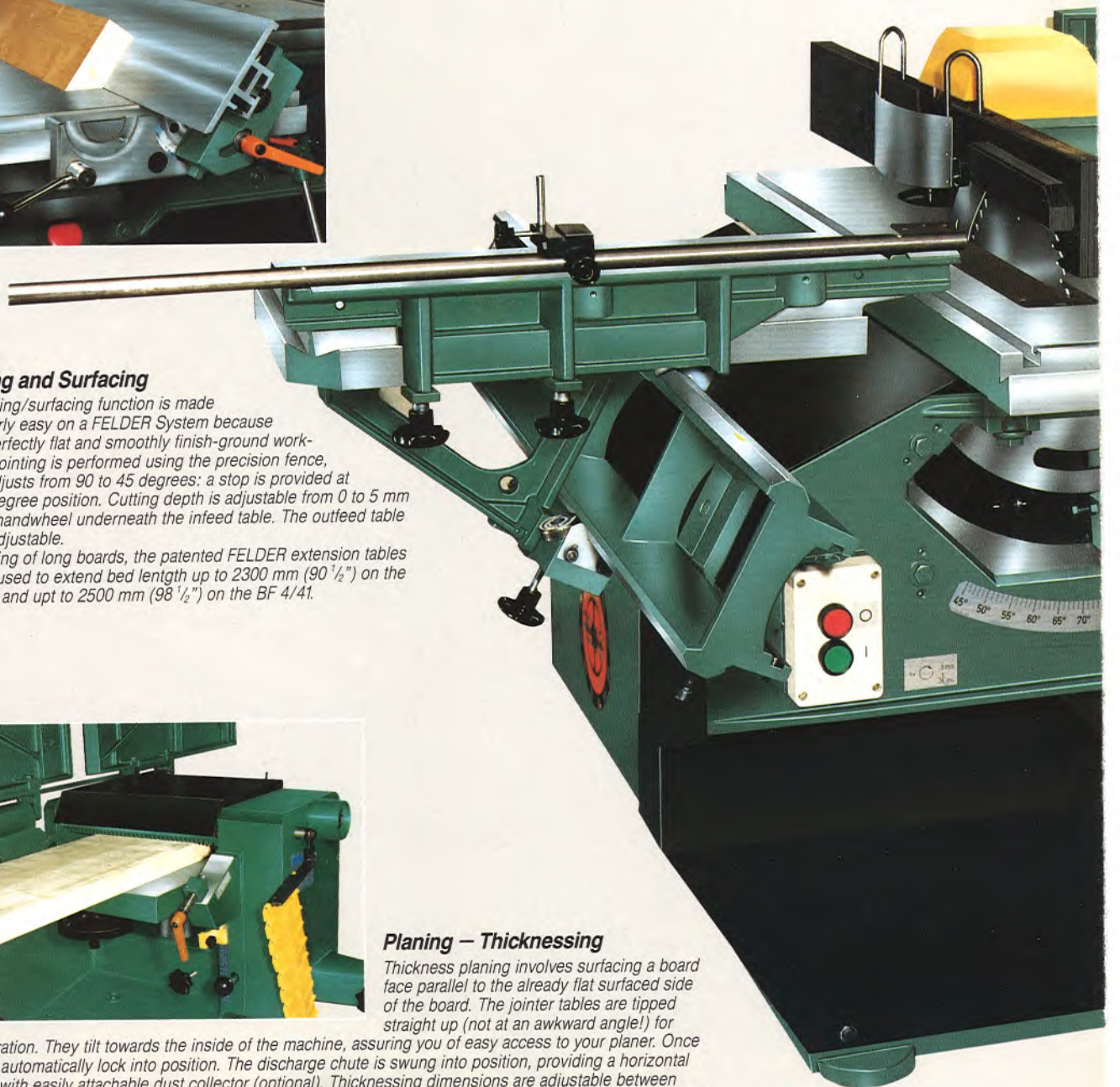
For jointing of long boards, the patented FELDER extension tables may be used to extend bed length up to 2300 mm (90 1/2") on the BF 4/31 and up to 2500 mm (98 1/2") on the BF 4/41.

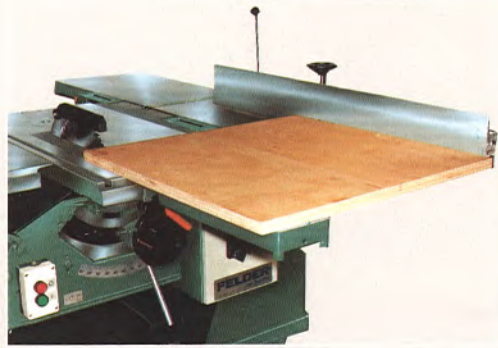


Planing - Thicknessing

Thickness planing involves surfacing a board face parallel to the already flat surfaced side of the board. The jointer tables are tipped straight up (not at an awkward angle) for

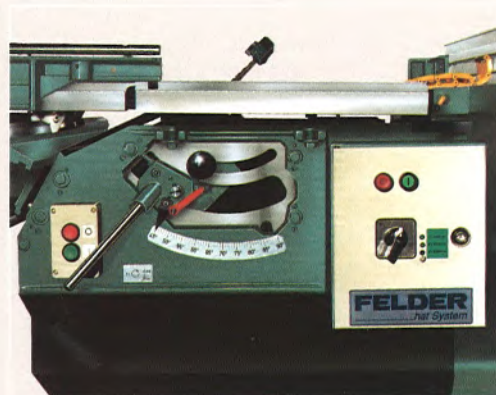
this operation. They tilt towards the inside of the machine, assuring you of easy access to your planer. Once up, they automatically lock into position. The discharge chute is swung into position, providing a horizontal exhaust with easily attachable dust collector (optional). Thicknessing dimensions are adjustable between 3 and 190 mm (1/8 to 7 1/2"). The power feed lever is conveniently located next to the thicknessing scale, and may be engaged at any time. For planing of particularly long boards, the patented FELDER table extension system may be utilized for additional workpiece support, extending the planer table to 1300 mm (51").





Circular Sawing

Ripping of long boards can be accomplished readily using the precision fence, adjustable via a continuous dovetail-guide for cutting widths from 0–930 mm (36.5") on the BF 4/41, or 0–830 mm (32.5") on the BF 4/31. A maximum ripping width of 48 3/4" can be achieved with the optional rip fence extension. The fence is fully adjustable lengthwise, and may be positioned face-down to provide a 10 mm (3/8") edge for guiding very thin or narrow workpieces. For support of over-size work, the sawtable can be extended to a length of 76 3/4" in just seconds.

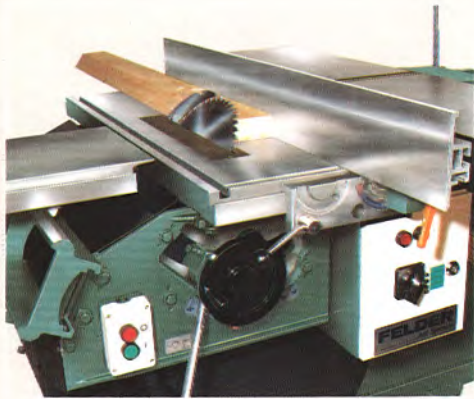


Tilting Arbor and Electrical Controls

The BF-4 tilting arbor mechanism is made exclusively of cast components and is therefore completely without vibration, providing the utmost in sawing precision and cut quality. It has a two-stage locking mechanism to assure secure positioning without the errors in settings that often accompany the locking mechanism on other saws.

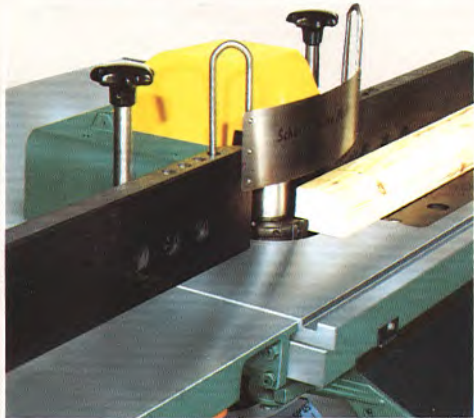
Sawblade position may be set anywhere from 90 to 45 degrees, and a positive stop is provided at both end positions. Cutting height may be adjusted from 0–95 mm (3 3/4").

The BF-4 is driven by three powerful motors. The fully electronic switching center contains the selector dial as well as push-button on and off switches. An electronic brake is available as an option, and will stop any drive within 6 seconds. The machine is supplied with a special plug-in connector (male/female), eliminating the need for expensive electrical labor during setup.

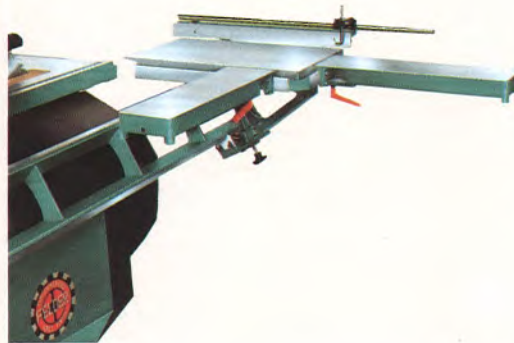


Bevelled Cuts

Bevelled cuts are performed using the precision fence and tilting arbor saw mechanisms.



Shaping, Spindelmoulding



Sliding Table

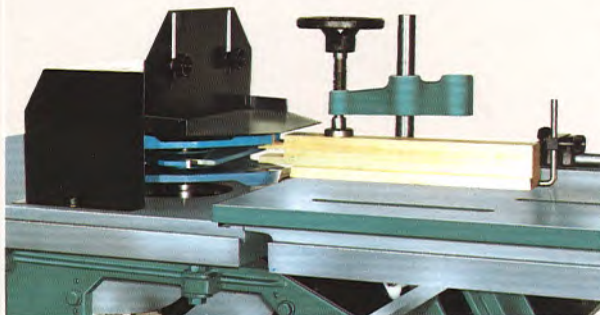
The sliding table, made of warp-free and highly stable cast iron, is supported through 8 ball bearings on a diagonally positioned dual-beam cast rail. The rail is supported on four ball bearings, permitting longitudinal adjustment for cross-cutting up to 1100 mm (43.3") without the need for any extensions. The patented FELDER table extension system may be used to support large panels as needed.



Tilting Spindle Shaper

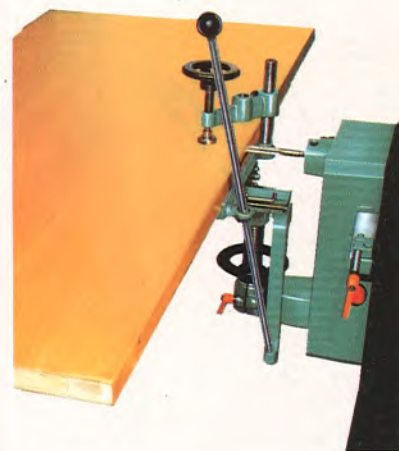
To save you the trouble and expense of complex shaper cutters, the Felder BF-4 offers you the only tilting shaper available in combination machines today. Adjustable from 90–45 degrees, it is equipped with a separate mechanism of the same quality and function as that on the tilting arbor table saw. You can now fully utilize the capacities of the machine, while using cost-effective and readily available standard shaper cutters.

A handwheel adjusts the spindle height, while a 2-second quick-release system is provided for instant removal of the entire shaper spindle (with cutters still in place) when using another machine function.



Mortise and Tenon Cutting

The precision-turned, quiet-running, massive shaper spindle permits use of even heavy, large-diameter cutter sets. By using the FELDER sliding table and the optional coverplate, highly precise mortise and tenon cuts can be performed quickly, easily, and above all, safely.



Slot mortising

The zero-tolerance boring table is supported on 16 ball bearings. Its movement is controlled by a single lever to insure comfortable operation and proper overview of your work. When working on larger pieces, such as doors or door frames, the jointer infeed table may be raised and the cutterhead covered to give even better access to the mortising table.



Horizontal Boring

The dual-jaw chuck assembly may be adjusted for shank diameters from 0–16 mm ($\frac{3}{8}$ "). It can be rotated clockwise or counterclockwise, simply by adjusting the selector switch. The worktable has both side-to-side and depth stops. Table height is adjustable by a handwheel on the threaded post. The lateral angle of the table is also adjustable from –45 to +45 degrees, and can be set for automatic lock at any one selected angle. When not in use, the table can be easily removed (this takes about five seconds) to increase operator convenience when jointing and planing.

Technical Data

BF4/31

BF4/41

Jointer/Planer

Planing width	310mm (12 3/16")	410mm (16 1/8")
Planing thickness min./max.	0-190mm (7 1/2")	0-190mm (7 1/2")
Total length of jointer tables	1300mm (51 3/16")	1500mm (59 1/16")
Cutterhead diameter	86mm (3 3/8")	86mm (3 3/8")
Number of knives	2	2
Number of knives optional (standard in USA)	3	3
Cutterhead RPM	5000	5000
Maximum cutting depth	5mm (3/16")	5mm (3/16")
Automatic feed rate	7,5m/min. (24.6 ft/min)	7,5m/min. (24.6 ft/min)

Circular Saw

Arbor Diameter	30mm	30mm
RPM	4800	4800
Sawblade Diameter min./max.	150-300mm (6-12")	150-300mm (6-12")
Sawblade height, max.	95mm (3 3/4")	95mm (3 3/4")
Arbor Tilt	90-45 degrees	90-45 degrees
Cutting width, min./max.	0-830mm (32 1/2")	0-930mm (36 1/2")

Shaper

Spindle Diameter	30mm, or 1 1/4"	30mm, or 1 1/4"
RPM	4000, 5600, 8300	4000, 5600, 8300
Cutter Diameter, max.	270mm (10 5/8")	270mm (10 5/8")
Spindle Tilt	90-45 degrees	90-45 degrees
Saw/Shaper Table Size	950 x 475mm (37 3/8" x 19")	950 x 475mm (37 3/8" x 19")

Sliding Table

12-Ball Bearings, Maximum Cutting Length	1100mm (43 5/16")	1100mm (43 5/16")
Support area with maximum extension	1040 x 840mm (41 x 33")	1040 x 840mm (41 x 33")

Boring Head

Dual-Jaw, bi-directional, Shank Diameter range	0-16mm (5/8")	0-16mm (5/8")
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Boring table

16 Ball Bearing, Single Lever Control, Max. Mortising Length	220mm (8 11/16")	220mm (8 11/16")
Boring Depth, Maximum	150mm (5 7/8")	150mm (5 7/8")
Boring Height, Adjustable Range	120mm (4 3/4")	120mm (4 3/4")

Electricals

Number of Motors	3	3
Motor Size, Standard	380 V, 50 Hz 3-Phase, 3 HP	380 V, 50 Hz 3-Phase, 3 HP
U.S. Version	220 V, 60 Hz 3-Phase, 3 HP	220 V, 60 Hz 3-Phase, 4 HP
Motor Options	3 x 4 HP	3 x 4 HP (U.S. none)
Single Phase Converter	Optional	Optional

Dimensions & Weights

Total Height	830mm (32 11/16")	830mm (32 11/16")
Minimum Transport Width	950mm (37 3/8")	950mm (37 3/8")
Net Weight	610 Kg (1340 lbs)	790 Kg (1740 lbs)
Gross Weight	650 Kg (1430 lbs)	830Kg (1830 lbs)

Crate Dimensions

Legth	1450mm (58")	1450mm (44 1/2")
Width	1130mm (44 1/2")	1130mm (44 1/2")
Height	1050mm (41 1/2")	1050mm (41 1/2")

A complete set of operating tools, grease gun, and planer knife adjusting gauge are included as standard equipment with each machine. All data are subject to change without notice.

Some Popular Options



Edge Sanding

A sanding drum may be installed on the FELDER shaper spindle for finishing of straight or curved edges.



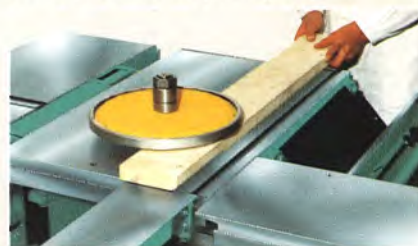
Feed Roller

The feed roller is mounted on the shaper fence, and assures even hold-down support and guidance while you feed the workpiece!



Shaper with Power Feed

See the FELDER Accessory Catalog for details.



Thickness Sanding

Sanding discs may be mounted on the shaper spindle for thickness sanding of boards, frames, etc.



Trimming Rail

For trimming of long boards or sheet stock up to 2500 mm (98 1/8").



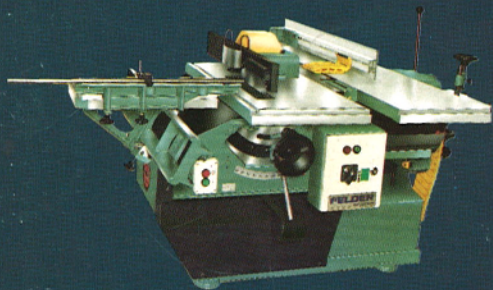
Vacuum Attachments, Dust Chutes

The machine is designed for quick adaptation to a dust collection system with the optional vacuum attachments.

FELDER

is systematic

The FELDER Program



Woodworking
System BF 4

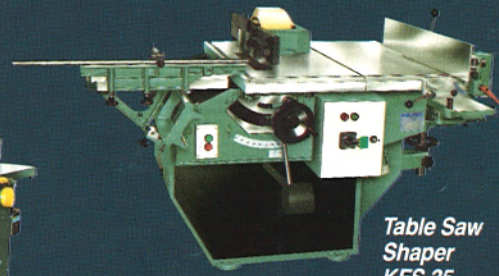


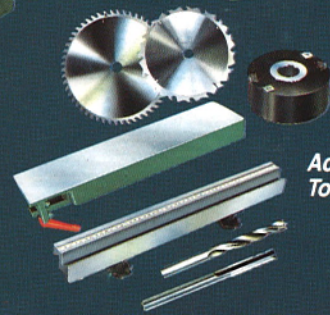
Table Saw
Shaper
KFS 35



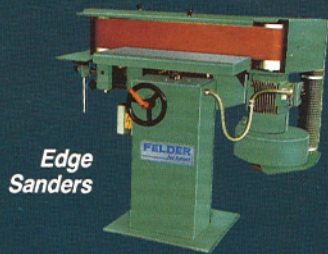
Jointer-
Planer
BF431/41 AD



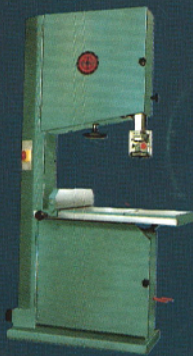
Universal
Woodworking
Machine
BU8 - FK 31/41



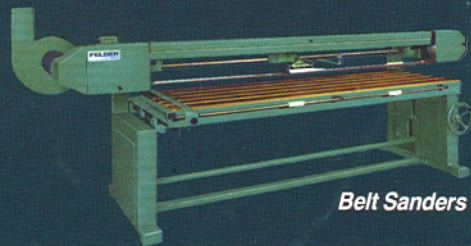
Accessories +
Tooling



Edge
Sanders



Band Saws



Belt Sanders

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