

Cut-to-size saw fh 6
On the cutting edge.



Future standards for noise protection and dust protection included.

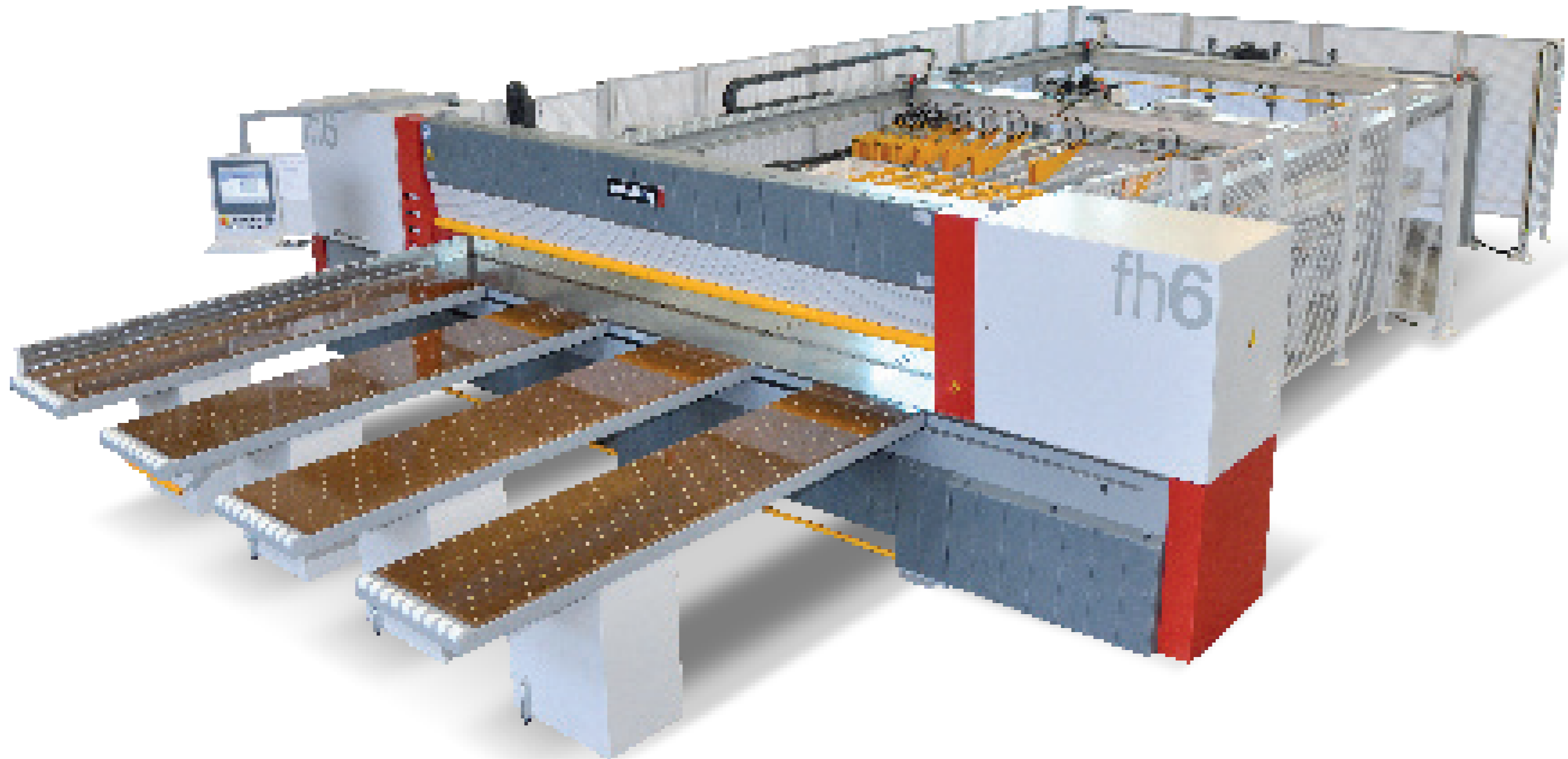


Today the fh 6 already satisfies the standards of tomorrow. For instance, this is clearly demonstrated in the fact that it already anticipates future noise protection and dust protection standards. Special small grooves in the machine table minimize noise and dust emissions. Sound-attenuated single blowers in the air cushion tables, as well as special insulated cladding offer additional noise reduction.

Thus today the fh 6 is the quietest machine in its class, by a wide margin.

Automation for every
degree of expansion.

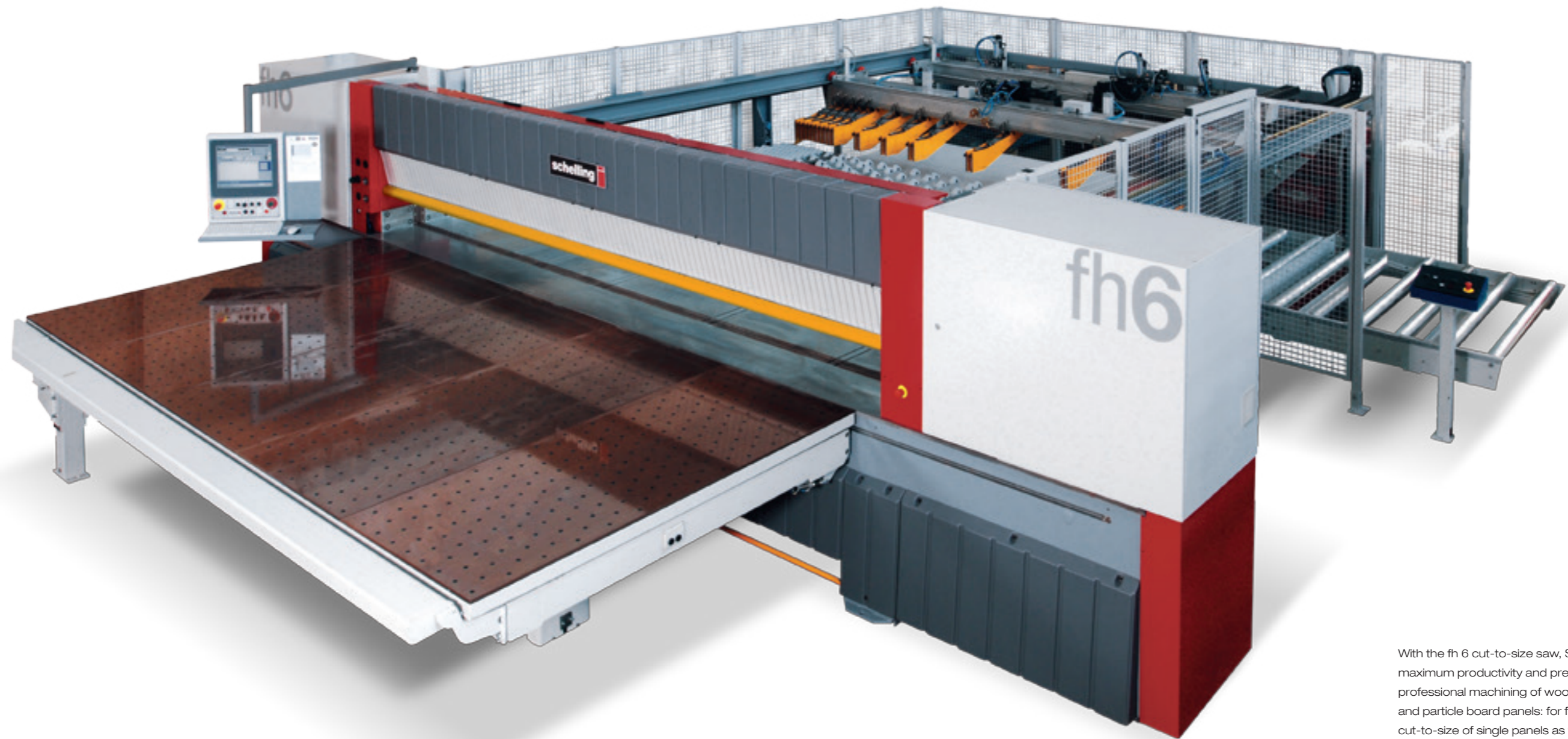
schelling



With the fh 6 Schelling extends the familiar strengths and offers clear advantages in all machine details.

Robust.
Productive.
Precise.

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With the fh 6 cut-to-size saw, Schelling offers maximum productivity and precision for highly professional machining of wood fibreboard and particle board panels: for flexible and fast cut-to-size of single panels as well as large books of material. With this, Schelling remains true to the philosophy of solid mechanical engineering. The massive, robust construction prevents natural vibration, and thus increases precision at each cut.

In addition this solid construction assure years of reliable implementation, as well as unusually long tool service life at minimum maintenance costs.



The DUPLUS2 implements two individually working feeder units that position the material in the saw independently of each other. This results in a clear performance increase due to simultaneous cutting of head part and main part or two strips of material with different cross cut dimensions.

Automatic labelling is a unique feature from Schelling. In this regard, the complete panel is automatically labelled in the in-feed area, i.e. before the panel is cut to size. Labelling positions can be freely selected. Labels are also appropriately applied for parts rotated 90°. Overall this results in a clear performance increase, as the case-by-case stops required for manual labelling are eliminated.

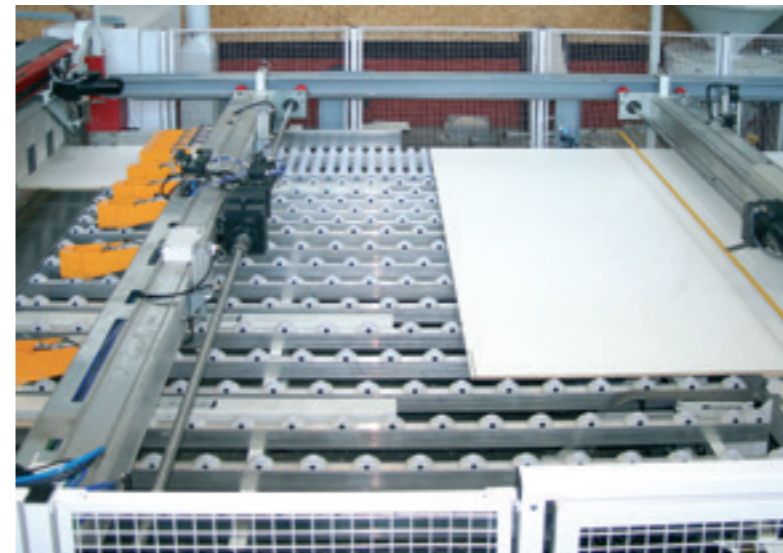
Cutting power: Controlled for optimal performance

With the fh 6 a variety of automatically monitored functions ensures optimized, harmonious work sequences. Saw feed and saw blade stroke are executed simultaneously, this means shorter cycle times per cut. The saw feed rate adjusts itself to the different book heights. This ensures that the machine always works at the maximum possible feed rate. The pressure beam is regulated automatically depending on panel length and book height.



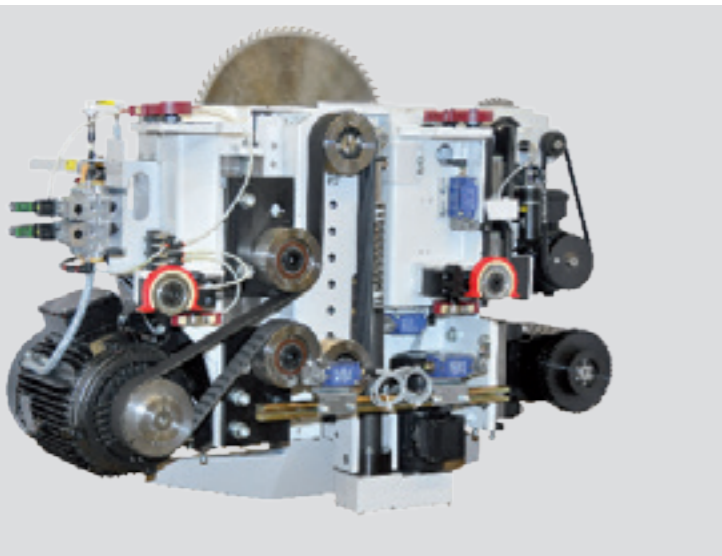
Saw unit: Ideal implementation of force

The Schelling fh 6 cut-to-size saw has the unique "Evolution" drive concept and offers an optimally matched ratio of motor power and useable book height. The saw motor is fixed in place on the saw carriage, thus it does not move with the saw blade. This permits strong motors with higher power while keeping the operating height low. The optimized chip routing system which is integrated in the saw carriage allows for the immediate disposal of chips from the cutting area. This in turn results in longer saw blade service life.



The separate push-off carriage enables simultaneous loading of the saw and dividing of panels. This considerably increases production capacity.

The Schelling turning device enables automatic execution of head cuts and longitudinal cuts without interruption. Each necessary rotation is executed in 90° increments, in this regard it adapts the rotational speed to the book height and ensures short and highly-precise machining cycles. The turning device is designed for automatically loaded cut-to-size saws and angular plants.

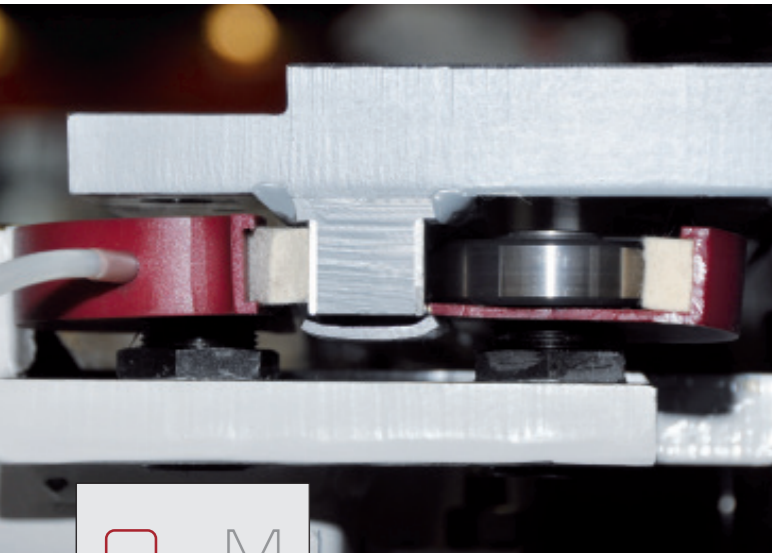


Precision: Accuracy throughout the entire service life

The Schelling high-performance flat guide for saw carriage and feeder carriage guarantees maximum precision over the service life of the machine at minimum maintenance costs.

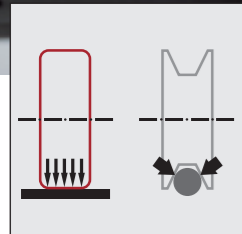
The precision-milled, steel machine table offers maximum resistance toward wear and protects material surfaces during the cut-to-size operation. The solid, robust design prevents any deflection, and thus assures maximum accuracy, even with heavy panels and large book heights.

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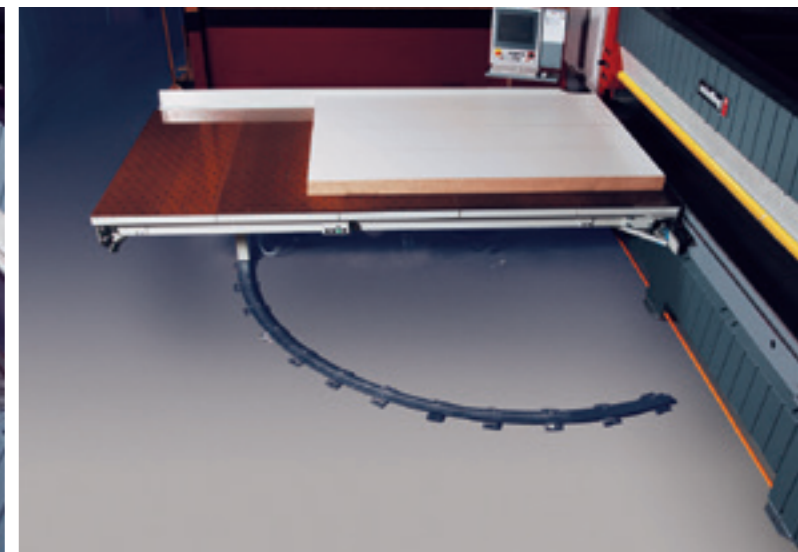
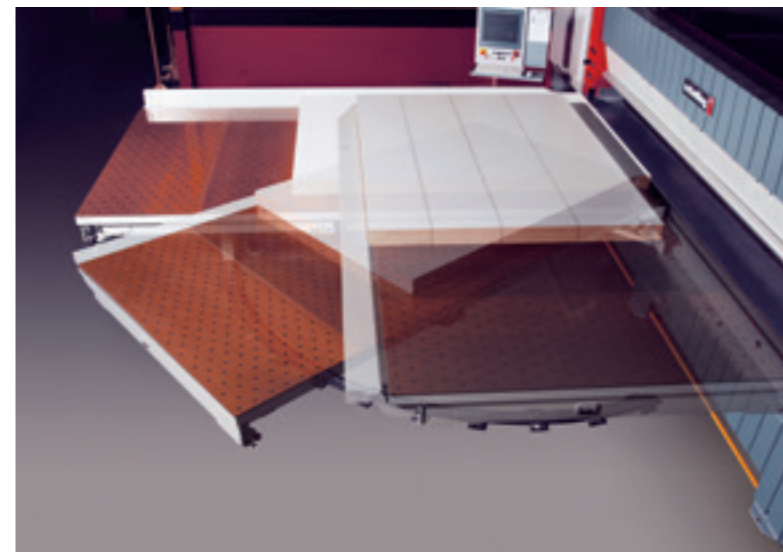


Handling: Easy and convenient operation

The extra-wide moveable air cushion tables enable optimal work and can be locked in any position in any desired position. The air cushion tables are always right where they are required.



System comparison:
Line contact -
no point load



The dual strip aligners upstream and downstream from the saw line remain on the material even during the cut and thus ensure maximum angular accuracy. The alignment force is adjusted automatically with a frequency converter to the material thickness or book height. Thus even thin panel strips can be cut with high precision.

The patented turntable enables easy handling. All long strips are automatically rotated in one process. This reduces the time expended for material handling and offloads operating personnel. In addition the surfaces of the panels are protected.

Simultaneously the turntable serves as material buffer during the entire dividing process. There are no parts that must be removed from the saw and reloaded.

Handling: Safe and gentle on material

The extra long slide-out scissor clamps that extend to the front edge of the saw table facilitate book transfer for operating personnel.

Vacuum in-feed:
Transport of panels
with sensitive surface



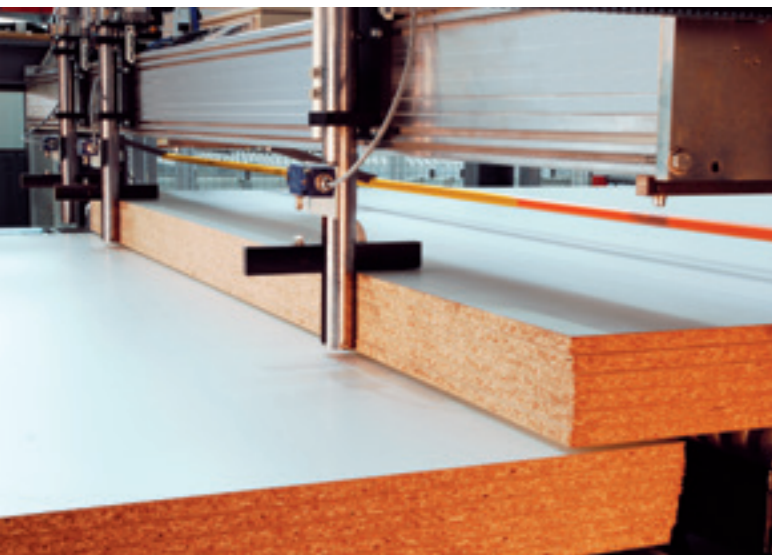
Material transport: Adapted to every requirement

Material loading and handling are essential performance characteristics for increasing the efficiency of a cut-to-size saw. Schelling offers specially-adjusted loading, material handling and stacking solutions that can be adapted to individual requirements. A single source for everything from planning to commissioning.



Manual stacking: Easy material handling

Area storage system: Increased productivity



With automatic in-feed the lift table adjusts itself precisely to the set number of panels to be divided. To handle panels from a thickness of 6 mm, special push-off units are used. Also the waviness of the panels is taken into consideration.

Also thin panels with a thickness under 6 mm can be pushed off of the stack with single-piece precision, with special counter brackets.

Quality: edge scoring

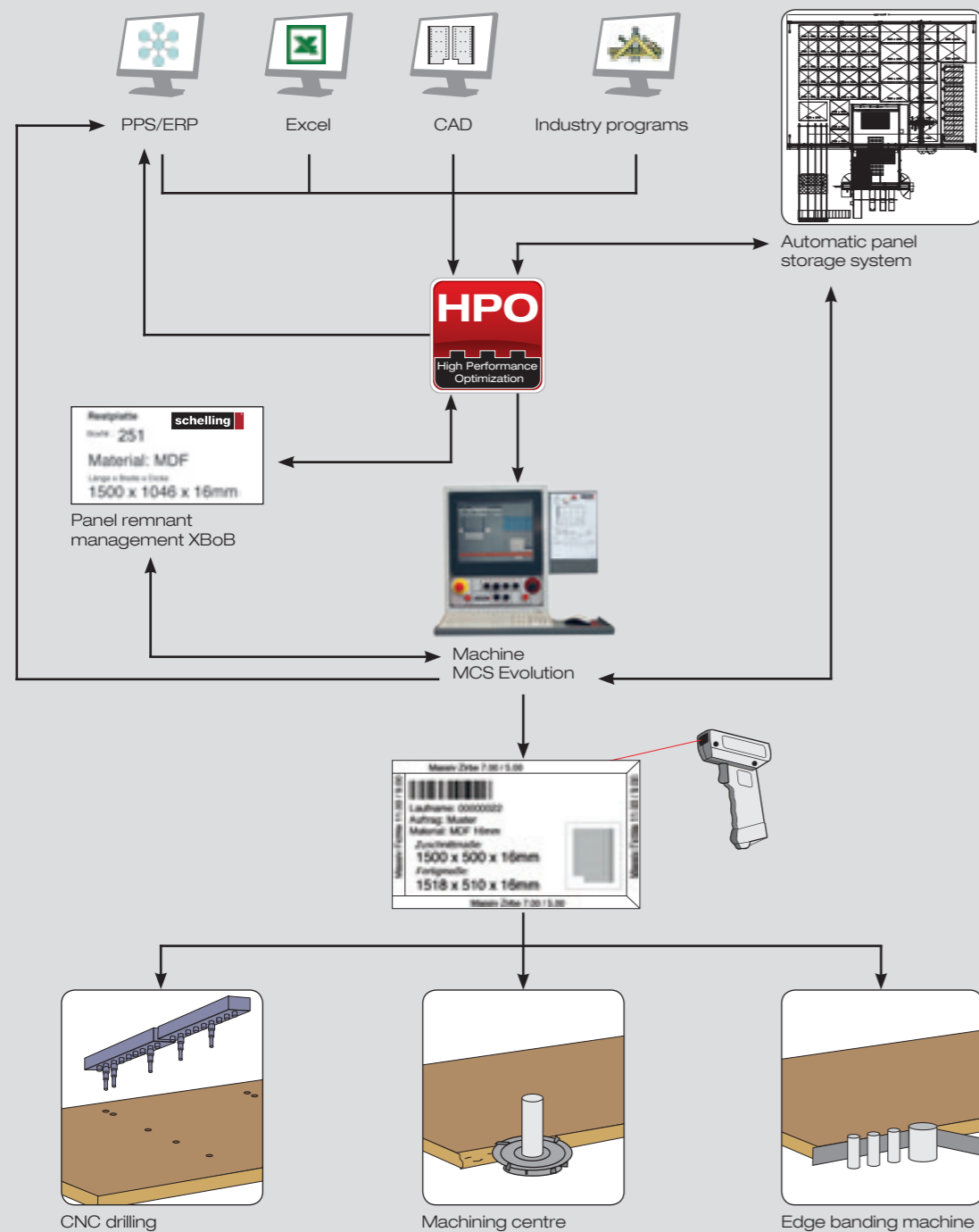
The edge scorer prevents the exit edge from tearing out when cutting material with coated edges. The edge scorer works automatically to a book height of 120 mm.



Material transport: Custom solutions

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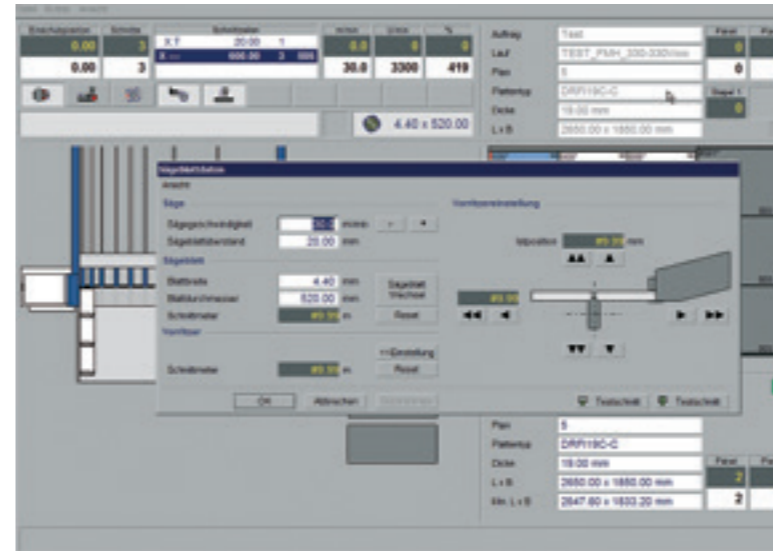
Production sequence diagram



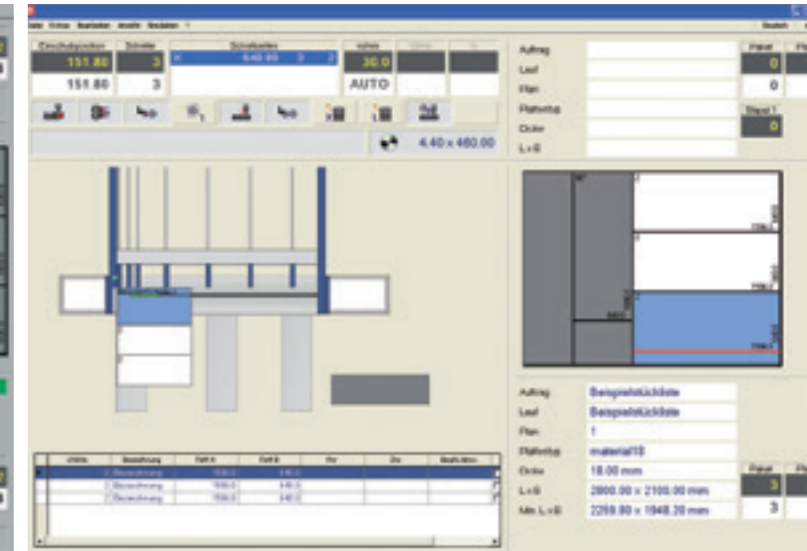
Control Desk: Ease of operation

Schelling's easy-to-operate "MCS Evolution" control software and "HPO" optimization software make operating the saw a breeze. Sequences are represented in real-time mode with unsurpassed fault diagnostic. Self explanatory operator guidance particularly eliminate operating errors, therefore increasing availability and machine efficiency.

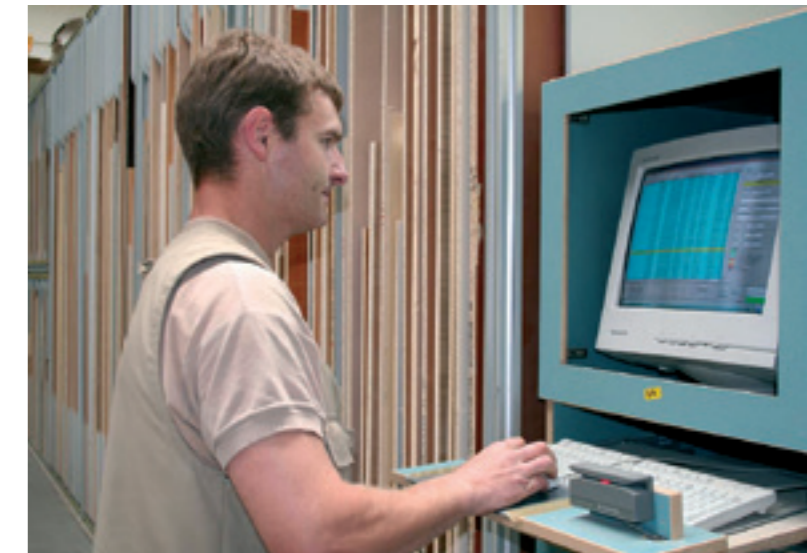
Operator panel: Electronic scorer adjustment



Control: Data of actual production on the screen



With the XBoB remnant management program, panel remnants can be managed in a manual store. Remnants are booked in and out in interaction with the machine controller. In addition XBoB is the interface from the machine controller to the optimization program. Remnants that accumulate can be re-planned and used without delay in the optimization. An easy and safe system for maximum capacity utilization of material.



The current release of the HPO cutting plan optimisation presents new functions for productivity and operating convenience. Multi-core use ensures the speed available from state-of-the-art hardware is effectively utilised. Thus computing times are reduced by as much as 60 %. In addition the system works with the latest computer core. Another new feature is that the appearance of plans can be virtually set as desired, on request the optimal un-machined panel can be determined, the print function can be configured and searching has been even more clearly designed.

Technical data

Saw blade

Diameter	460 mm / 18.125"
Projection	135 mm / 5.375"

Saw feed rate

Forward	up to 150 m/min / 492 ft/min
Reverse	150 m/min / 492 ft/min

Scorer

Diameter	200 mm / 7.875"
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Power

Saw motor	21/27 kW / 29/37 PS
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Feed rate

Forward	up to 80 m/min / 262 ft/min
Reverse	80 m/min / 262 ft/min

Clamp opening

125 mm / 4.875"

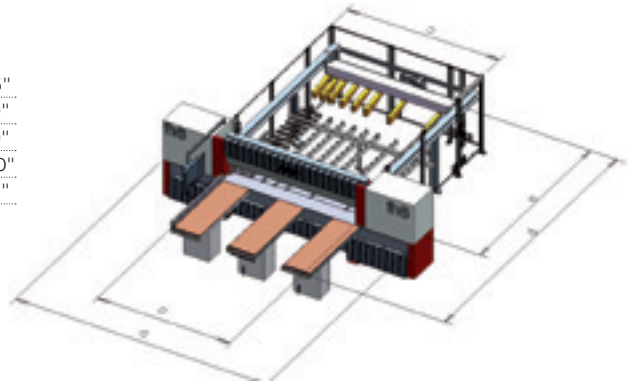
Dimensions fh 6 manual

	fh 6 330	fh 6 430	fh 6 580	fh 6 630
a	3330 / 131.00"	4330 / 170.50"	5830 / 229.50"	6330 / 249.25"
b	6450 / 254.00"	7450 / 293.25"	8950 / 352.25"	9450 / 372.00"
c	3860 / 152.00"	4860 / 191.25"	6360 / 250.50"	6860 / 270.00"
d	7100 / 279.50"	8100 / 319.00"	9600 / 378.00"	11000 / 433.00"
e	4600 / 181.00"	5600 / 220.50"	7100 / 279.50"	7600 / 299.25"

Dimensions - mm / inch

Weight

fh 6 330	7.500 kg / 16,500 lbs	fh 6 430	10.000 kg / 22,000 lbs
fh 6 580	11.000 kg / 24,250 lbs	fh 6 630	12.000 kg / 26,500 lbs



Dimensions fh 6 automatic

	fh 6 330x160	fh 6 330x220	fh 6 430x160	fh 6 430x220	fh 6 580x220	fh 6 630x220
a	3330 / 131.00"	3330 / 131.00"	4330 / 170.50"	4330 / 170.50"	5830 / 229.50"	6330 / 249.25"
b	6450 / 254.00"	6450 / 254.00"	7450 / 293.25"	7450 / 293.25"	8950 / 352.25"	9450 / 372.00"
c	3830 / 150.75"	3830 / 150.75"	4830 / 190.25"	4830 / 190.25"	6360 / 250.50"	6860 / 270.00"
d	7900 / 311.00"	8900 / 350.50"	8900 / 350.50"	9400 / 370.00"	10900 / 429.25"	11400 / 448.75"
dDT	9000 / 354.25"	10000 / 393.75"	10000 / 393.75"	11460 / 451.25"	14460 / 569.25"	15460 / 608.75"
e	5400 / 212.50"	6400 / 252.00"	6350 / 252.00"	6850 / 269.75"	8350 / 328.75"	8850 / 348.50"
f	3600 / 141.75"	3600 / 141.75"	4600 / 181.00"	4600 / 181.00"	6100 / 240.25"	6600 / 259.75"

Dimensions - mm / inch

Weight

fh 6 330	10.500 kg / 23,100 lbs	fh 6 430	13.000 kg / 28,700 lbs
fh 6 580	15.000 kg / 33,000 lbs	fh 6 630	17.000 kg / 37,500 lbs

