

Cut-to-size saw s 45

Saw mitre cuts  
and cut boards.



More output and less waste when cutting mitres.

**schelling**



The Schelling s 45 opens up new potentials everywhere where mitre cuts are an issue. It saves a second complete machine, space and valuable processing time and man hours. In addition, because there is no longer a need to change from one machine to the next, it provides more precision, more output, fewer errors, less damage and less waste.

The Schelling s 45 is a full-fledged pressure beam cut-to-size saw for wooden materials. And thanks to its technologically advanced saw blade that can be continuously inclined from 0 to 46°, it can simultaneously cut boards to size with a mitre cut when required.

There are numerous applications for this, and once the machine has been procured more applications appear as if on their own. Whether your company's profession is furniture construction, interior finishing, shop fixtures, facades, concrete formwork or exhibition design and construction, mitre cuts play an important role, especially in the case of objects with high aesthetics and design standards.

The technical design of the Schelling s 45 is ideal for both single-unit and volume production. The full-fledged Schelling machine control unit makes a significant contribution to simple operation, optimal results and higher productivity.

## True Schelling precision over the service life.

The Schelling s 45 is the first combined mitre/cut-to-size saw on the market and a Schelling through and through. The latter is clearly displayed by the uncompromising emphasis on precision and service life. To this end, the industry's technology leader relies on solid technology all around. This means in particular: the heavy robust construction results in lower vibration and the suppression of any torsion from the outset.

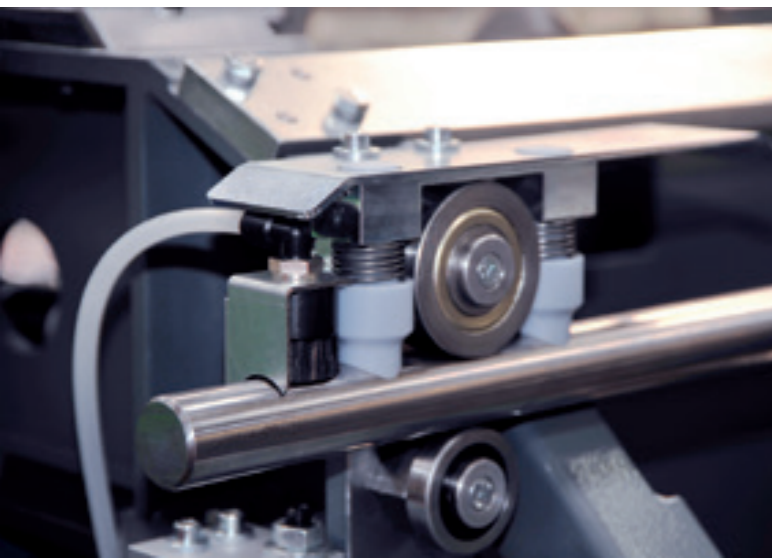
The machine's bottom plate is designed as a precision table of massive steel and equipped with a calibrated table surface. 100 % table levelness ensures consistent scoring depth and absolutely precise mitre cuts.



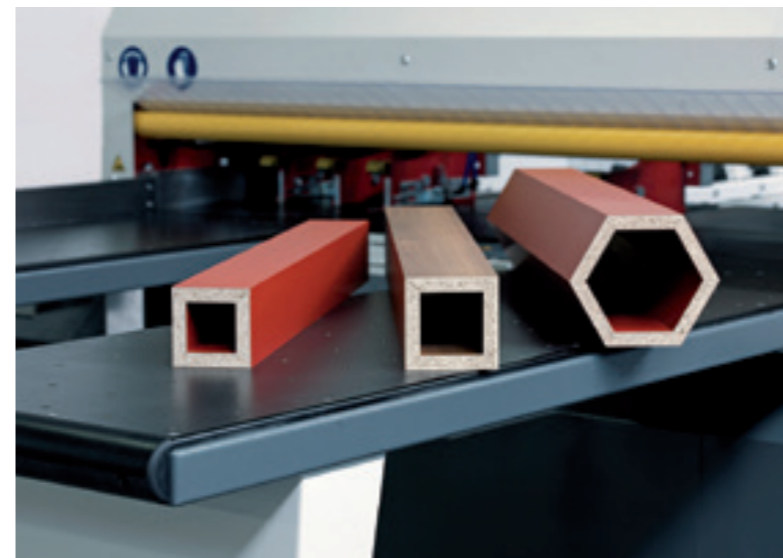
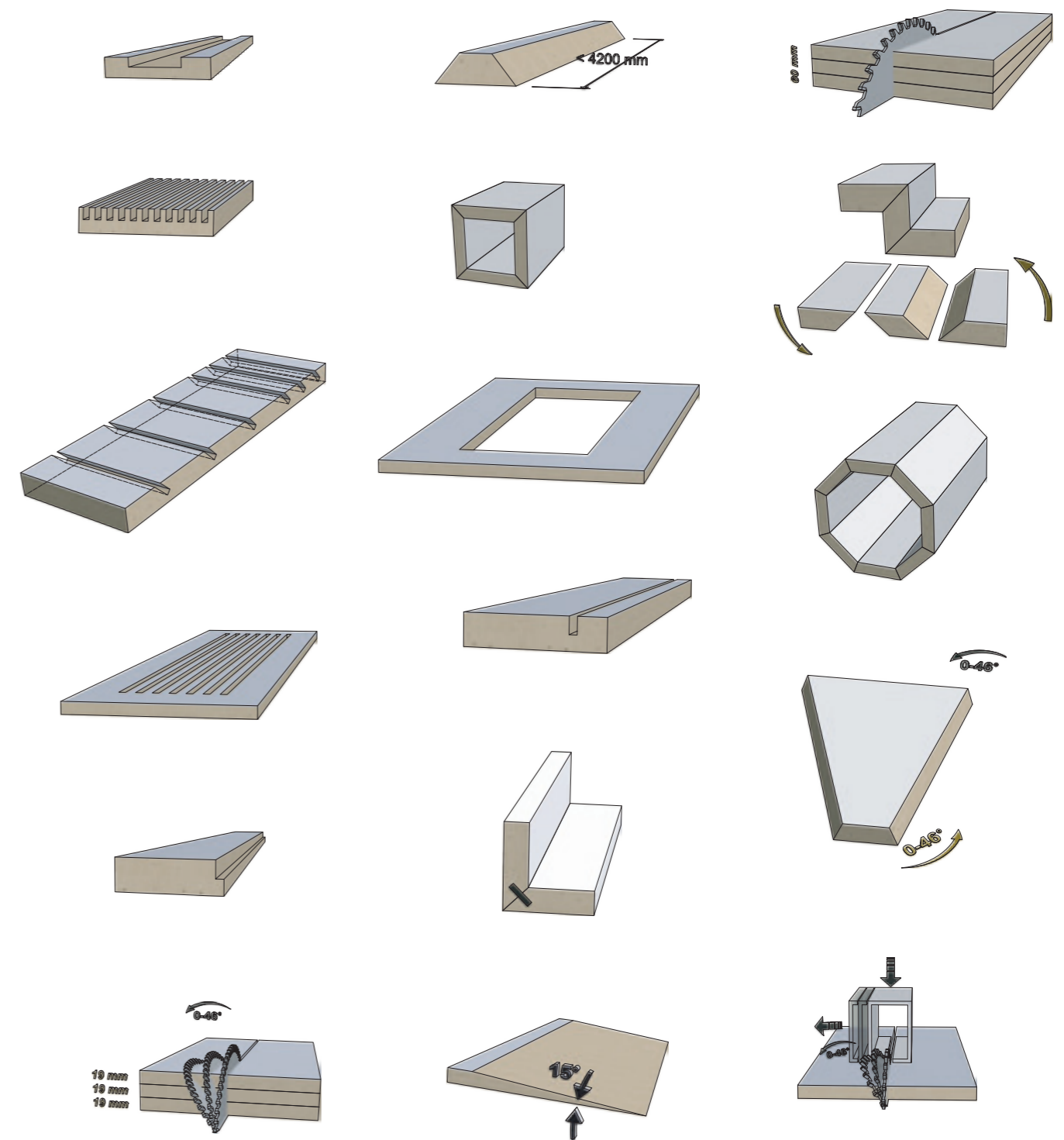
The strip aligning device upstream from the saw remains on the material even during the cut and guarantees maximum angular accuracy. The alignment force can be adjusted. Thus even sensitive or narrow panel strips can be cut precisely.



Both the saw unit and the feed trolley are equipped with the special Schelling high-performance round rod guides. This ensures precision and reduces maintenance costs.



## Versatile and precise



Because boards are cut to size and mitre cuts are performed simultaneously on only one machine, there is no need for handling from one saw to the next. This significantly reduces the risk of errors and damage.

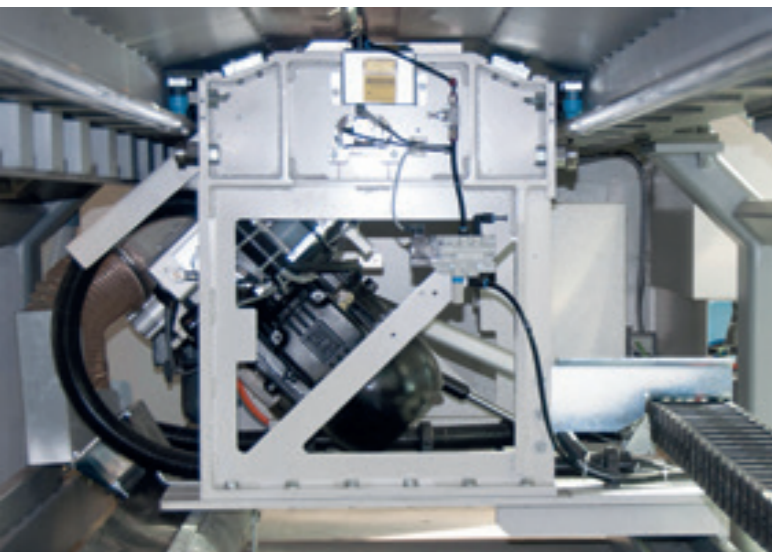
## Productive from A to Z.

Many sophisticated details, such as workplace lighting and rack and pinion gear, reduce saw and auxiliary times and make the Schelling s 45 very productive.

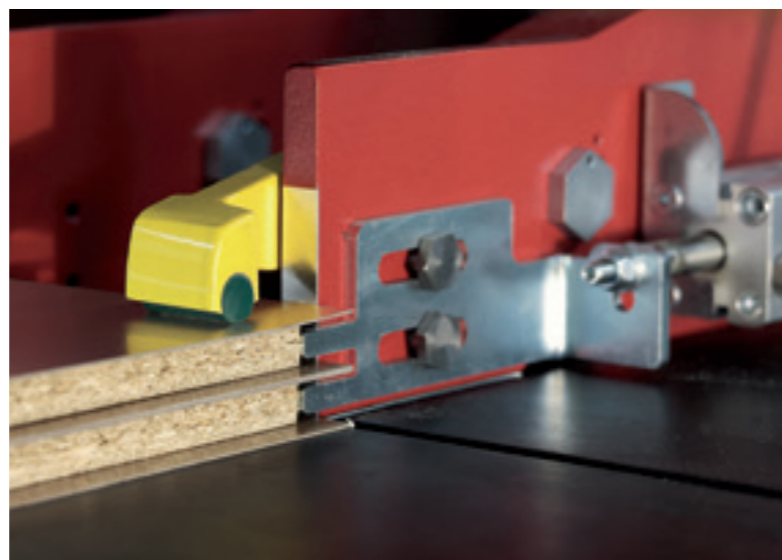
As with all Schelling saws, a century of know-how and the future-oriented attitude of the Schelling engineers are incorporated here. In addition, operating comfort, material conservation and low overall operating costs play decisive roles in all calculations.



Thanks to the massive steel construction of the machine table, it is possible to use smaller saw blade diameters. This means less vibration, better cut quality, longer service life and more cutting power with the same motor output.



The motorisation of the Schelling s 45 is appropriately powerful. With an output of 14 kW, it has neither a horsepower too many nor too few. The satisfying power ensures quick processing and reduced saw times.

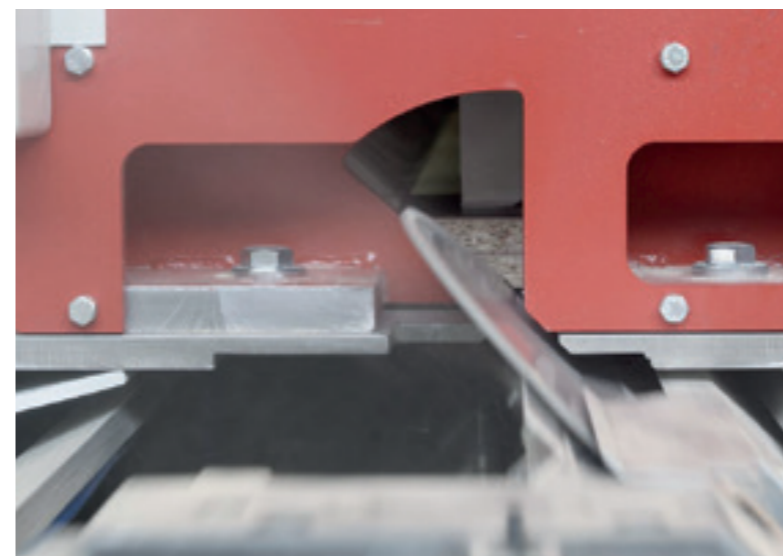
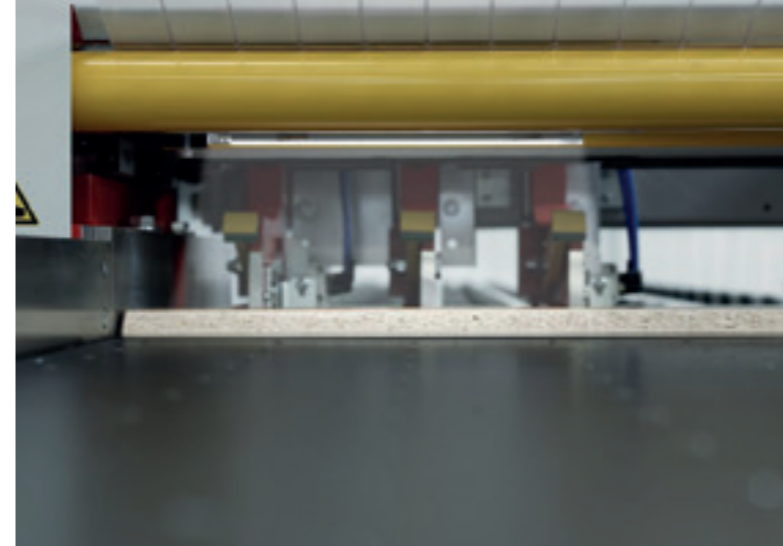
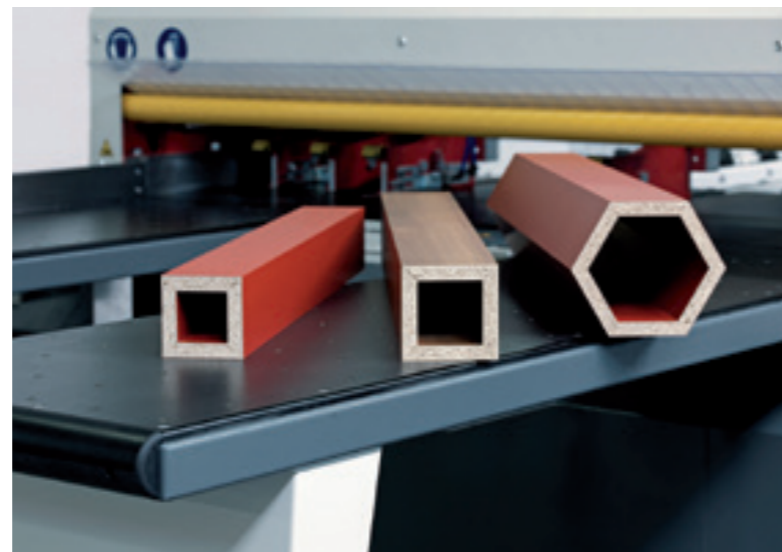
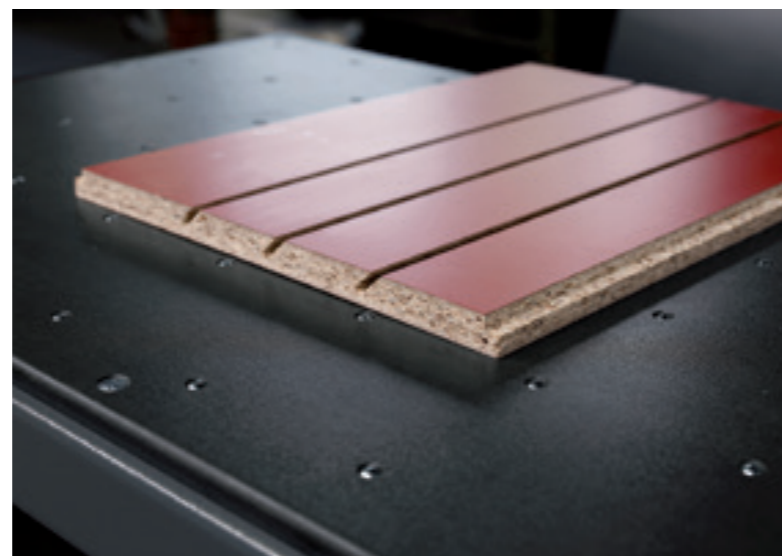


Three air flotation tables make panels and parts extremely easy to handle. Furthermore, all air flotation tables (except on the angle end stop) can be moved, which ensures good accessibility in every situation. In addition, the right table can be shifted to the outer edge of the machine, which opens up more space for comfortable positioning of, e.g., longer parts.

## Numerous standard functions, helpful options.

The standard version of the Schelling s 45 already offers everything you could want for almost every job in its class and, thanks to the mitre cut function, even more. For special functions, you can choose from a number of optional features.

- The optional groove device makes it simple to cut mitre grooves on the Schelling s 45.
- Special constructions for shop and exhibition and design construction are no problem with s 45.
- The saw blade can be continuously inclined from 0 to 46°.
- The constantly operating strip aligning device ensures precision.
- Produce compound mitre cuts thanks to the combined angular cutting device and the mitre saw.
- Individually closing clamps prevent damage to the material.
- Cutting projecting top players with the automatic formatting device.

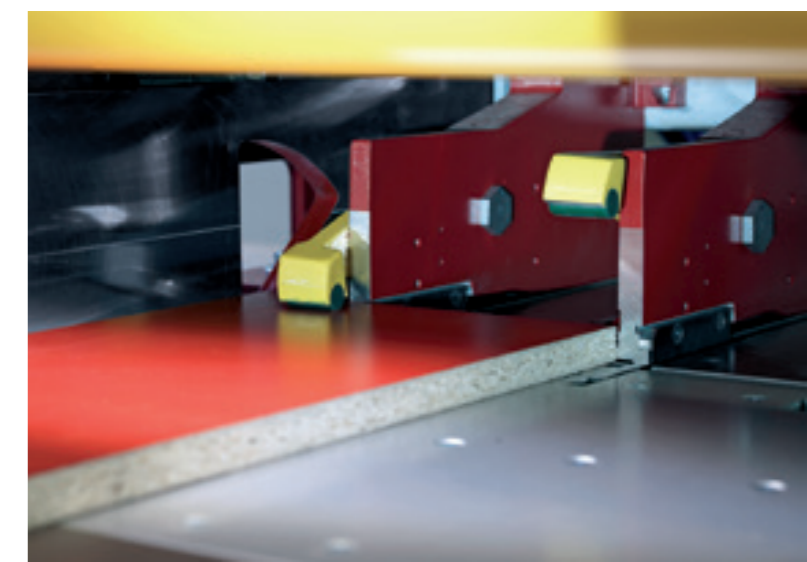
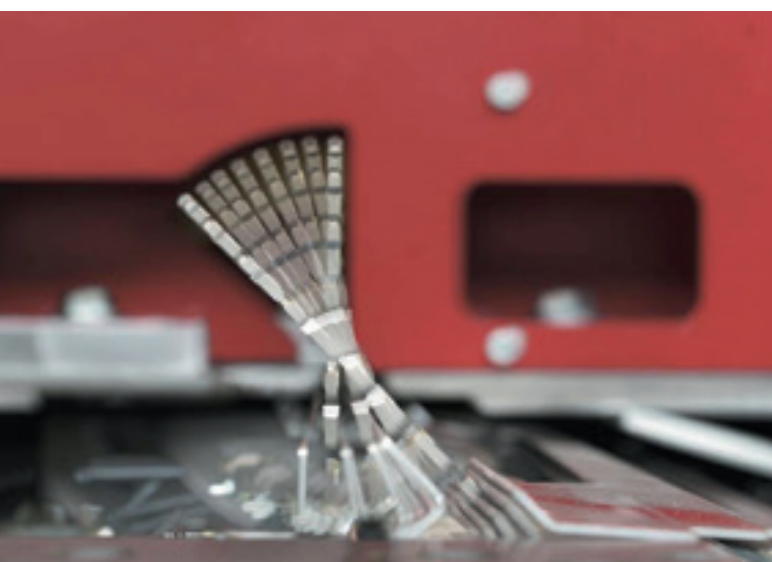


## Standard features:

- Saw unit with adjustable inclination from 0 to 46°
- Automatic pressure beam positioning to board thickness and mitre
- Stationary and movable air flotation tables
- 14 kW motor with rack and pinion gear
- 10 year guarantee on the hardened guide shafts of the saw unit
- Automatic 4-stage cutting height adjustment
- Automatic saw unit cleaning system
- Quick-action clamping device for changing the saw blade
- Automatic cutting length adjustment
- Automatic pressure beam short stroke for quick saw cycles
- Strip aligning device automatically pre-positioned
- Scoring unit with 1.5 kW output
- LED workplace lighting
- Inspection port in the press beam cover
- Dual function measuring system on feeder
- Control with visual operator guidance
- Industrial PC with up-to-date Windows operating system
- 22" TFT colour screen
- Notice board on control panel
- Remote maintenance
- Cutting pattern generator

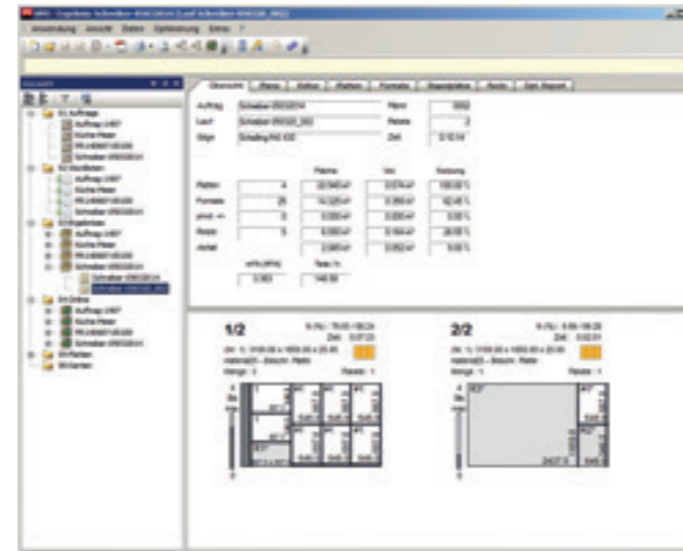
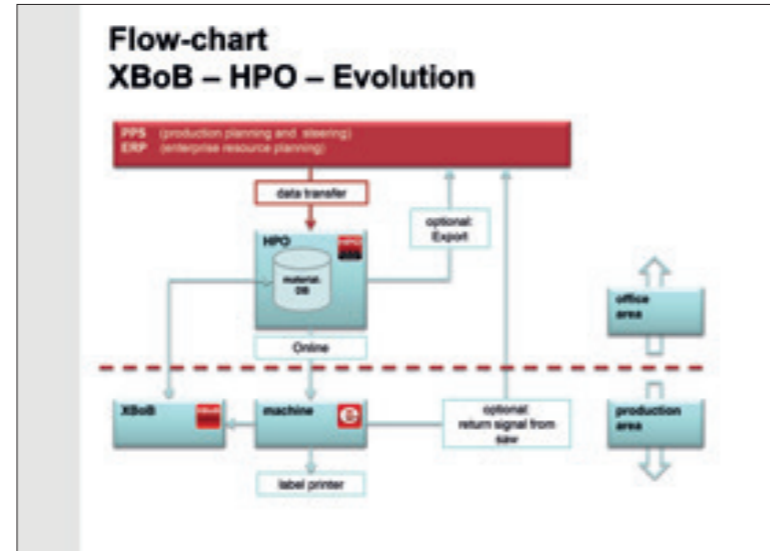
## Options:

- Groove device
- Cut windows and insert grooves
- Label printer
- Formatting device
- Additional clamps
- Continuously adjustable clamping pressure
- Individually controllable clamps (intelligent clamp control)
- Clamps with double clamp claw
- Angular cut device
- Motorised cutting height adjustment of the main saw
- Continuously adjustable rpm control on the main saw
- Electronic scorer adjusting mechanism
- Post-forming scoring unit
- Laser alignment light
- Air cushions in the machine table
- Power-Plus Package with 102 mm saw blade projection and 18.5 kW motor
- Dust package
- Air-conditioning unit for the switch cabinet
- Thin boards package



## Intelligently controlled for high output.

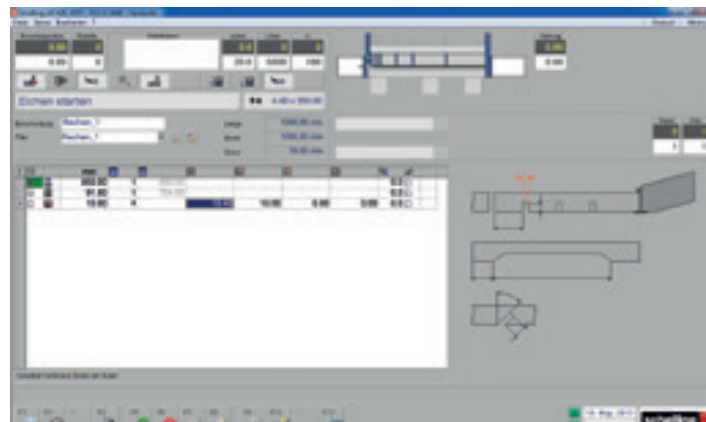
The Schelling MCS Evolution control makes using the s 45 efficient right from the very beginning and quickly provides you with high degree of automation. Open interfaces allow you to easily integrate the machine into existing systems and control and program it from the office PC. A new diagnostics function for the periphery simplifies the work of machine operators, maintenance personnel and hotline remote maintenance and pays off already at initial commissioning. The control panel with the MCS Evolution and the Schelling HPO optimisation software makes work a joy. Processes are represented in real-life mode with unsurpassed error diagnosis. The self-explanatory operator guidance practically excludes operating errors, and thus increases saw availability and efficiency.



## HPO cutting plan optimisation saves time and money.



The current release of the optional HPO cutting plan optimisation presents new functions for productivity and operating comfort. The multi-core design ensures that that which is contained in the most modern hardware is recovered at speed. 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 pattern appearance 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.



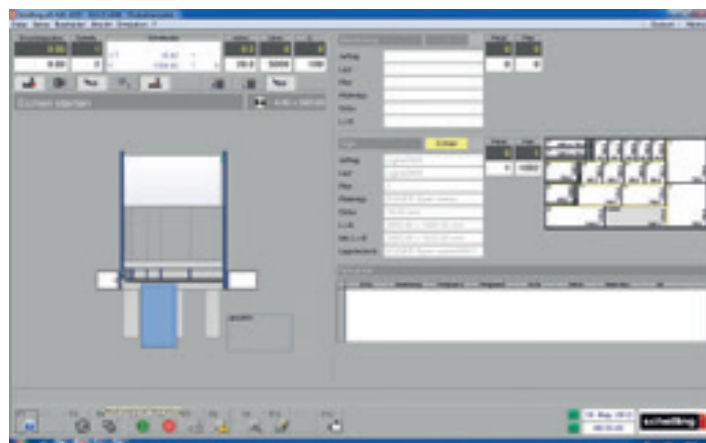
The operating data reporting of the MCS Evolution logs all relevant operating data, such as operating hours and the travel paths of the saw unit, feeder, pressure beam, etc. In addition, the running data of the saw blades are individually captured.

## XBoB brings order to waste.

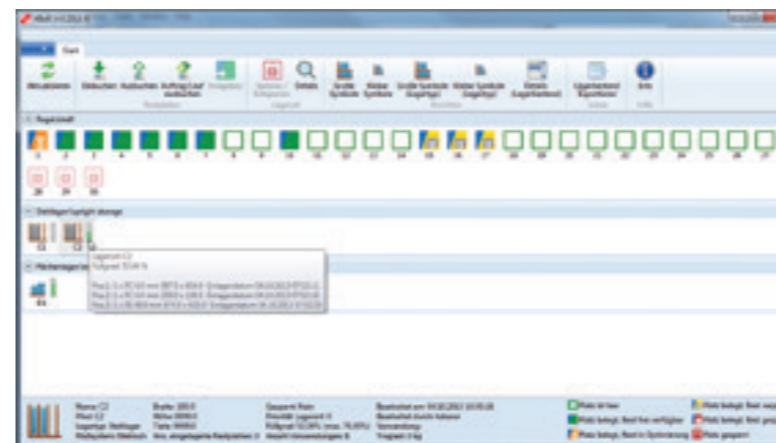


With the XBoB remainder management program, board remainders can be managed in a manual store. Remainders are automatically booked in and out in interaction with the machine control unit. In addition, XBoB is the interface from the machine control unit to the optimisation program.

Remainders that accumulate can be re-planned and used without delay in the optimisation. An easy and safe system for maximum utilisation of material.



Display of the current cutting pattern, the cut, the order, and the material on the operators screen. The newly developed optical power display aids easy sight monitoring of the saw motor power. (Only with the continuously adjustable RPM control option).



# Technical data

## Saw blade

Diameter	350 mm / 13.750"
Projection	77 mm / 2.875"
Projection 45°	54 mm / 2.000"

## Scorer

Diameter	180 mm / 7.000"
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## Feed rate

Forwards	up to 80 m/min / 262 ft/min
Backwards	120 m/min / 393 ft/min

## Saw feed rate

Forwards	up to 100 m/min / 328 ft/min
Backwards	100 m/min / 328 ft/min

## Power

Saw motor	14 kW / 19 PS
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## Clamp opening

84 mm / 3.250"
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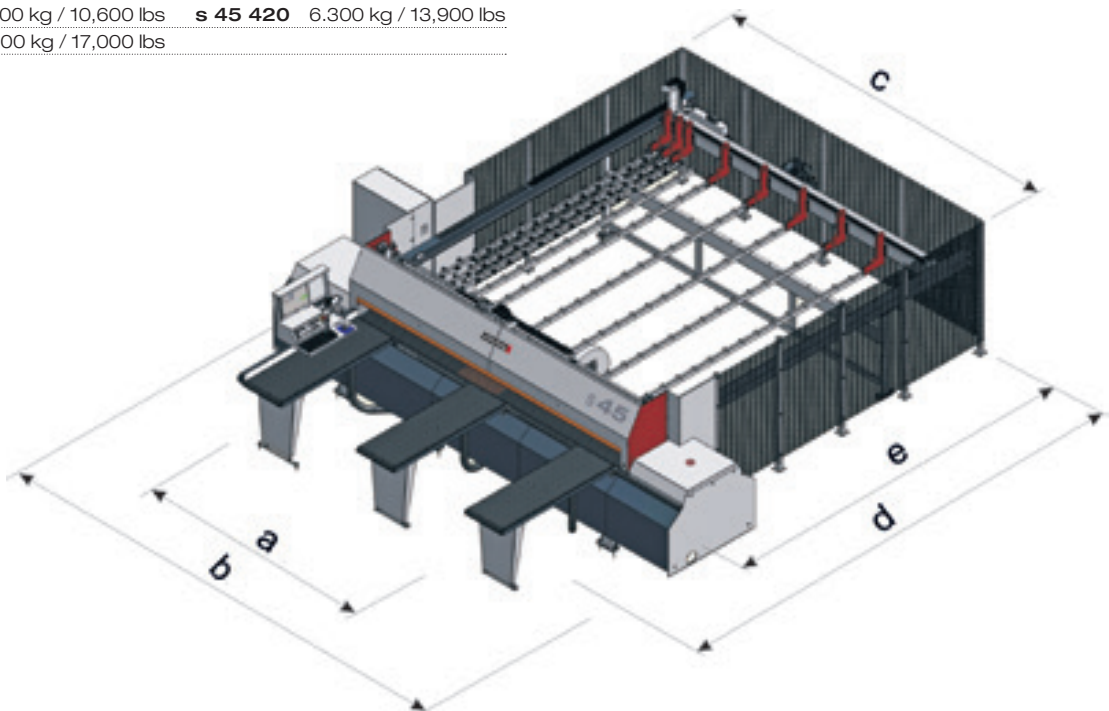
# Dimensions of the s 45

	s 45 320	s 45 420	s 45 580
a	3210 / 126.50"	4210 / 165.50"	5810 / 228.75"
b	5450 / 214.50"	6450 / 254.00"	8050 / 317.00"
c	3900 / 153.50"	4900 / 193.00"	6550 / 257.75"
d	6380 / 251.00"	7380 / 290.50"	9170 / 361.00"
e	4140 / 163.00"	5140 / 202.25"	6930 / 272.75"

Dimensions - mm/inch

## Weight

<b>s 45 320</b>	4.800 kg / 10,600 lbs	<b>s 45 420</b>	6.300 kg / 13,900 lbs
<b>s 45 580</b>	7.700 kg / 17,000 lbs		



Pictures in the brochure may show optional equipment.  
Technical changes and errors excepted.