

# MORE OUTPUT AND NO WASTE WHEN CUTTING MITRES.





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  $46^{\circ}$ , 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.

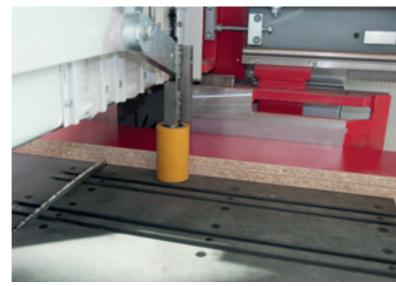
# TRUE SCHELLING PRECISION OVER THE SERVICE LIFE.

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.

### Machine's bottom plate

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.







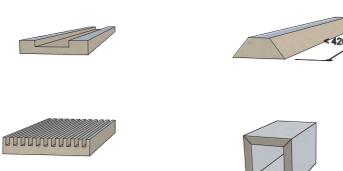
### Strip aligner

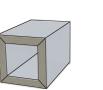
The strip aligning device upstream from the saw remains on the material even during the cut and guarantees maximum angular accuracy. The alignment force can be adjusted. Thus even sensitive or narrow panel strips can be cut precisely.

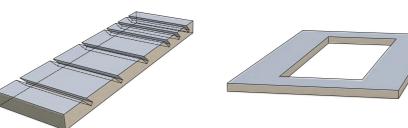
#### Saw unit

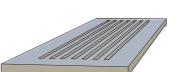
Both the saw unit and the feed trolley are equipped with the special Schelling high-performance round rod guides. This ensures precision and reduces maintenance costs.

# Versatile and precise

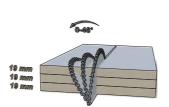


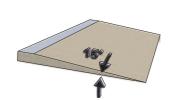


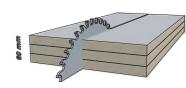


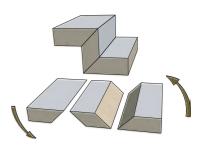


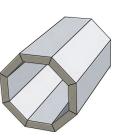




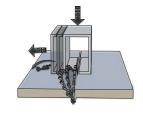














Because boards are cut to size and mitre cuts are performed simultaneously on only one machine, there is no need for handling from one saw to the next. This significantly reduces the risk of errors and damage.







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.

### Air Flotation tables

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.





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.

### Motorisation

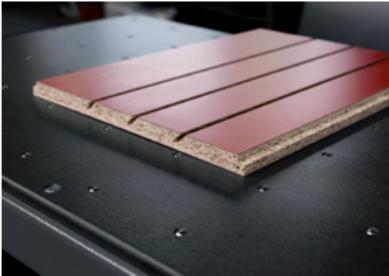
The motorisation of the Schelling s 45 is appropriately powerful. With an output of 14 kW, it has neither a horsepower too many nor too few. The satisfying power ensures quick processing and reduced saw times.



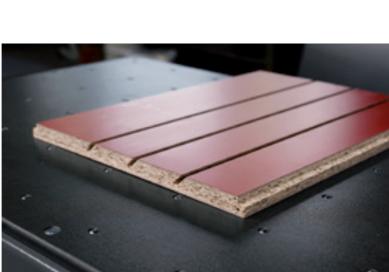
# NUMEROUS STANDARD FUNCTIONS, HELPFUL OPTIONS.

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.

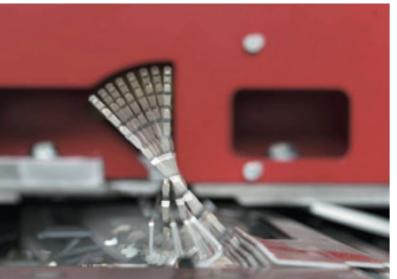
- The optional groove device makes it simple to cut mitre grooves on the Schelling s 45.
- Special constructions for shop and exhibition and design construction are no problem with s 45.
- The saw blade can be continuously inclined from 0 to 46°.
- The constantly operating strip aligning device ensures 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
- Clamps with double clamp claw
- 14 kW motor with rack and pinion gear
- Motorised infinately cutting height adjustment of the main saw
- 10 year guarantee on the hardened guide shafts of the saw unit
- 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
- Electronic scorer adjusting mechanism
- 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



### Options

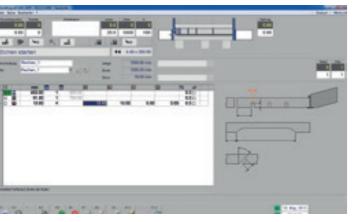
- Grooving and rebating device
- Cut windows and insert grooves
- Label printer
- Formatting device
- Additional clamps
- Continuously adjustable clamping pressure
- Individually controllable clamps (intelligent clamp control)
- Angular cut device
- Continuously adjustable rpm control on the main saw
- 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

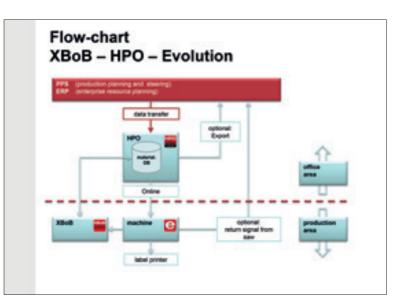


# INTELLIGENTLY CONTROLLED FOR HIGHER OUTPUT.



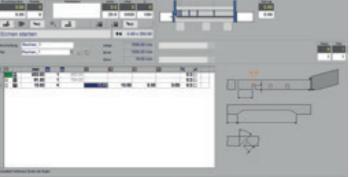
The Schelling MCS Evolution controller allows for efficient use of the s 45 from the outset and makes it possible to rapidly implement a high degree of automation. Open interfaces mean that the machine can be easily integrated in existing systems and programmed from an office PC. A new diagnostic function for peripherals facilitates the work of machine operators, maintenance personnel and remote hotline maintenance and proves it's worth right from initial commissioning. The control desk with the MCS Evolution and the Schelling HPO optimization software turns work into a pleasure. Sequences are presented in real-life mode – with unsurpassed fault diagnostics. Self-explanatory operator guidance practically excludes handling errors, and increases availability and saw efficiency.



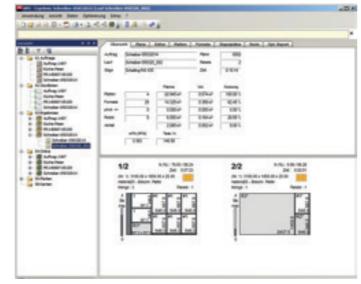


Available production data reporting of the MCS Evolution PLC logs all relevant operating data, such as operating hours and travel paths of the saw unit, feeder, pressure beam, etc. In

addition, the running data of the saw blades are individually recorded.



MCS Evolution also displays the current cutting plan, cut in process, the order and the material on the screen. The newly developed optical power display aids easy sight monitoring of the saw motor power.

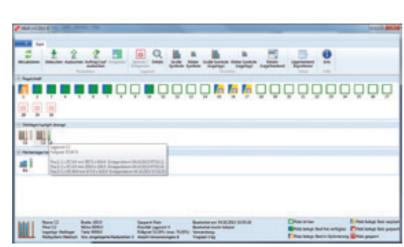




## XBoB brings order to waste.

With the XBoB remainder management program, material remnants can be easily managed by the saw operator. Remainder material is automatically booked in and out through interaction

with the machine controller. In addition, XBoB is the interface from the machine controller to the optimization program. Remainders that accumulate can be reused without delay in the optimization. XBoB offers an easy and safe system for maximum utilization of material.





# HPO cutting pattern optimization saves time and money.

The latest version of HPO cutting pattern optimization offers new functions for productivity and operating convenience. Multi-core use ensures the speed

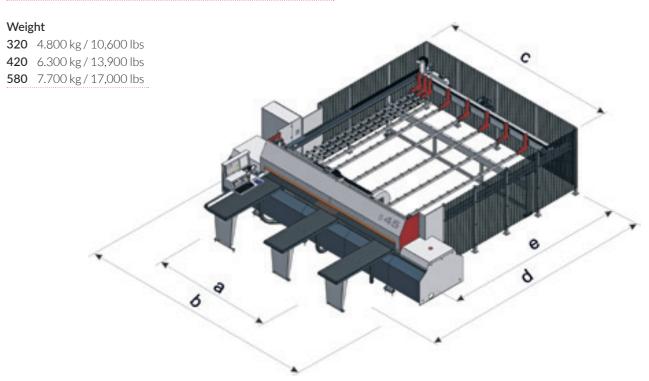
available from state of the art hardware is effectively utilized. Thus computing times are reduced by as much as 60 %. In addition, the system works with the latest calculation logarithms. Other new features include the appearance of patterns can be virtually set as desired, on request the optimal un-machined panel can be determined, the print function can be configured and searching has been even more clearly designed.



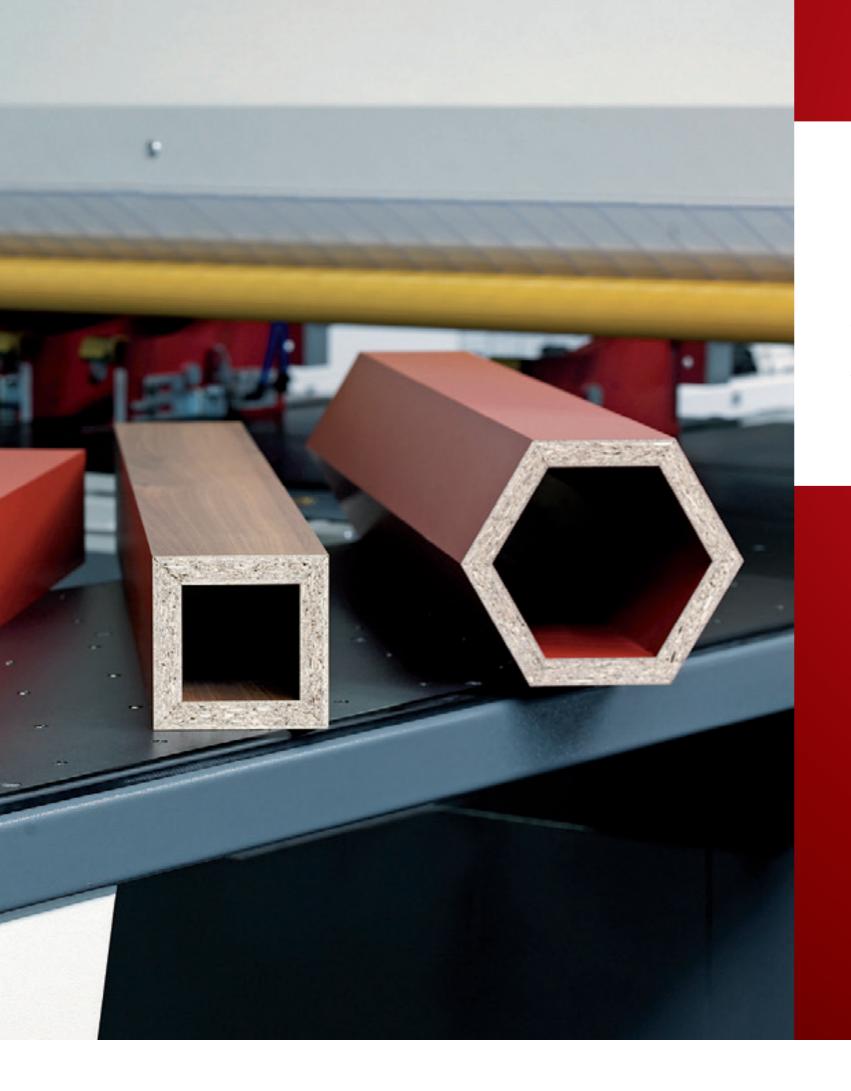
### TECHNICAL DATA

Saw blade		Scorer	
Diameter	350 mm / 13.750"	Diameter	180 mm / 7.000
Projection	77 mm / 2.875"		
Projection 45°	54 mm / 2.000"	Feed rate	
Clamp opening	84 mm / 3.250"	forward	up to 80 m/min / 262 ft/mi
		reverse	120 m/min / 393 ft/mi
Power			
saw motor	14 kW	Saw feed rate	
saw motor	19 HP	forward	up to 100 m/min / 328 ft/mi
		reverse	100 m/min / 328 ft/mi

Dimensions s 45				
320	420	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				







ONE GROUP ONE GOAL:
EXPERTISE IN
DEVELOPING
SOLUTIONS
FOR THE
WOODWORKING
INDUSTRY

The IMA Schelling Group is a reliable partner for implementing of sophisticated system solutions.

The demands of our customers are a daily challenge to us, our know-how and creativity!

We work with you to develop innovative and unique solutions for wood processing.

www.imaschelling.com

Subject to technical modifications and mendments and to further developments. The offer, respectively the order confirmation is relevant in either ca

The picture of the machine could have been taken without complete protection devices. The protection device is part of the scope of delivery.

Photos could also be options, not being part of the scope of delivery.

