SCHELLING

Cut-to-size saw s 45

The all-in-one solution for cut-to-size and mitre cuts.

schelling.com

MORE OUTPUT AND NO WASTE WHEN CUTTING MITRES.

The Schelling s 45 opens up new potential where mitre cuts are required. This all-in-one machine combines the capabilities of two machines, thereby saving space, 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. 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 technology, and the only limitation is your creativity. 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 for applications with high aesthetic and design standards.

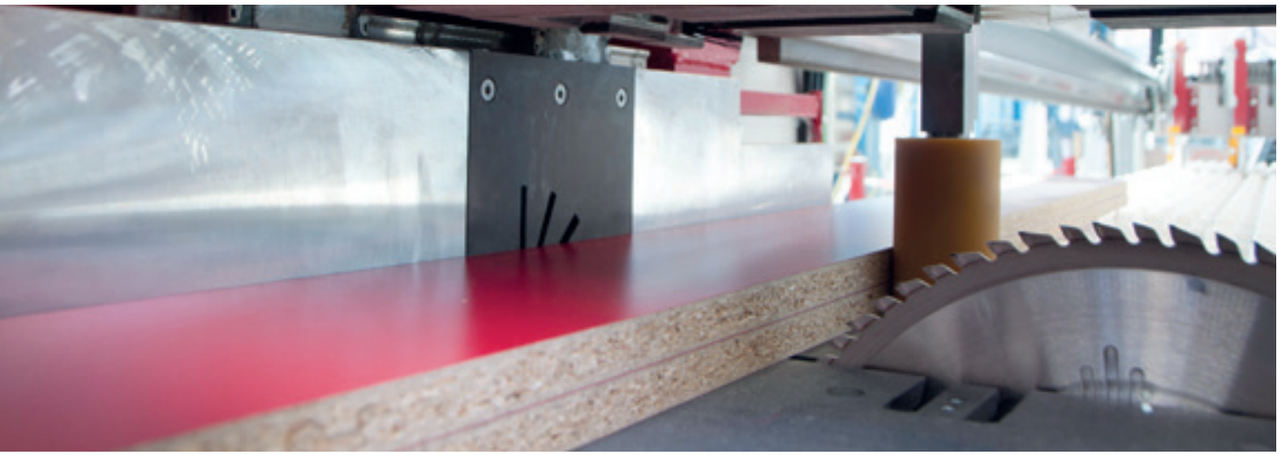
The technical design of the Schelling s 45 is ideal for both single-unit and volume production. The full-fledged Schelling machine control unit makes a significant contribution for simple operation, optimal results and higher productivity.

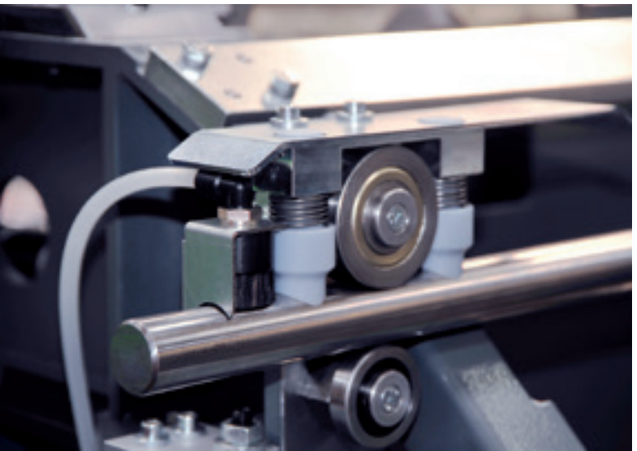
TRUE SCHELLING PRECISION OVER THE SERVICE LIFE.

The Schelling s 45 is the first combined mitre/cut-to-size saw on the market and is a Schelling through and through. The uncompromising emphasis on precision and service life clearly identify it as a product by Schelling.
To this end, the industry's technology leader relies on solid technology all around. This means in particular that the heavy robust construction results in lower vibrations 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.





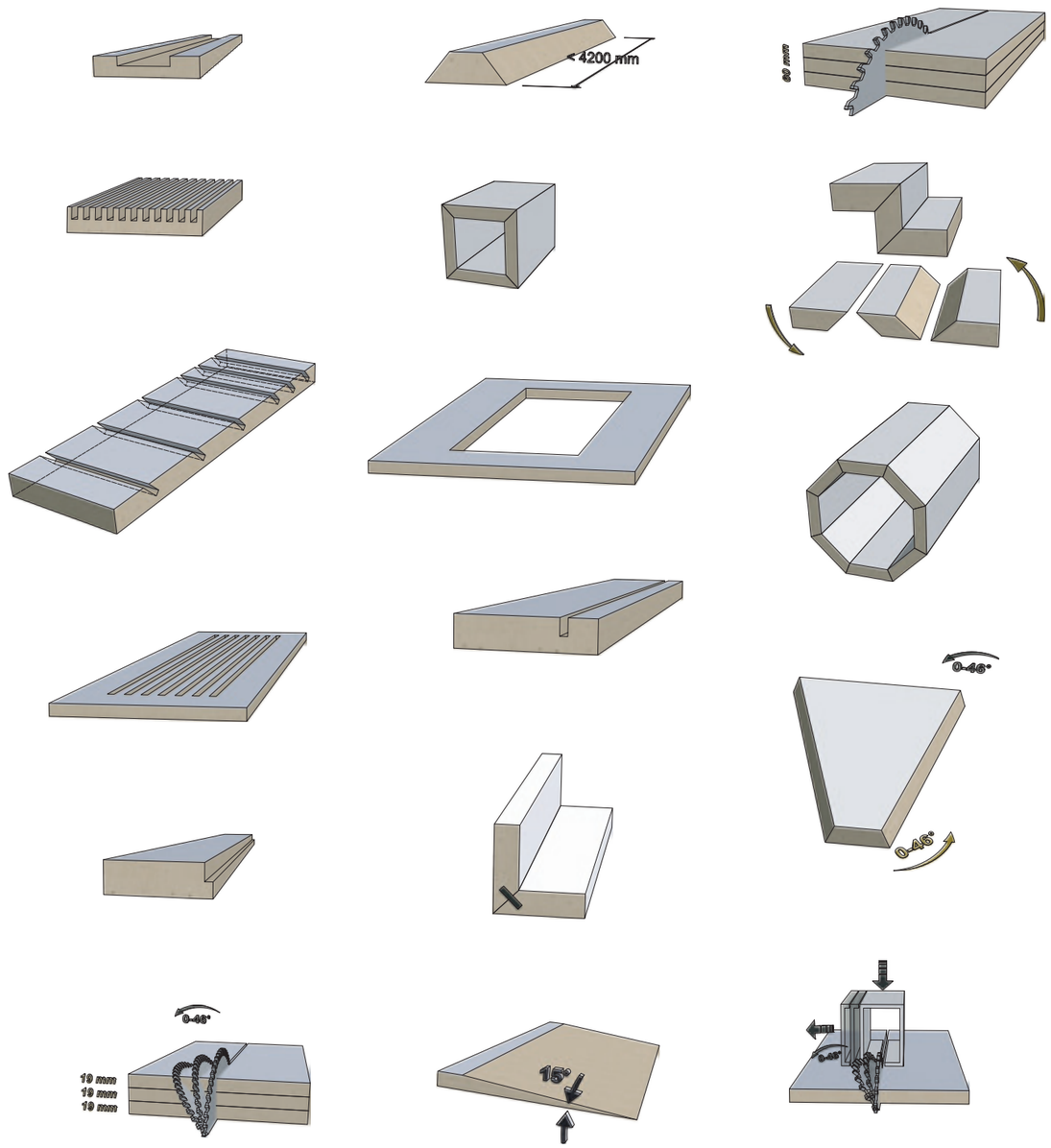
Strip aligner

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, therefore 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.

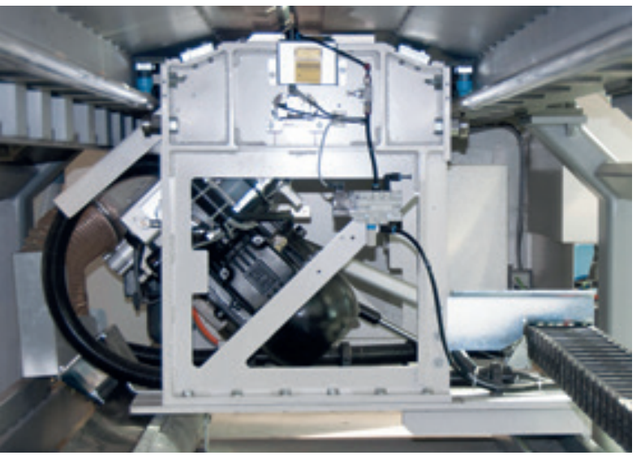
Versatile and precise

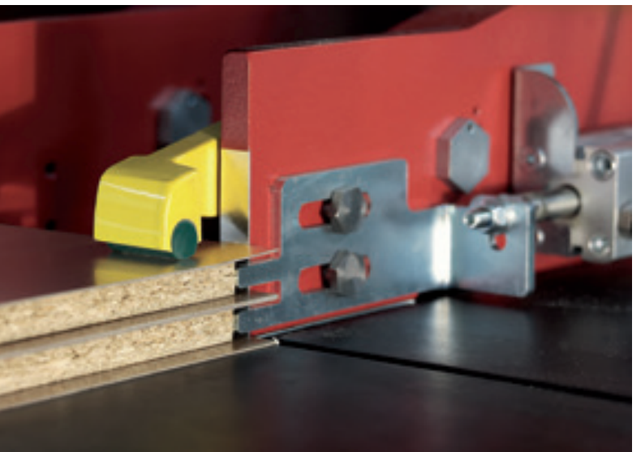


There is no need for handling from one saw to the next because boards are cut to size and mitre cuts are performed simultaneously on one machine. This significantly reduces the risk of errors and damage.

PRODUCTIVE
FROM A TO Z.

SCHELLING





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 innovated thinking of the Schelling engineers are incorporated here. In addition, operating comfort, material conservation and low overall operating costs play decisive roles in the design.

Motor

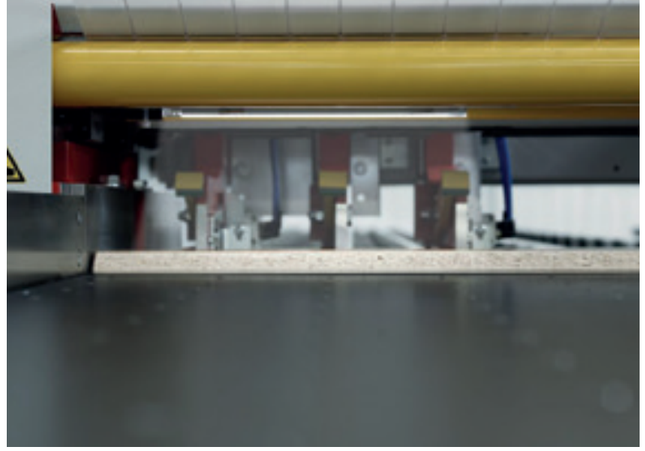
With an output of 14 kW, the motor for the s 45 has just the right horsepower to ensure quick processing and reduced saw times.

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

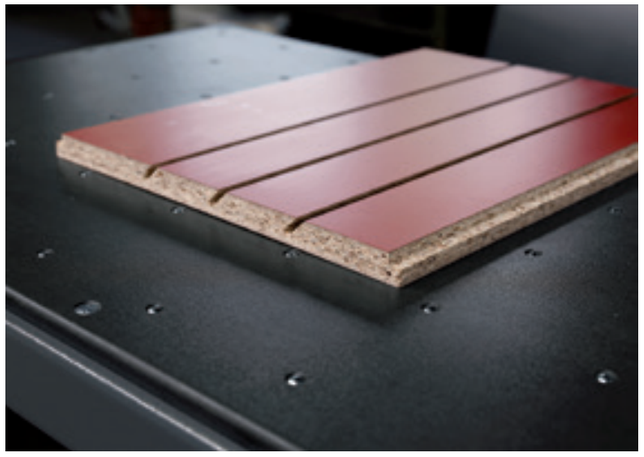
Three air flotation tables make panels and parts extremely easy to handle. Furthermore, all air flotation tables, except on the angle end stop, can be moved which ensures good accessibility in every situation. In addition, the right table can be shifted to the outer edge of the machine, which opens up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

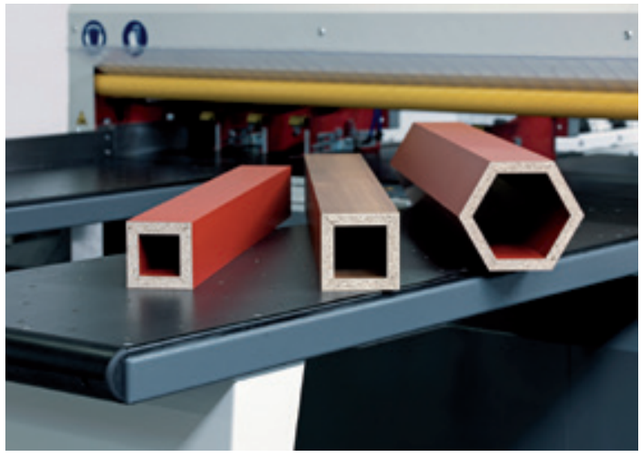
NUMEROUS STANDARD FUNCTIONS, HELPFUL OPTIONS.

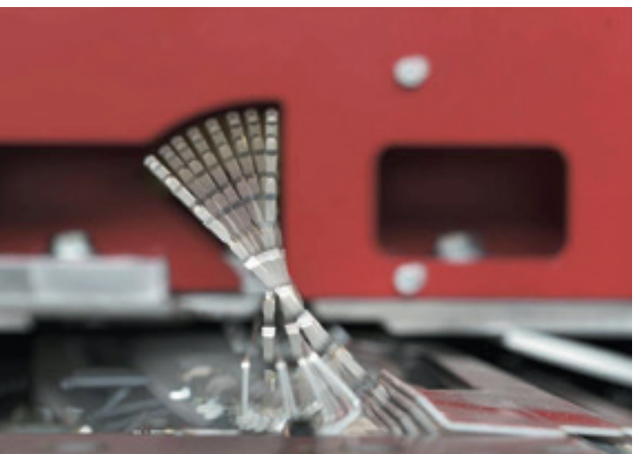


The standard version of the Schelling s 45 already offers everything you could want for almost every job in its class and offers even more, due to the mitre cut function. For special functions, you can choose from a number of optional features.

- The optional grooving device makes it simple to cut mitre grooves on the Schelling s 45.
- Special construction 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 strip aligning device operates constantly and 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.
- Cut projecting top layers with the automatic formatting device.

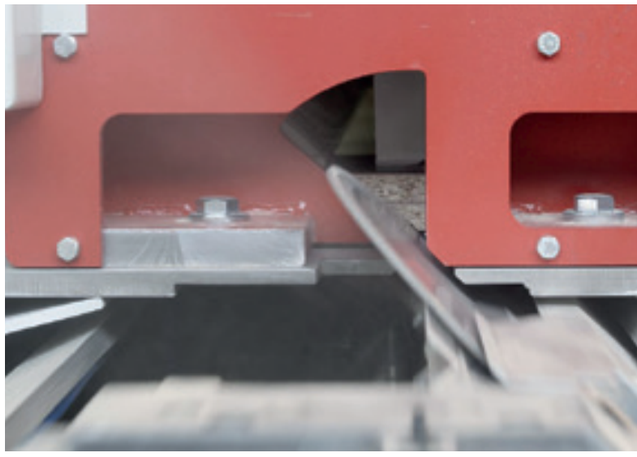






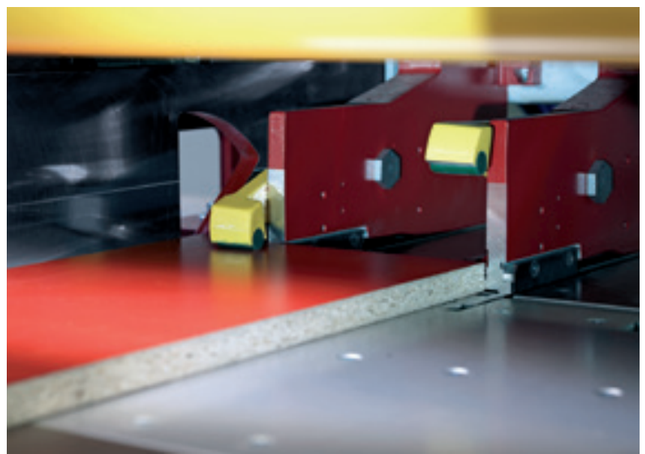
Standard features

- Saw unit with adjustable inclination from 0 to 46°
- Automatic pressure beam positioning to board thickness and mitre
- Stationary and movable air flotation tables
- Table clamps with double clamp claw
- 14 kW motor with rack and pinion gear
- Motorized gear for continuous 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
- Magnetized board for paperwork on control panel
- Remote maintenance
- Cutting pattern generator



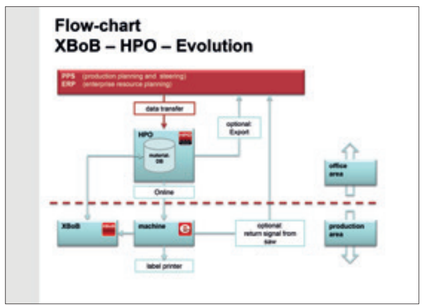
Options

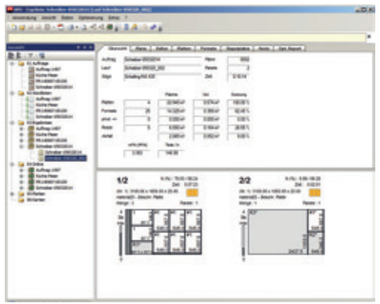
- Grooving and rabbeting device for cutting windows and insert-grooves
- Label printer
- Formatting device
- Additional clamps
- Continuously adjustable clamping pressure
- Individually controllable clamps (intelligent clamp control)
- Angular cut device
- Continuously adjustable rpm control on the main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



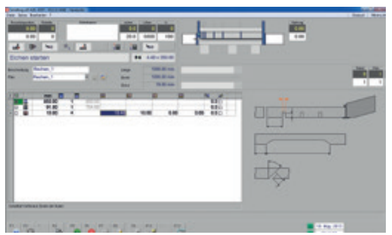
INTELLIGENTLY CONTROLLED FOR HIGHER OUTPUT.

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 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.



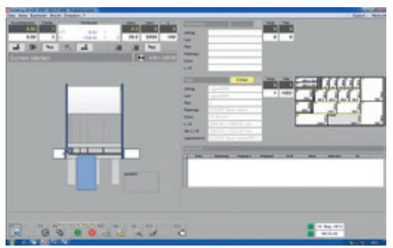


HPO cutting pattern optimization saves time and money.
The latest version of HPO cutting pattern optimization offers new functions for productivity and operating convenience. Multi-core use ensures the speed available from state of the art hardware is effectively utilized. Thus computing times are reduced 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.

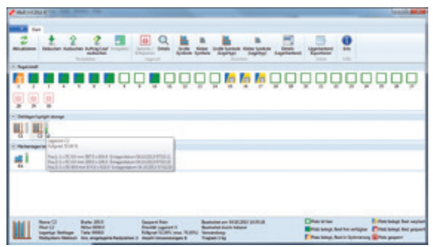


Available production data reporting of the MCS Evolution PLC logs all relevant operating data, such as operating hours and travel paths of the saw unit, feeder, pressure beam, etc. In addition, the runtime data of the saw blades are individually recorded.

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.



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.



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TECHNICAL DATA

Saw blade

Diameter	350 mm / 13.750"
Projection	77 mm / 2.875"
Projection 45°	54 mm / 2.000"
Clamp opening	84 mm / 3.250"

Power

saw motor	14 kW
saw motor	19 HP

Scorer

Diameter	180 mm / 7.000"

Feed rate

forward	up to 80 m/min / 262 ft/min
reverse	120 m/min / 393 ft/min

Saw feed rate

forward	up to 100 m/min / 328 ft/min
reverse	100 m/min / 328 ft/min

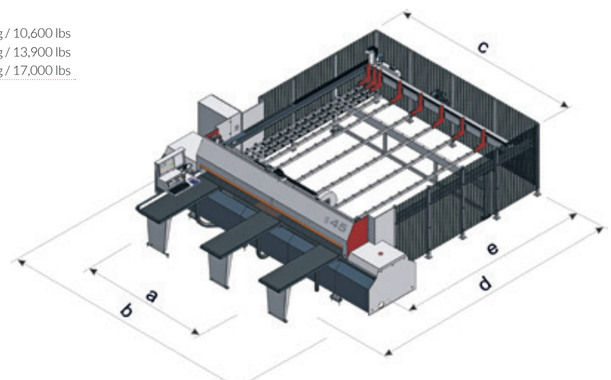
Dimensions s 45

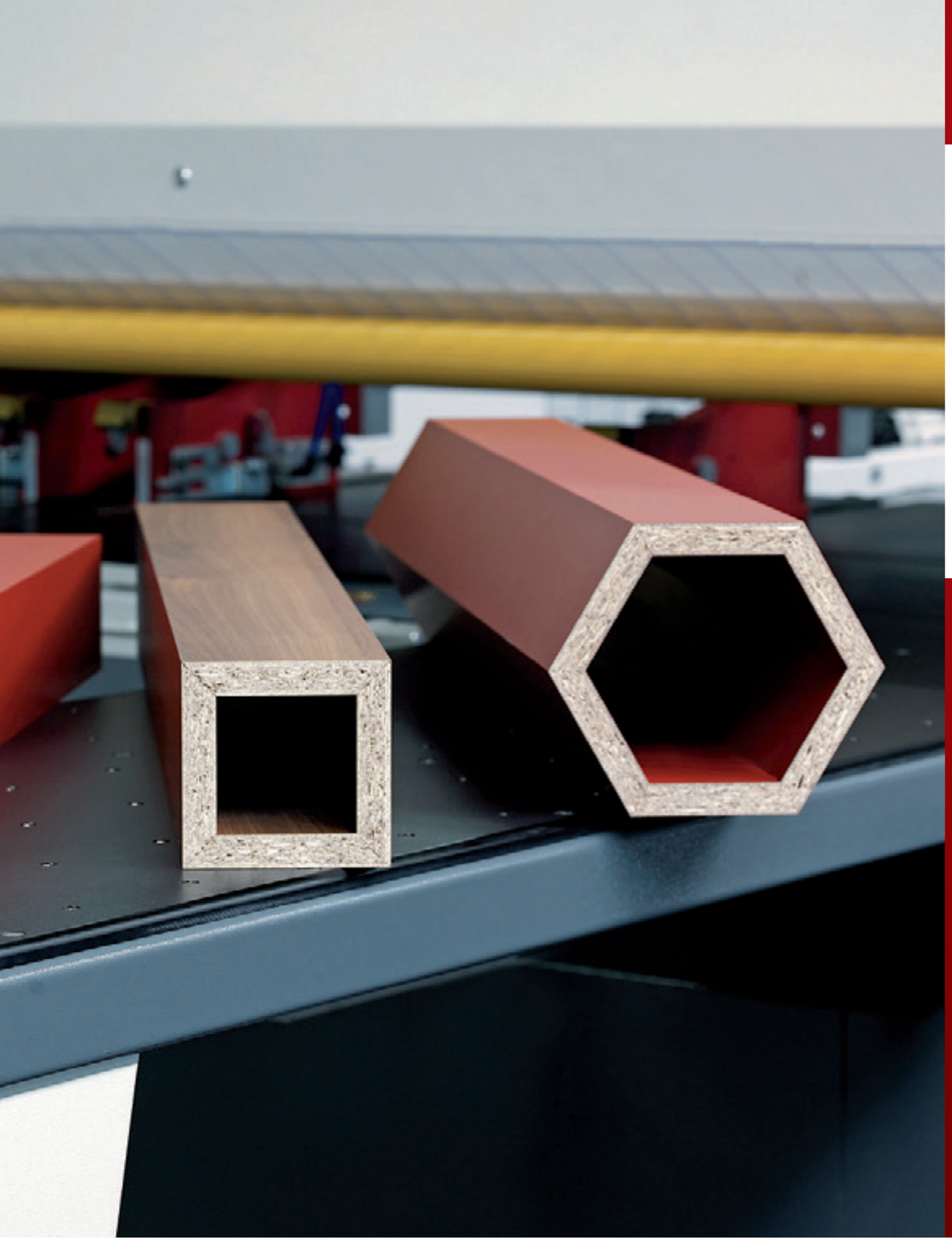
	320	420	580
a	3210 / 126.50"	4210 / 165.50"	5810 / 228.75"
b	5450 / 214.50"	6450 / 254.00"	8050 / 317.00"
c	3900 / 153.50"	4900 / 193.00"	6550 / 257.75"
d	6380 / 251.00"	7380 / 290.50"	9170 / 361.00"
e	4140 / 163.00"	5140 / 202.25"	6930 / 272.75"

Dimensions – mm / inch

Weight

320	4.800 kg / 10,600 lbs
420	6.300 kg / 13,900 lbs
580	7.700 kg / 17,000 lbs





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