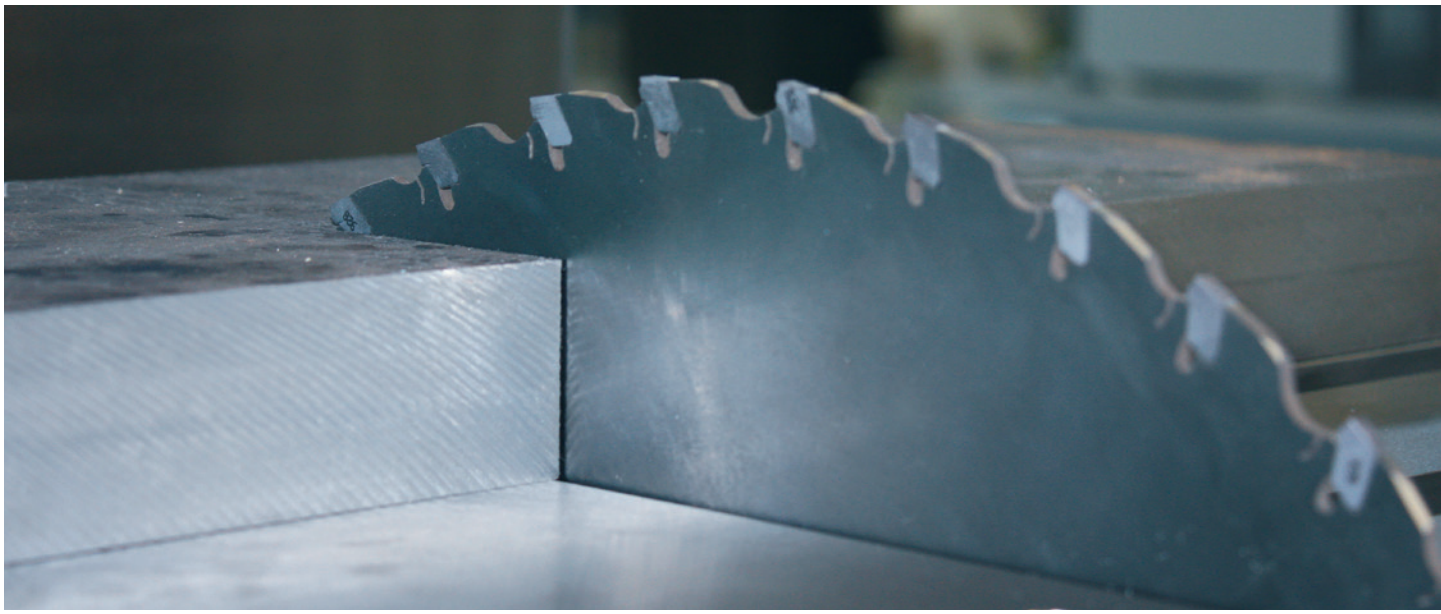
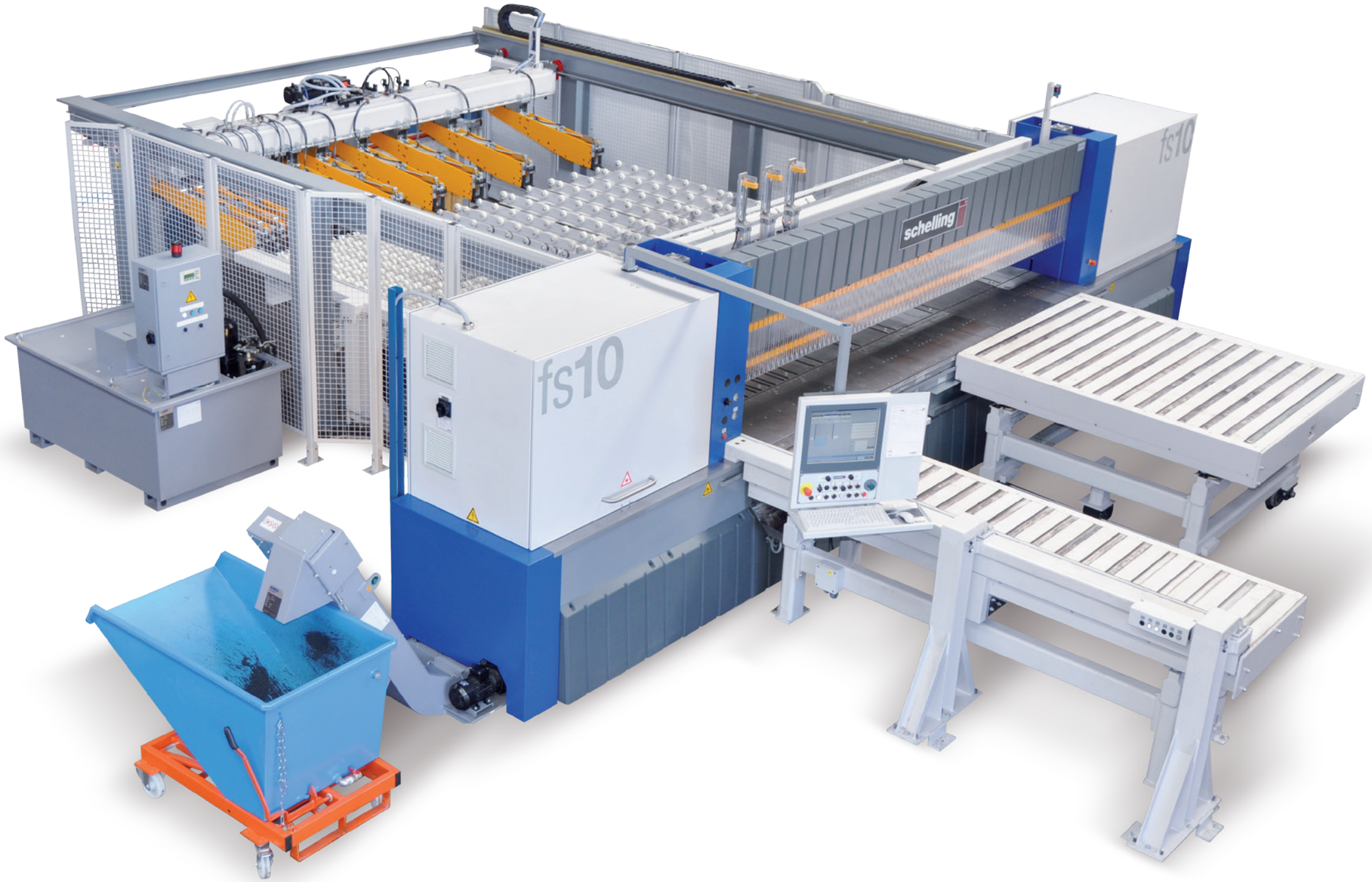
schelling

Precision Plate Saw fs 10

Sawing steel and titanium efficiently



Circular saw technique increases speed by up to six times.



Productivity: More speed. More Quality.
Up to now circular saw technique was barred from processing steel and titanium panels in most cases. But, Schelling's know-how finally made the breakthrough: The Schelling fs 10 panel sizing saw presents considerably increased speed and perfect cut quality.

Precision: accuracy ± 0.3 mm
The fully automatic positioning system, the integrated material adjustment system, and precise positioning – as well as numerous other machine details and construction characteristics – ensure a part and angle accuracy of ± 0.3 mm.

Automation: rational from A to Z.
Schelling fs 10 can be used to cut steel, stainless steel and titanium panels in one working step without remachining. The well-established sub-bench circular saw technology is applied basically. Thus, panels can be processed up to six times faster than with conventional techniques.

Robustness: massive construction.
Quite normal for Schelling: the machine is highly massive. The extremely stable construction puts a stop to vibrations and thus ensures the best possible cutting quality and precision as well as the long service life, for which Schelling machines are well-known. And that applies for a three shift operation as well.

Handling: easy to use and safe.
The fs 10 is easy to operate. Driven roller raceways pass the material on to the machine automatically. Special Schelling scissor clamps take over and position the panels and pass on the finished parts. Without another manual action. Maximum safety is guaranteed.

Precision for the entire service life.

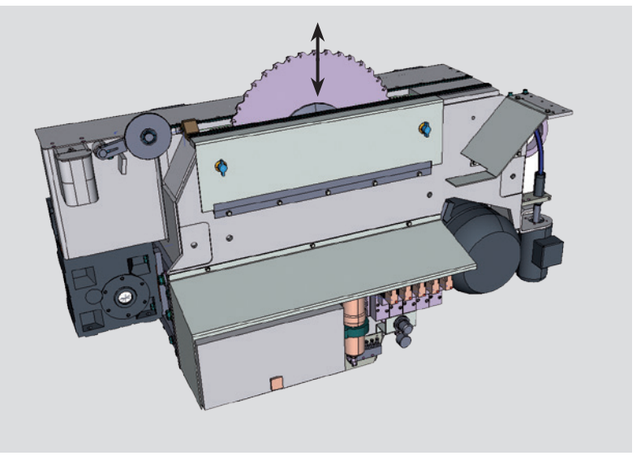
A well-known characteristic feature of Schelling machines is the massive, heavy construction. It minimizes vibrations, optimizes accuracy and ensures a longer low-failure service life.

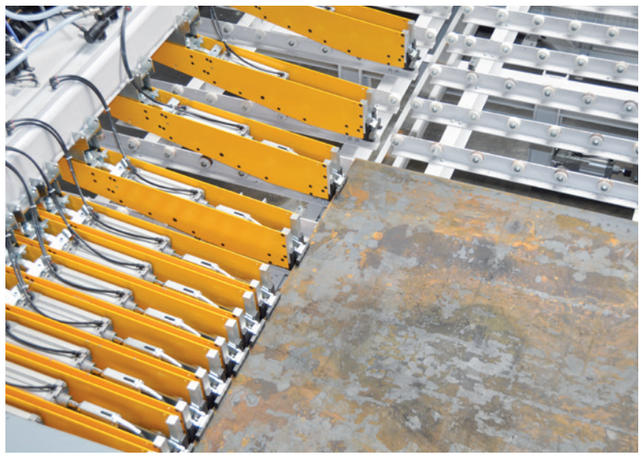
Powerful unit, lowerable blade.

Based on the knowledge of sawing other materials and with a lot of power, the fs 10 separates steel, stainless steel and titanium. The concepts with a lifting and lowering saw blade ensures short processing cycles: after the end of each cut the saw blade is lowered and the saw carriage moves back underneath the material whilst the panels are positioned for the next cut.

Clean machine. Clean results.

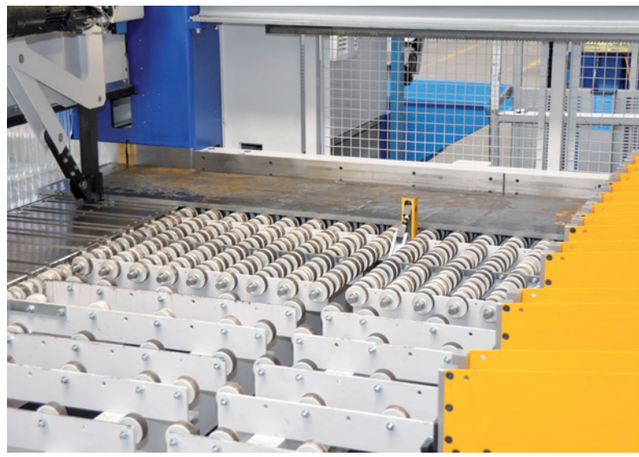
The basic pre-requisite for high processing quality is a clean machine. For this reason fs 10 collects 98 per cent of all chips occurring automatically. Spent coolant is also reprocessed and returned to the system. This reduces costs and increases environmental compatibility.





Strip aligner for ± 0.3 mm angular accuracy.

As the name indicates already, the stip aligner automatically aligns the stips against the angular stop. Thus an angular accuracy of highly precise ± 0.3 mm is achieved. Depending on the stip length, up to four aligners are used.



Highly precise positioning with scissor clamps.

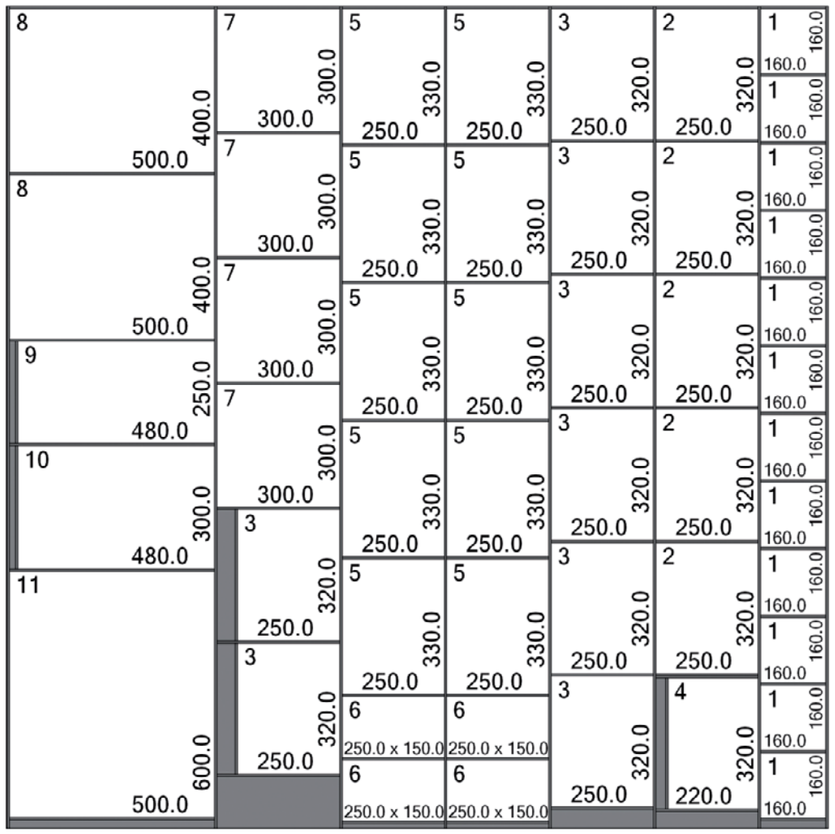
The scissor clamp principle of Schelling has been tried and tested a thousand times and the fs 10 has been equipped with it as well. The material is taken up by the scissor clamps at the cut line and is positioned automatically. It is possible also to divide several strips together.

Safety curtain protects the user.

The fs 10 is intent on ensuring safety for the operating staff. Various safety measures are included. Essentially it is the safety curtain which prevents hands passing through to the sawing line during the sawing process.

Cutting plan optimisation: Making use of panels in the best possible way.

Profitability has many faces. Apart from speed and precision, it is also a matter of maximum utilisation of raw panels.
Schelling cutting plan optimisation HPO can be used, for example, to plan eleven different formats from a panel using up to 90 per cent of the material.

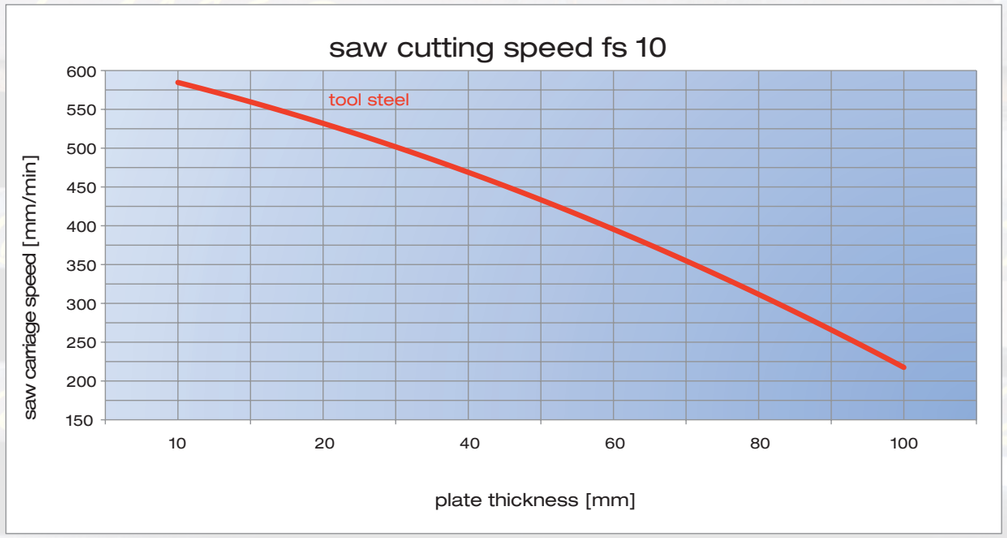


Material	1,1730
Dimension	2,050 x 2,050 x 30 mm
Number of cut pieces	49
Overall cutting length	33.52 m
Process time (including setup time)	
Schelling precision plate saw	199 min
Traditional cutting methods	835 min

HPO
High Performance Optimization

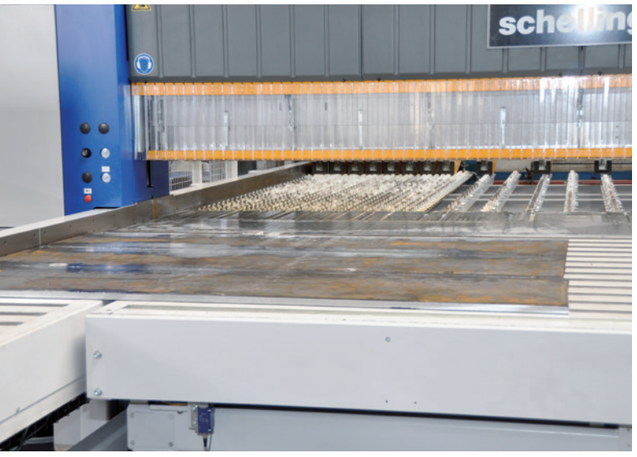
Schelling cutting plan optimisation HPO uses more than 90 per cent of the material producing eleven different formats.

Machine data fs 10



Saw blade	
Diameter	420 – 500 mm
Saw blade projection	max. 115 mm
Clamp opening	130 mm
Cutting speed	26 – 230 m/min

Feeder carriage speed	
Forward	0 – 20 m/min
Return	0 – 20 m/min
Saw carriage speed	
Forward	0.02 – 10 m/min
Return	10 m/min



Easy to operate. Sawing to size completely.

The fs 10 is a complex machine which is easy to operate. Scissor clamps, crane, roller table with driven rollers, etc ensure easy handling and uncomplicated workflow. And cutting the parts to size can be carried out on one machine in a single work process.

The scissor clamps push the sawn strips out of the machine completely.

The roller table is lifted and pushed to the right with the material.

The crane is used to turn the strips by 90 degrees ...

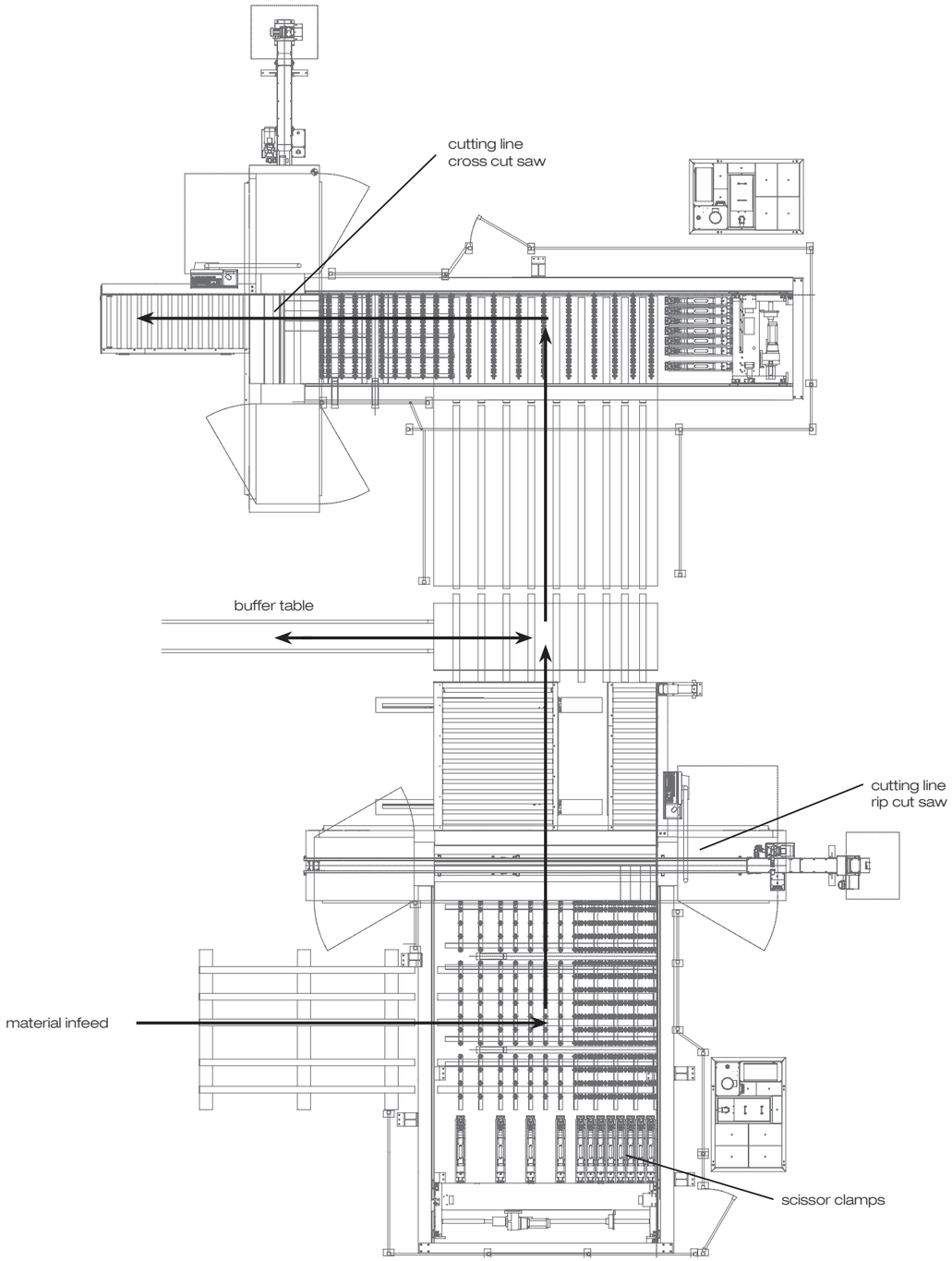
... which are placed on the roller table at the angle stop.

By pressing the start button, the strips are clamped and cut up.

Material transport
”à la carte“.

Automatic material feed and handling are significant for the efficiency and productivity of every machine. Schelling offers individual solutions in this respect: adapted feed and material handling as well as stacking variants.

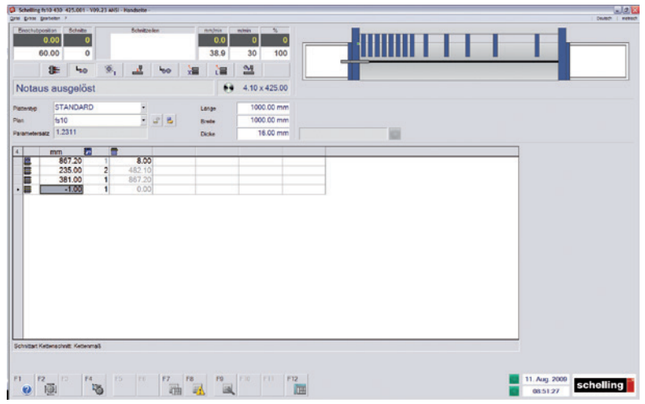
Clear advantage: peripheral technologies including machine come from one source.

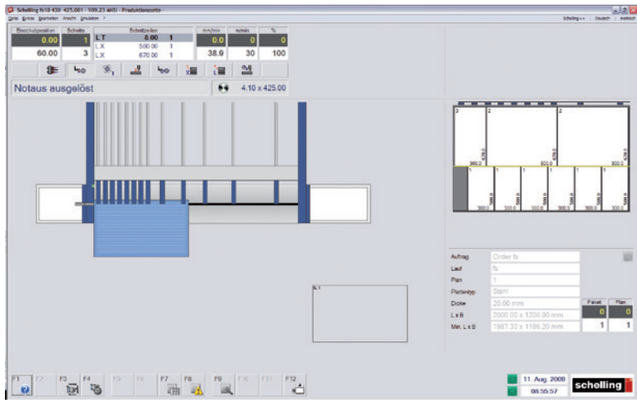


Intuitive control. Errors prevented. Optimisation.

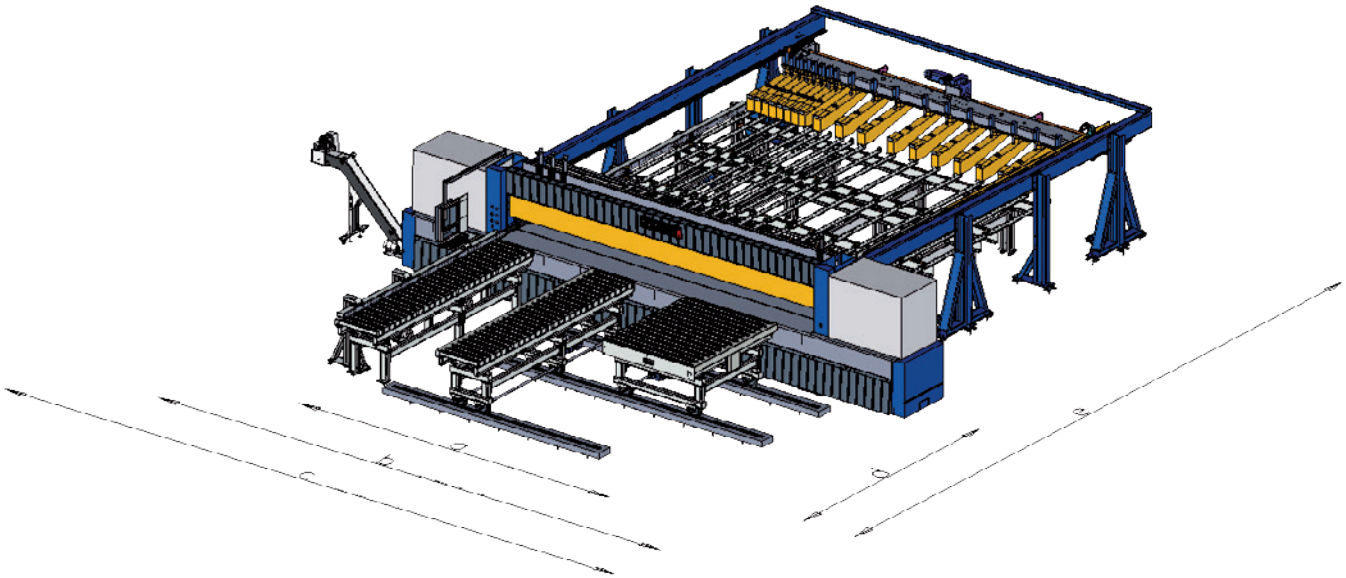
The fs 10 panel dividing saw for steel, stainless steel and titanium has been equipped with highly modern, user-friendly electronic hardware and software. The machine is controlled by a control panel fitted with a flat screen. The MCS and HPO software of Schelling simplifies control and material utilisation. Processes are displayed in real life mode. The fault diagnosis is unsurpassed and the user guidance is self-explanatory.

HPO
High Performance Optimization





Technical data fs 10



weight fs 10		
fs 10 130	17,000 kg	37,479 lbs
fs 10 230	19,000 kg	41,888 lbs
fs 10 330	21,000 kg	46,297 lbs
fs 10 430	23,000 kg	50,706 lbs
fs 10 630	28,000 kg	61,729 lbs

	fs 10 130	fs 10 230	fs 10 330	fs 10 430	fs 10 630
a	1,330	2,330	3,330	4,330	6,330
b	5,200	6,200	7,200	8,200	10,200
c	7,200	8,600	9,600	10,600	12,600
d	2,600	2,600	3,600	3,600	4,600
e	7,200	7,200	9,200	10,200	13,200

Dimensions – mm

	fs 10 130	fs 10 230	fs 10 330	fs 10 430	fs 10 630
a	4‘ 4 3/8“	7‘ 7 3/4“	10‘ 11 1/8“	14‘ 2 1/2“	20‘ 9 3/16“
b	17‘ 0 3/4“	20‘ 4“	23‘ 8“	26‘ 11“	33‘ 6“
c	23‘ 7 7/16“	28‘ 6“	31‘ 6“	34‘ 9“	41‘ 4“
d	8‘ 6 3/8“	8‘ 6“	11‘ 10“	11‘ 10“	15‘ 1“
e	23‘ 7 7/16“	26‘ 11“	30‘ 2“	33‘ 6“	43‘ 4“

Dimensions – inch

ENG 77/2013 | 200 Stück | v7

Schelling Anlagenbau GmbH, Schwarzach, Austria
Schelling America Inc., Raleigh, USA
Schelling UK Ltd., Wetherby West Yorkshire, England
Schelling Asia (S) PTE LTD, Singapore
Schelling Polska, Sroda Wlkp., Poland
Schelling Changzhou Trading Co., LTD., Changzhou, China
Schelling Australia, Malaga, Western Australia
Schelling Unità locale Italia, Busto Arsizio, Italia
Schelling Moscow, Russia
www.schelling.com