

Precision saw **fk 6**

The PLUS<sup>+</sup> in everything!



[ precision! ]



**schelling** 

# PLUS<sup>+</sup> CONCEPT

SCHELLING PLUS<sup>+</sup> CONCEPT: THE PLUS<sup>+</sup> IN EVERYTHING!



The **fk 6** precision plastics and composites saw fully demonstrates Schelling's continuing commitment to productivity and precision. The machine's solid, rigid structure enables considerably higher processing speeds while maintaining cutting quality and part accuracy.

Schelling's PLUS<sup>+</sup> Concept, puts "The PLUS<sup>+</sup> in everything": Exceptional chip and dust removal, precision, cutting quality and productivity.

#### **ERGONOMICS PLUS<sup>+</sup>**

Optimized saw carriage chip guides and pressure beam extraction system maximize

chip and dust removal to a point of 99.5%. Even chips from face or "dust" cuts are completely removed with the patented "CLEAN-UP" system.

#### **POWER PLUS<sup>+</sup>**

The unique saw carriage design with a stationary, powerful saw motor allows for the highest

possible cutting speeds and maximum productivity.

#### **HANDLING PLUS<sup>+</sup>**

The specially developed movable turntable makes material handling significantly easier.



# PLUS<sup>+</sup> CONCEPT

## SCHELLING PLUS<sup>+</sup> CONCEPT: PRECISION<sup>+</sup> FOR THE LIFE OF THE MACHINE!



### **STABILITY PLUS<sup>+</sup>**

The heavy duty design prevents vibrations and assures longevity. The result is unmatched cutting quality and the highest possible precision.

### **SURFACE PLUS<sup>+</sup>**

The scissors clamps are equipped with retractable bottom fingers for improved material support on the machine table. Schelling also offers air floatation built directly into the machine table

to achieve optimum material surface protection and to dramatically simplify material handling for the operator.

### **PRECISION PLUS<sup>+</sup>**

The heavy-duty machine with a proven guiding system

guarantees the highest angular accuracy. Schelling also offers a dual drive system for the feeder to achieve positioning precision within hundredths of a millimeter.





# PLUS+ CONCEPT

## ERGONOMICS PLUS+: EXCEPTIONAL CHIP AND DUST REMOVAL



Chip protection curtain - **optimum extraction**

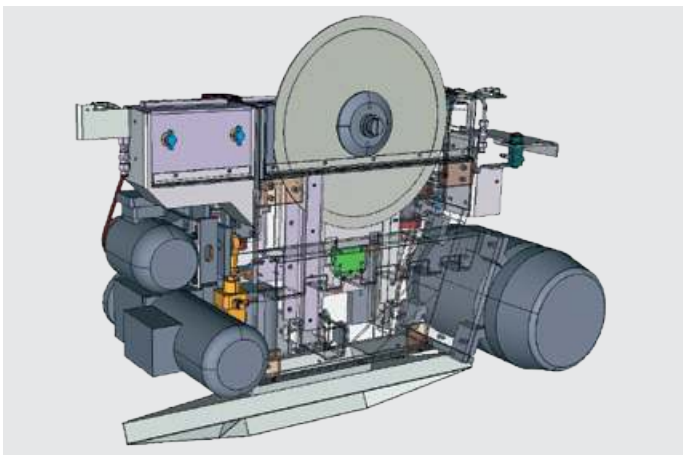
The double guided chip protection curtain creates a tight extraction channel over the entire length of the pressure beam. The result is a 99.5% chip free working environment.



CLEAN-UP System - **perfect chip removal even when making face or "dust" cuts**

The patented CLEAN-UP system perfectly removes chips from face or "dust" cuts.

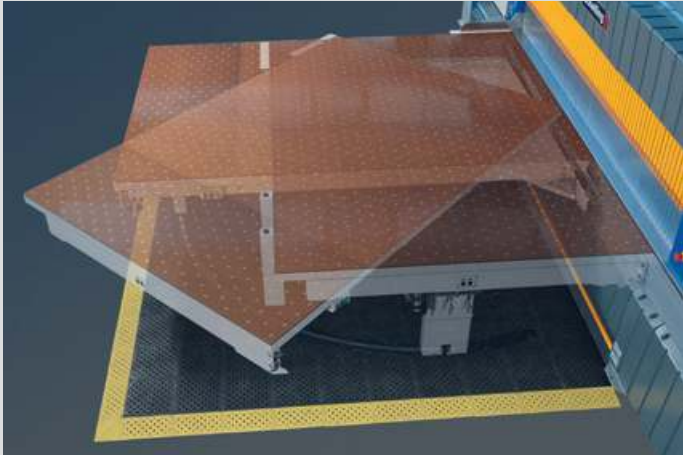
## POWER PLUS+: STRONGEST SAW CARRIAGE



Evolution saw carriage - **highest cutting output**

The unique drive concept with stationary main saw motor and locking device for saw arbor positioning allows for maximum power transfer of up to 30 kW. The automatic saw blade projection system is mounted on precision linear guides.

## HANDLING PLUS<sup>+</sup>: EFFORTLESS OPERATION



Turntable - **effortless turning of material**

The patented turntable allows for effortless material handling.

All rip cut strips are automatically turned in one motion.

This not only reduces handling time, but also reduces workload on the operator. Additionally, the material surface is protected.



Movable turntable - **effortless work at the cross aligning fence**

The side movable turntable allows for easy cutting of strips or small parts directly at the cross aligning fence.

The large table surface makes material movement simple.



Scissors clamps - **for safe operation**

Material is directly pushed onto the air tables or turntable via the Schelling scissors clamp principle. Reaching behind the saw line is not required.

# PLUS+ CONCEPT

## HANDLING PLUS+: SIMPLE OPERATION



Safety curtain - **with lift – lower – and swivel motion**

The optional lift – lower – and swivel safety curtain allows operation without interruptions due to swiveling lamellas during the production process.

## STABILITY PLUS+: MOST SOLID PRECISION SAW



Robust precision steel construction - **lifetime precision**

Heavy-duty construction with a maximum weight of up to 12 tons (24,000 lbs) assures the highest angular accuracy and provides a duty life of over 20 years which Schelling is well known for.

## SURFACE PLUS+: BEST MATERIAL SURFACE PROTECTION



Machine table with air nozzles - **best material surface protection**

The available hard chromed precision steel table with integrated air floatation provides the highest material surface protection possible along with simple material handling.



## PRECISION PLUS<sup>+</sup>: MOST STABLE PRECISION SAW



Double cross aligner - **highest angular accuracy**

The torque controlled double cross aligner before and after the saw line allows for precision alignment of any size part. Heavy material can be pushed with great force against the cross alignment fence.

Schelling also offers an optional aligner in the roller table to provide additional aligning force on long heavy strips.

## PRECISION PLUS<sup>+</sup>: LIFETIME PRECISION



Feeder carriage - **heavy duty construction including drive and secondary brake**

The heavy-duty servo drive and the optional secondary spot holding brake assures constant precision positioning of the material.



Feeder with dual motor drive - **highest angular accuracy**

Schelling's optional dual feeder drive motor system is ideal for extremely high precision jobs that require the tightest tolerances possible.



Loading with a crane and vacuum lifter - **effortless handling of heavy materials**



Loading table - **loading and cutting of material at the same time**

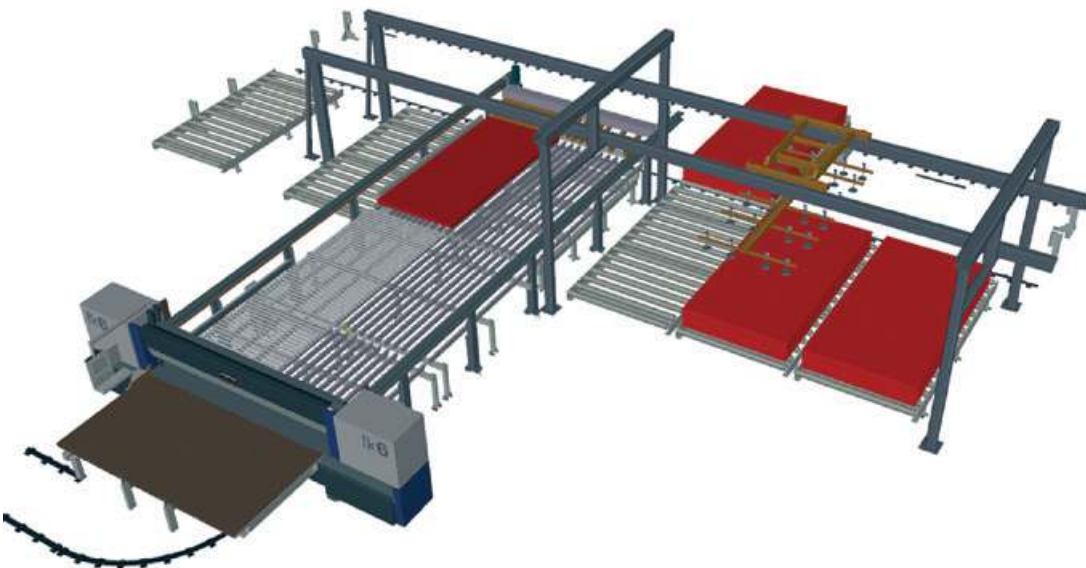
# PLUS+ CONCEPT

## MATERIAL TRANSPORT PLUS+: INDIVIDUAL SOLUTIONS

Material loading and handling are essential elements in increasing efficiency and output of a panel saw.

Schelling offers special loading, material handling and stacking solutions that are tailored to the individual need.

From planning to commissioning, Schelling is the one source supplier.





Barcode - real time label printing

The Schelling MCS software controls the integrated production process via open interfaces from the office to the panel saw.

## APPLICATIONS

Schelling is the market leader for precision sawing of all types of plastics and composites. From PetG, PMMA, PC, PE, UHMW-PE, PA, PVC to glass-filled and carbon fiber composites, a Schelling specialist will guide you to the optimum solution to meet your specific requirements.



# PLUS+ CONCEPT

EXTRA PLUS+: EASY TO OPERATE

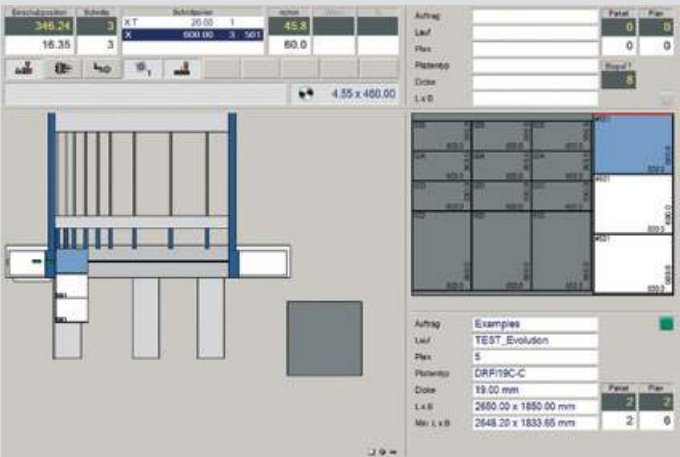
The **fk 6** control desk with its easy to operate Schelling MCS Evolution and HPO optimization software makes operation simple.

Cutting sequences are displayed in real-time moving graphics. With unbeaten diagnostics, the self-explanatory operator

guidance system prevents operational errors and increases efficiency and uptime on the machine.



MCS Evolution - “Manual Page”  
simple and quick interface



MCS Evolution - “Production Page”  
cutting patterns can be simulated and optimized at the control desk



MACHINE SPECIFICATIONS fk 6

Saw Blade	
Diameter	460 mm / 18.1 inches
Projection	135 mm / 5.3 inches
Clamp opening	135 mm / 5.3 inches
Cutting height	depends on material/blade type

Feeder speed	
Forward	up to 80 m/min / up to 262 ft/min
Backwards	80 m/min / 262 ft/min

Saw Carriage speed	
Forward	up to 80 m/min / up to 262 ft/min
Backwards	80 m/min / 262 ft/min

Power	
Saw motor	21/27 kW (28/36 HP)

MACHINE SPECIFICATIONS fk 6+

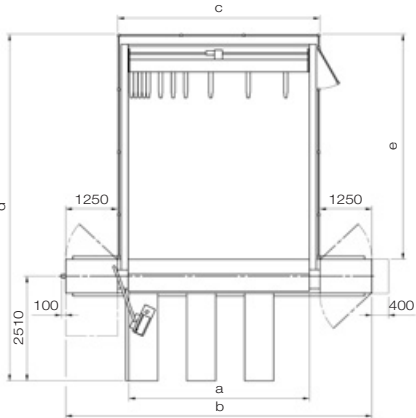
Saw Blade	
Diameter	520 mm / 20.4 inches
Projection	165 mm / 6.5 inches
Clamp opening	150 mm / 5.9 inches
Cutting height	depends on material/blade type

Feeder speed	
Forward	up to 80 m/min / up to 262 ft/min
Backwards	80 m/min / 262 ft/min

Saw Carriage speed	
Forward	up to 80 m/min / up to 262 ft/min
Backwards	80 m/min / 262 ft/min

Power	
Saw motor	30 kW (40 HP)

TECHNICAL SPECIFICATION fk 6 / fk 6+ MAN



Weight fk 6 / fk 6+ MAN		
fk 6 / fk 6+ 330	8.500 kg	18,800 lbs
fk 6 / fk 6+ 430	11.000 kg	24,300 lbs
fk 6 / fk 6+ 630	14.000 kg	30,900 lbs

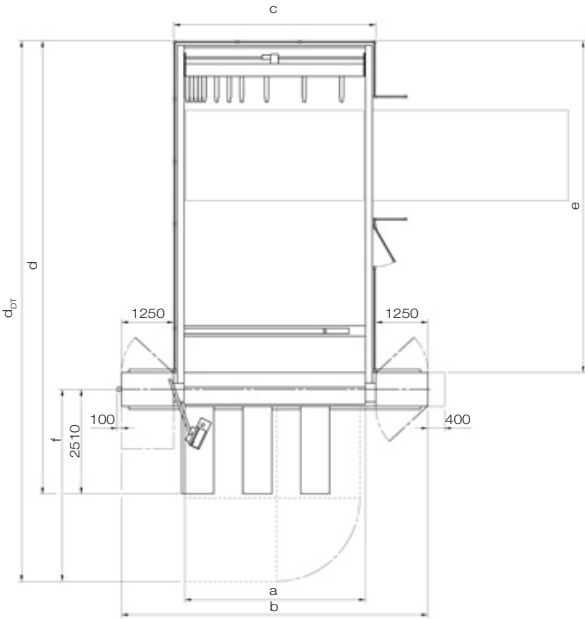
	fk 6/fk 6+ 330	fk 6/fk 6+ 430	fk 6/fk 6+ 630
a	3330	4330	6330
b	6350	7350	9350
c	3860	4860	6860
d	7120	8120	10120
e	4200	5200	7200

Dimensions - mm

	fk 6/fk 6+ 330	fk 6/fk 6+ 430	fk 6/fk 6+ 630
a	10' 11 1/8"	14' 2 1/2"	20' 9 3/16"
b	20' 10"	24' 1 3/8"	30' 8 1/8"
c	12' 7 15/16"	15' 11 5/16"	22' 6 1/16"
d	23' 4 5/16"	26' 7 11/16"	33' 2 7/16"
e	13' 9 3/8"	17' 3/4"	23' 7 7/16"

Dimensions - inch

TECHNICAL SPECIFICATION fk 6 / fk 6+ AUTO



Weight fk 6 / fk 6+ AUTO		
fk 6 / fk 6+ 330	11.000 kg	24,300 lbs
fk 6 / fk 6+ 430	13.000 kg	28,700 lbs
fk 6 / fk 6+ 630	17.000 kg	37,500 lbs

	fk 6/fk 6+ 330	fk 6/fk 6+ 430	fk 6/fk 6+ 630
a	3330	4330	6330
b	6350	7350	9350
c	3860	4860	6860
d	9900	10900	12900
d <sub>DT</sub>	11015	13015	17015
e	6890	7980	9980
f	3605	4605	6605

Dimensions - mm

	fk 6/fk 6+ 330	fk 6/fk 6+ 430	fk 6/fk 6+ 630
a	10' 11 1/8"	14' 2 1/2"	20' 9 3/16"
b	20' 10"	24' 1 3/8"	30' 8 1/8"
c	12' 7 15/16"	15' 11 5/16"	22' 6 1/16"
d	32' 5 3/4"	35' 9 1/8"	42' 3 14/16"
d <sub>DT</sub>	36' 1 11/16"	42' 8 1/8"	55' 9 14/16"
e	22' 10 13/16"	26' 2 3/16"	32' 8 15/16"
f	11 9 15/16"	15 1 5/16"	21' 8 1/16"

Dimensions - inch

