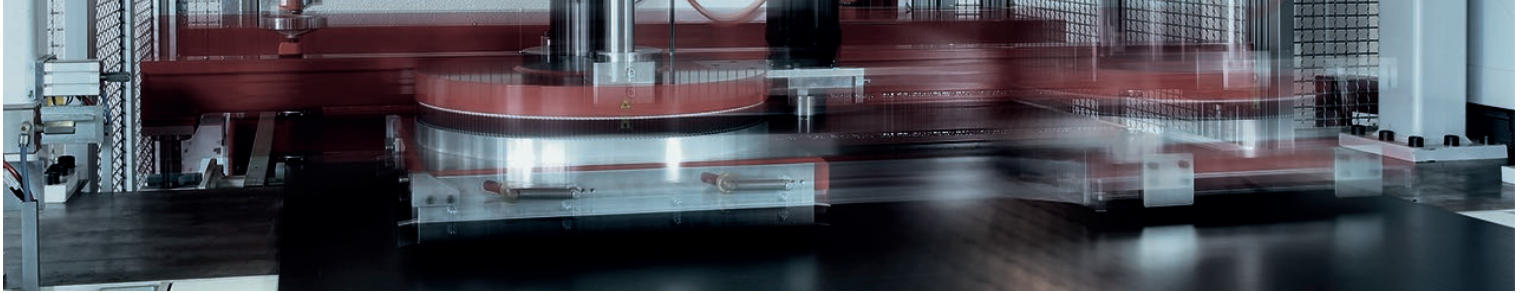


**schoen + sandt**

schoen + sandt machinery GmbH

part of

**icg** International  
Cutting  
Group



Company + Industry solutions + Product solutions + After Sales

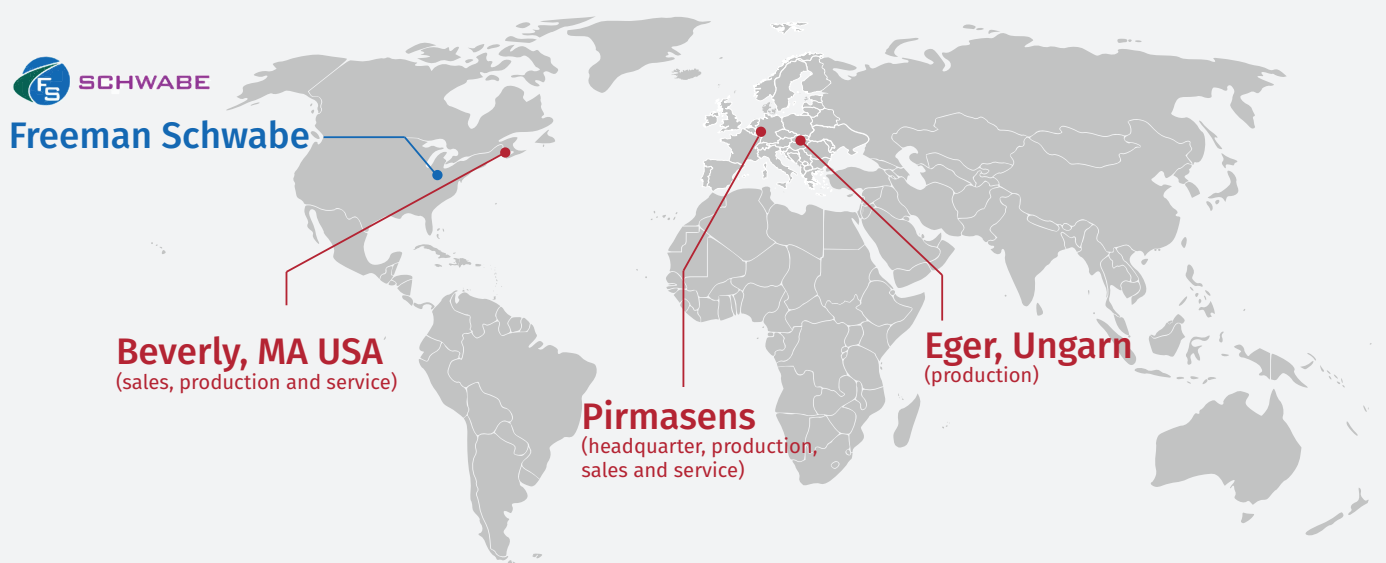
**schoen + sandt machinery GmbH**

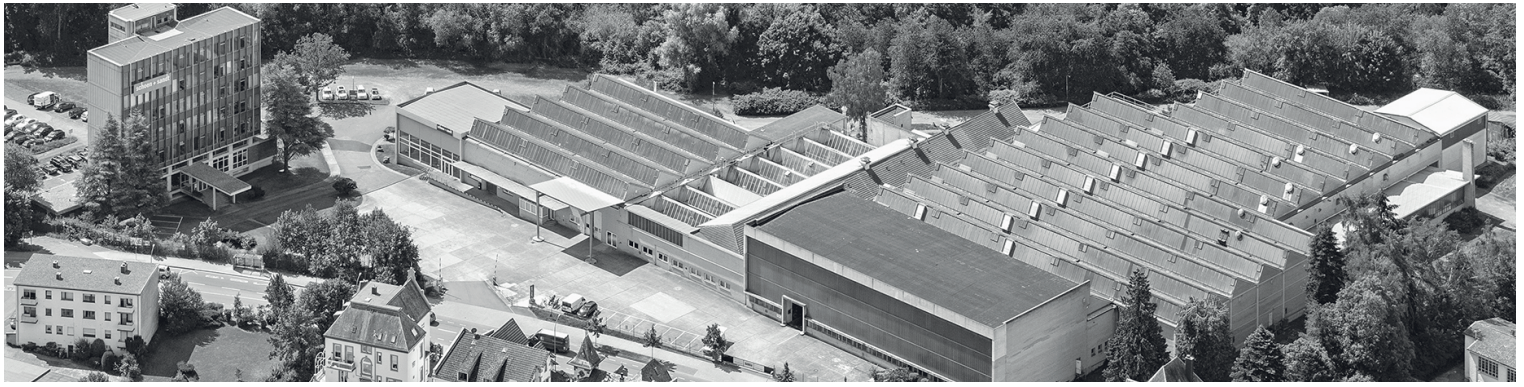
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*cutting solutions  
for your success*

# Contents

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## Company

# About Us



Schoen + Sandt machinery GmbH is a medium-sized mechanical engineering company with over 150 years of tradition and experience in the development and production of innovative machines and systems tailored to the needs of its customers.

With a dedicated, customer- and service-oriented team at three locations worldwide, we develop, design, plan and manufacture a comprehensive portfolio of die cutting machines with and without peripherals, right through to fully automated turn-key systems.

In addition to die cutting and shoemaking machines, Schoen + Sandt develops and manufactures embossing machines with complete equipment for the installation of complete screening workshops for security paper production.

The comprehensive product range is complemented by our After Sales Service, which ensures trouble-free operation of the machines and systems. In addition, we offer various upgrades that allow the opportunity to modernize existing equipment.

## International Cutting Group

### Vision + Strategy

The ICG International Cutting Group is a diversified supplier of cutting machines for non-metallic applications. The group operates worldwide with branches in Germany, USA and Hungary.

### Products

The product portfolio includes machines and fully automated equipment for die cutting of non-metallic materials.

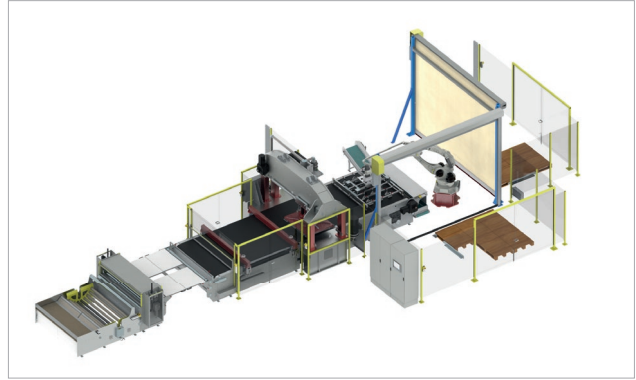
### Development of the group

07/2018 Freeman Schwabe Machinery (USA)  
12/2017 schoen + sandt machinery  
(Germany, Hungary, USA)

### Customer benefits

- Global distribution network for high-tech die cutting solutions
- Worldwide service availability through local locations

# Automotive



## Application example

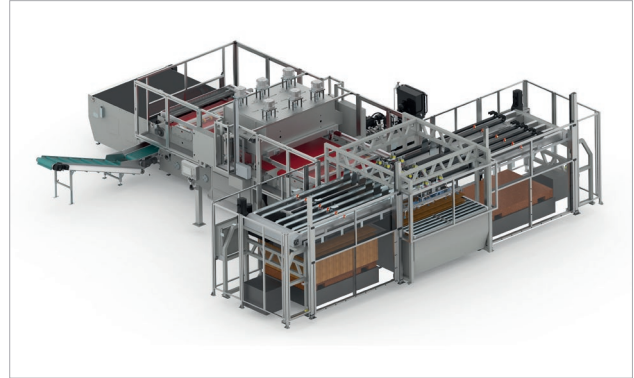
### **Production plant for the production of Automobile floor mats with robotic system for automatic destacking**

Traveling Head Die Cutting Machine with clamping beam feeder operated feed line system and automatic removal system (robot) for stacking on pallets.

#### **The plant consists of:**

- Traveling Head Die Cutting Machine with 1000 KN cutting force and cutting area of 1350 x 1100 mm (presser plate)
- Lateral tool changer
- Die Cutting machine with clamping bar feed
- Powered roller tray with additional roller buffer
- Counter bending device with pre-trigger and stock loop control
- Automatic robot removal system with needle grippers
- 2 pallet spaces with automatic roll-up doors
- Waste removal system

# Flooring



## Application example

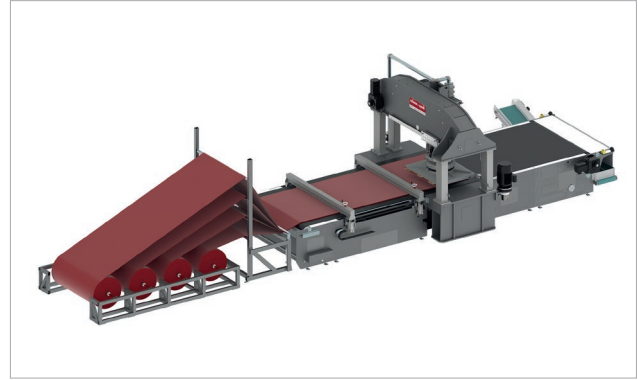
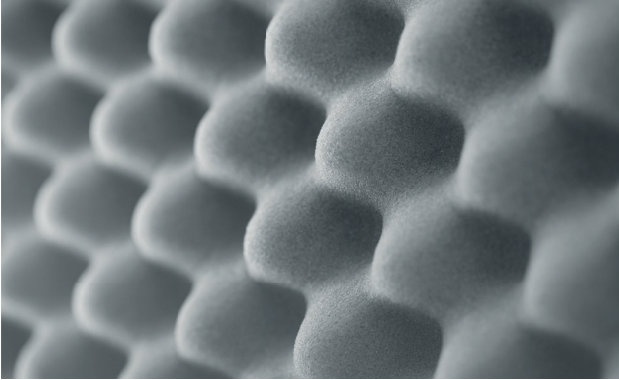
### **Production line for the production of LVT (Luxury Vinyl Tiles) floor tiles of various sizes and shapes**

Fully automatic, servo-hydraulic Die Cutting System with PCB feeder for various board sizes designed for fast pallet change in automatic mode without interrupting production.

#### **The plant consists of:**

- 2 automatic lifting gates for pallet lifting tables
- „two in one“ tandem double feeder
- Roller conveyor with automatic centering device
- Die Cutting Machine with special welded plastic belt for quick change
- Servo Hydraulically driven Cross Beam Die Cutting Machine with energy efficient and noise-reduced drive
- Waste removal with waste disposal belts
- Transfer device for further processing of the „LVT planks“

# Foam



## Application example

### **Production plant for the production of textile laminated foam for car interior trim**

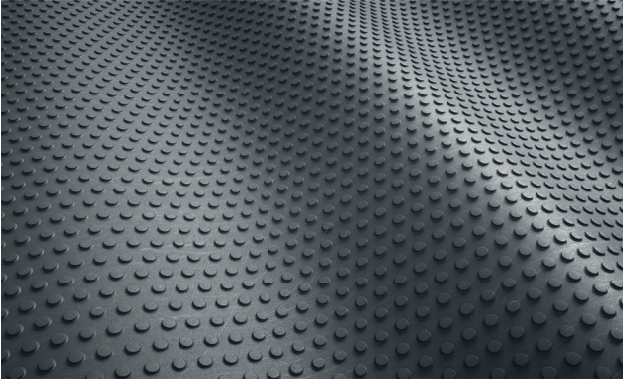
Traveling Head Die Cutting machine with servo hydraulics and clamping beam feeder for cutting up to 4 layers of material from 4 integrated roller blocks.

With integrated production monitoring system via chip card system.

#### **The plant consists of:**

- Traveling Head Cutting machine with 750 KN cutting force
- Pressure plate of 1150 x 1150 mm with rotary drive
- motor adjustment
- Die Cutting machine with clamping beam feeder and motorized roller brush
- 4-compartment roller block
- CAD - nesting system
- Smart card system

# Rubber



## Application example

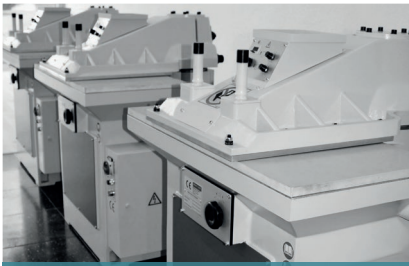
### **Production plant for the production of Rubber tiles from used tires, with camera system and robots for loading and unloading of material**

Fully automatic cross beam die cutting machine for precise cutting of vulcanized rubber tufted tiles with robots for turning parts and loading and unloading of the machine. Camera system for positioning of the cutting tool to the nub pattern with simultaneous missing part detection.

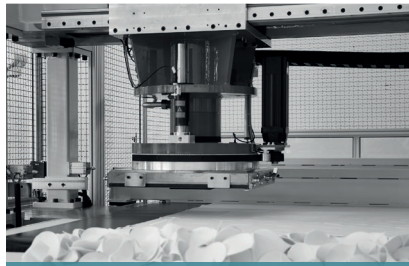
#### **The plant consists of:**

- Cross Beam Die Cutting machine with 1000 KN cutting force with pressure plate of 1600 x 1050 mm
- Automatic board turning and laying device with robot
- Accurate measurement by means of camera system
- Precise cutting
- Loading system with robot
- Waste delivery system with conveyor belts

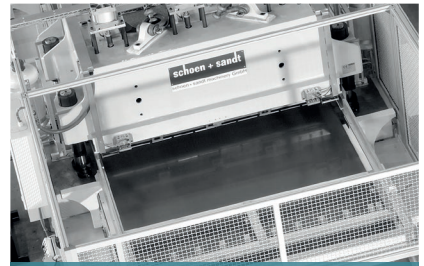
# Cutting machines



Cutting machines ecoLine



Cutting machines proLine



Cutting machines customLine

**Hydraulic swing arm cutting machine:**

1028 C Page 9

**Upstroke cutting machines:**

proCUT 5300 Page 10  
5230 Page 10

**Crosshead cutting machine:**

2071 Page 12

**Crosshead cutting machine:**

7072C Page 9

**Beam cutting machine:**

proCUT 6005 BA Page 11

**Downstroke cutting machines:**

2070 Page 13  
6140 Page 13

**Crosshead cutting machine:**

2062 Page 11

**Large area cutting machine:**

5050 Page 14

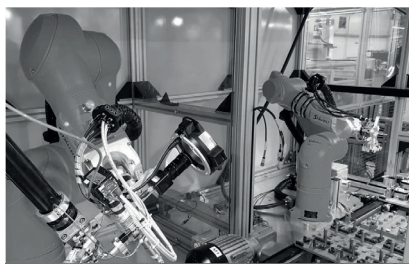
**Roller cutting machine:**

7320 Page 12

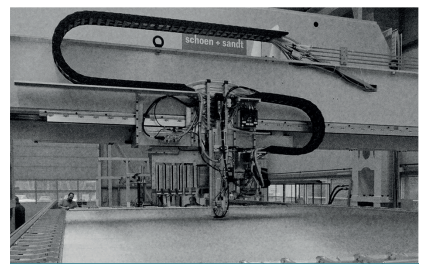
# Cutting machines periphery, automation & equipment for mold workshop



Cutting machines periphery



Automation



Equipment for mold workshop

Page 15

Page 16

Page 17



## ecoLINE Hydraulic swing arm cutting machine

# 1028C

<b>Type</b>	1028C
<b>Cutting force</b>	200kN
<b>Table width</b>	1000 mm
<b>Table depth</b>	500 mm
<b>Swing arm</b>	550 x 550 mm
<b>Stroke</b>	8 - 80 mm
<b>Motor drive</b>	2,2 kW / 400 V / 50 Hz
<b>Oil requirement</b>	ca. 60 Ltr.
<b>Dimensions</b>	1000 x 95 mm
<b>Weight</b>	1140 kg

### Your Benefits

- Semi automatic cutting device
- Easy operation (all operation elements at the front of swing arm)
- Two-hand relais



### Technical specification

- Easy cutting device adjustment
- Infinitely variable return stroke
- User friendly arrangement of all operating elements at the front of the swing arm
- Electrical Two-hand relais
- With plastic cutting board
- Easy moveable swing-arm

## ecoLINE Crosshead cutting machine

# 7072C

<b>Type</b>	7072C
<b>Cutting force</b>	200kN
<b>Dimensions</b>	2225 x 2100 x 1450 mm
<b>Table surface</b>	1600 x 500 mm
<b>Passage width</b>	1700 mm
<b>Pressure plate</b>	500 x 500 mm
<b>Cutting plate size</b>	1600 x 500 mm
<b>Cutting stroke</b>	15 - 50 mm
<b>Weight</b>	1600 kg

Designed in a steel welded construction. The punching head movement is motorized. The hydraulic unit with pump and motor is under the machine frame.



The operation unit for the movement of the punching head and the triggering of the machine is at the punching head.

## proLINE Upstroke cutting machine

# proCUT 5300

Table size	Cutting force
1200 mm x 800 mm	630 kN
1600 mm x 800 mm	800 kN
1700 mm x 1050 mm	1000 kN

### Accessories optional

- Die holder stationary or adjustable
- Die clamp manual or pneumatic
- Extended Daylight
- Automatic cutting board oscillation
- Workplace light

### Feed devices optional

Roller feed with operation via foot switch or position-controlled with servo drive



## proLINE Upstroke cutting machine

# 5230

Table size	Cutting force
500 mm x 400 mm	1250 kN or 1600 kN
800 mm x 650 mm	1250 kN or 1600 kN
1000 mm x 700 mm	1250 kN or 1600 kN

### Accessories options

- Manual or automatic sliding table
- Die holder stationary
- Plastic stamping plate or steel stamping plate
- Overrun supports manually / automatically adjustable
- Embossing time setting with adjustable embossing speed
- Hot plate, heated tools

### Your advantages

- Extremely sturdy machine-stand construction in panel construction with high static and dynamic load capacity



- Fast stroke speeds
- High cutting forces
- Suitable for hot saws

## proLINE Beam cutting machine

# proCUT 6005 BA

Table size	Cutting force
1600 mm x 850 mm	800 kN
2060 mm x 1050 mm	1250 kN
2060 mm x 1250 mm	1250 kN
2060 mm x 1250 mm	1600 kN

### Accessories optional

- Die holder stationary or adjustable
- Die clamp stationary or adjustable
- Automatic cutting board oscillation
- Steel die mounting Plate
- Workplace light

### Feed devices optional

Roller feed with operation via foot switch or position-controlled with servo drive



## proLINE Crosshead cutting machine

# 2062

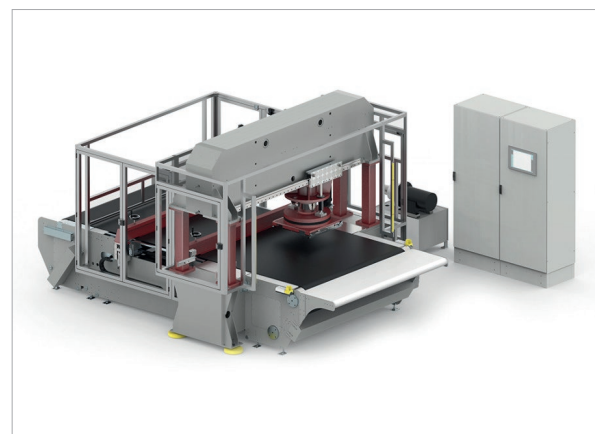
Table size	2750 mm x 750 mm
Dimensions of cutting platen	650 mm x 640 mm
Cutting force	300 kN, 500 kN

### Standard equipment

- cutting die holder
- Automatic cutting die height adjustment
- Mechanical low point stops
- S7 control with touch panel

### Optional Accessories

- Rotary drive
- Cutting board shifting device



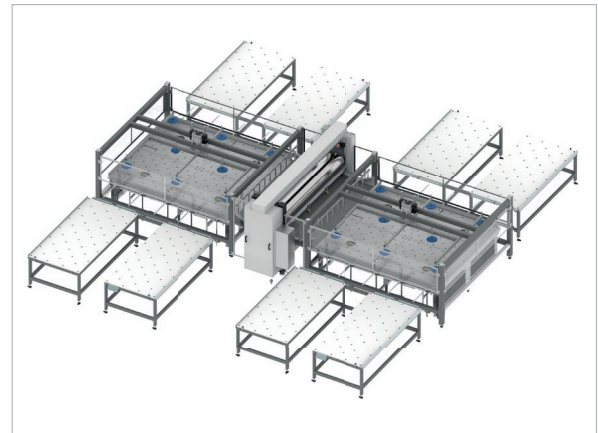
## proLINE Roller cutting machine

# 7320

<b>Roller width</b>	1400 mm, 2600 mm
<b>Table dimension</b>	1300 x 3000 mm 2500 x 3000 mm
<b>Transport tables</b>	2 or 4
<b>Prep tables</b>	2, 4, 6, 8 or 10
<b>Cutting force</b>	1250 kN or 1600 kN

### Standard equipment

- Roller cutting machine
- Transport tables with wheels
- Lifting stations
- Rigid steel construction preparation tables
- Cutting cover plates
- Pneumatic swivel arms



### Optional accessories

- Cutting die shelf
- Industry 4.0 connection

## customLINE Crosshead cutting machine

# 2071

<b>Table width [mm]</b>	2400, 2600, 2800, 3200
<b>Table depth [mm]</b>	700, 900, 1100, 3200
<b>Dimensions of cutting platen</b>	550 mm x 550 mm 1200 mm x 1000 mm
<b>Cutting force [kN]</b>	300, 500, 750, 1000

### Standard equipment

- Cutting die holder

### Optional accessories

- Motorized low point stops
- Linear motion drive
- Pneumatic product ejection
- Automatic cutting board shifting device
- Special accessories for various applications



### Optional feed devices

- Automatic sliding table
- roll feeder
- Clamping beam feeder
- Cutting belt system
- Cardboard cutting belt system
- Suction belt conveyor

## customLINE Downstroke cutting machine

# 2070

<b>Dimension of pressure plate</b>	550 mm x 550 mm
<b>Cutting force</b>	1500 mm x 1400 mm
	300 kN, 500 kN, 750 kN und 1000 kN

### Standard equipment

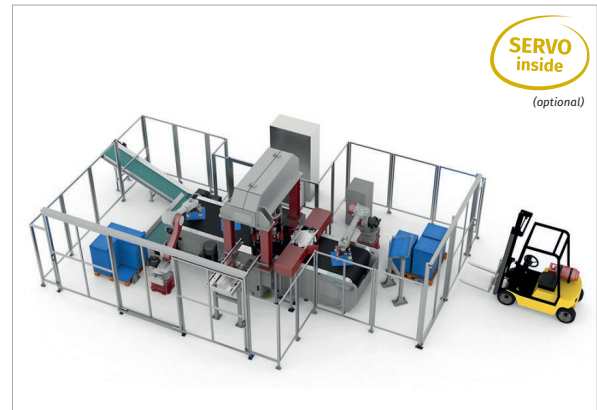
- die holder (incl.)
- Open side panel (incl.)

### Accessories optional

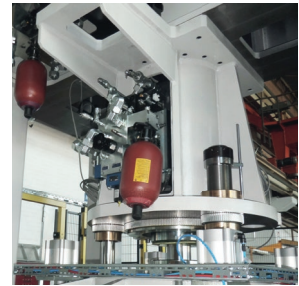
- Automatic low point stops
- Automatic cutting board shifting device

### Feed devices optional

- Automatic sliding table
- roll feed
- Clamping bar feed
- Cutting belt system
- Cardboard or fabric cutting belt system
- Vacuum Belt Feed



**NEW**  
Closed servo hydraulics system PDSC (optional)



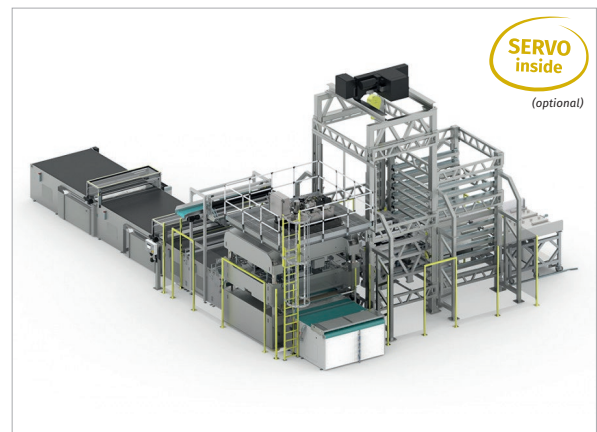
## customLINE Downstroke cutting machine

# 6140

<b>Table size</b>	2400 mm x 1600 mm
<b>Cutting force</b>	1500 kN - 4000 kN

### Advantages

- Built with 4-column construction with lowering beams
- The lowering beam is guided with maintenance-free sliding elements made of copper alloys with solid lubricant
- The hydraulic cylinders act directly on the lowering beam, ensuring a uniform distribution of force
- 4 mechanical low point stops with automatic central adjustment limits the lowest level of the beam during the cutting process and thus enables the accurate setup of the die in 0.1 mm increments



## customLINE Large area cutting machine

# 5050

<b>Table width [mm]</b>	1800, 2200, 2500
<b>Table depth [mm]</b>	1050, 1250, 1600, 2100
<b>Cutting force [kN]</b>	1250, 1600, 2000, 2400

### Advantages

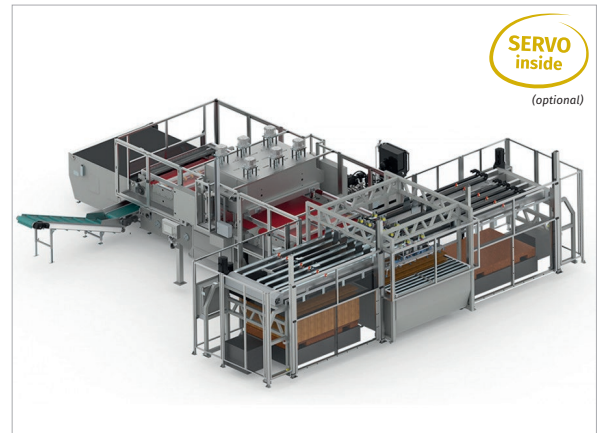
Various table dimensions are available

### Accessories optional

- Die holder stationary or adjustable
- Die clamping device, manual or pneumatic
- Increased daylight
- Automatic cutting plate displacement
- changing rails / Die changing rails
- Steel cutting plate

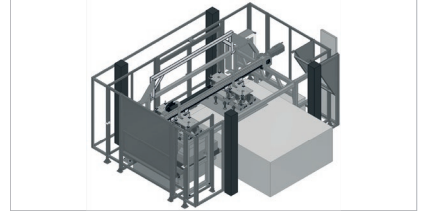
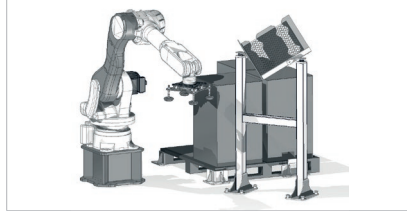
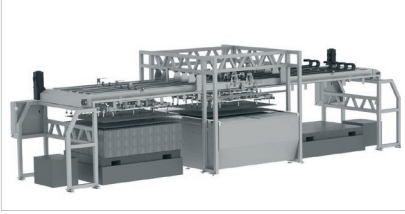
### Feed devices optional

- Automatic sliding table
- Roll feeder
- Clamping beam feeder
- Cutting belt system
- Cardboard cutting belt system
- Suction belt conveyor

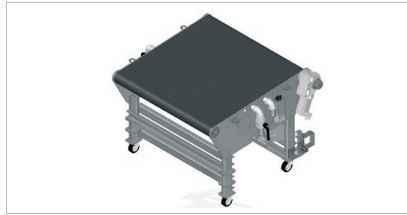
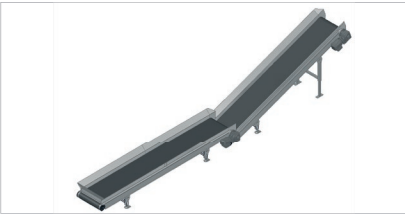


# Cutting machines periphery

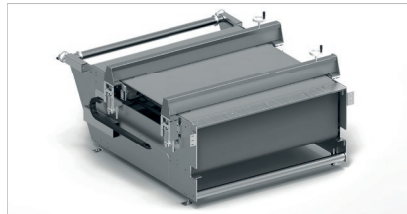
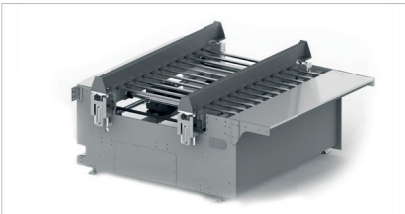
## Attachment and removal device



## Material handling



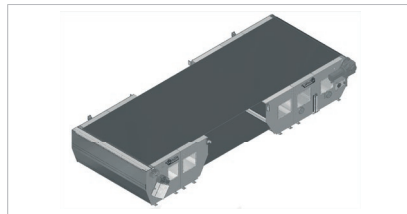
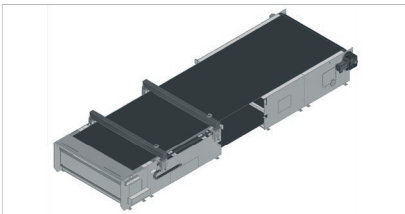
## Clamping beam feeders



## Roll feeders



## Cutting belt systems

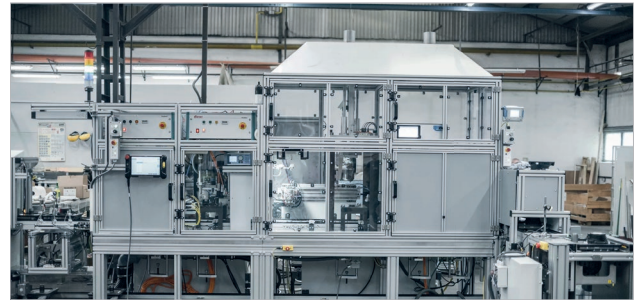
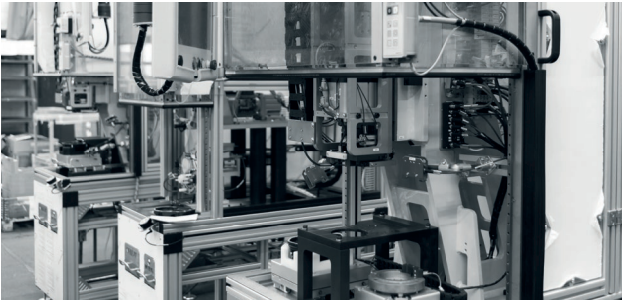


## Sliding table



Additional Periphery  
**on request!**

# Automation



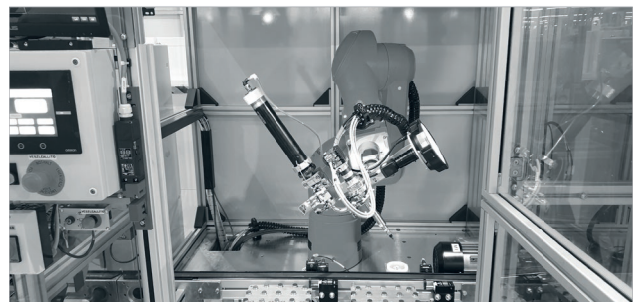
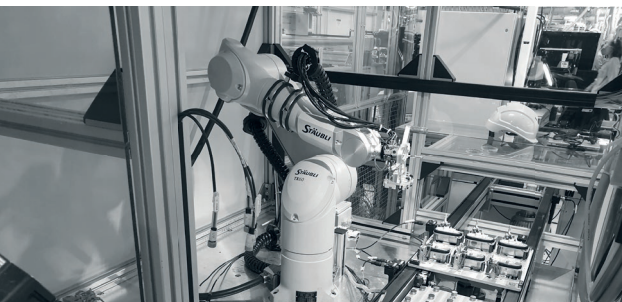
## From construction to finished solution

In the first step, experienced engineers from schoen+sandt Hungary Kft. develop the automation concept based on customer requirements. Coordinated cooperation between the various parties takes place during the design. This is also the case with manufacturing, in order to optimally link the experience in the implementation and the innovations of the developers. As a result of this collaboration, an idea creates a working solution.

## Strengths & Advantages

- a team of 10 engineers working exclusively on the development and construction of machines. (5 electrical engineers, 5 mechanical engineers)
- long-standing, experienced professionals
- 98% of component production is covered by our own machine shop
- prompt attention and service
- high internal and external system standards according to ISO 9001:14001

# Robotics

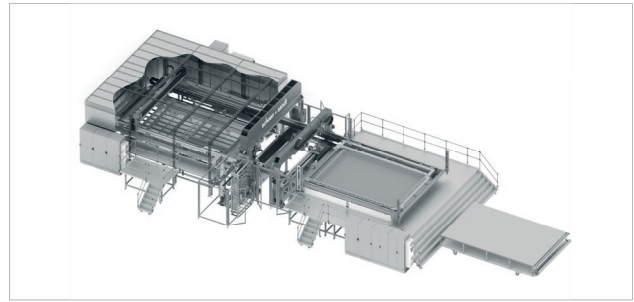
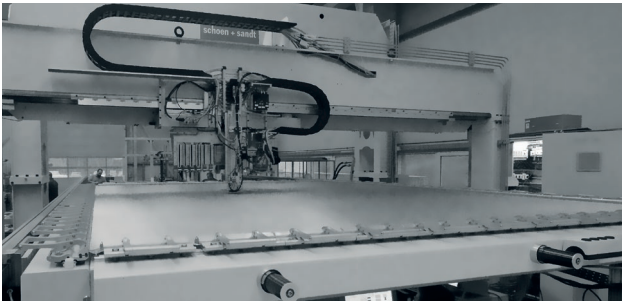


## Your advantages when using a robot

- in addition to the benefits of automation, the position of the robot arm can be adjusted quickly and easily in all directions
- similar to the human hand, we can position the tool in any direction
- a robot does not lose time due to illness and its upkeep and maintenance can be planned in advance
- cycle times can be calculated and do not depend on the performance and abilities of the person
- certain input parameters are always associated with a specific and predictable output quality
- a robot does exactly what we have programmed and never makes a mistake after a „smart“ learning process



# Equipment for mold workshop



## Machines and installations for the production of screen covers for use in security paper making for the production of watermark paper.

We offer you the complete equipment for the screening workshop from a single source. At the heart of this is a patented embossing unit with a turret, under which a clamping frame driven by linear direct drives moves with the highest positioning accuracy.

In conjunction with the likewise patented E-type welding robot and a laser cutting machine, this

is the highest-tech equipment available for the production of screens used in security paper-making machines for the production of watermark paper.

Thus, you can use **security paper** for:

- banknotes
- ID documents
- Official documents
- and more ...

that meet the highest standards produced!

# Hotline



**Our service team will help you quickly and competently.**

- Troubleshoot by phone
- Common diagnosis and troubleshooting
- Rapid introduction of necessary measures:
  - Spare parts order
  - Service technicians use

## Remote-Service

Does your system have a VPN connection?  
This minimizes unplanned downtime!

- Fast support through direct access to your system
- Targeted fault diagnosis
- Control-side errors / operating errors can be corrected directly
- by pre-diagnosis targeted service technician use

# Maintenance



Whether regular maintenance, inspection or accident prevention. Take advantage of our extensive offer to keep your machine or plant in a top condition.

- Annual safety and accident prevention inspections
- Inspection and maintenance of mechanic, hydraulic and pneumatic components

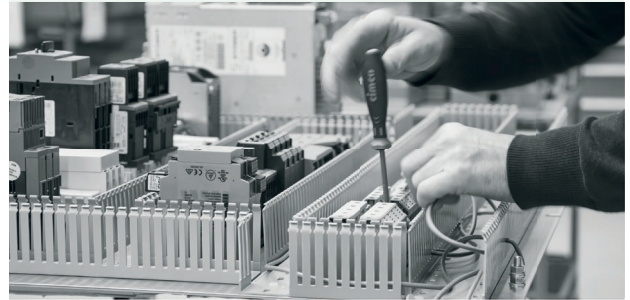
## Preventive maintenance

Benefit from the execution of a maintenance contract with our annual maintenance concept and discounted travel packages.

For an annual package, we take care of everything related to the maintenance of your schoen + sandt system.

After Sales

## Upgrades



Bring your schoen + sandt system up to the state of the art.  
We offer individual upgrades for controls, hydraulics, safety and automation.

- Retrofitting to the state of the art
- Control upgrades / replacement of discontinued components
- Performance / output increases
- Increased safety / protection of your employees

After Sales

## Spare parts



Our After Sales Service will provide you with original manufacturers spare parts - or their successors - for hydraulics, pneumatics, electrical and mechanical.

- Spare parts also available for older machines
- Common spare parts from stock
- Quick identification
- Short reaction times

# Retrofit



Vorher

As an alternative to a new machine, schoen + sandt offers also overhauls of your machines or systems in different ranges.

These includes updates to the most modern components and safety standards.



Nachher

**Ask our experienced technicians for an assessment.**

- schoen + sandt checks your machine / system and gives recommendations regarding cost & profitability of the overhaul
- mutual definition of the retrofit range
- smaller modifications can be done on site bigger retrofits at the manufacturer's plant

## Services

# Financing services



### Partnership with Würth Leasing

You plan to purchase a new cutting machine or cutting line while remaining financially flexible and do not bind any additional capital?

This is easily possible with our financing partner Würth Leasing GmbH & Co. KG.

For further information please contact your usual sales contact person.

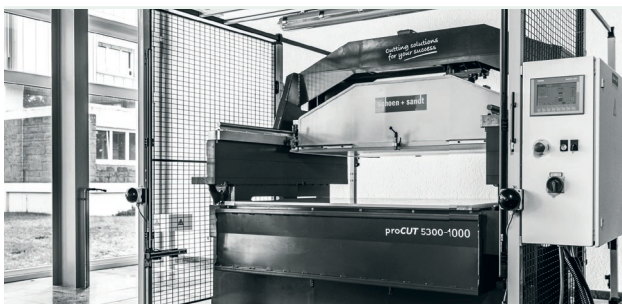


### Würth Leasing GmbH & Co. KG – Competence since 1993

- medium-sized leasing company independent of banks and manufacturers
- regional offices at several locations with over 90 employees
- object- and customer-specific solutions

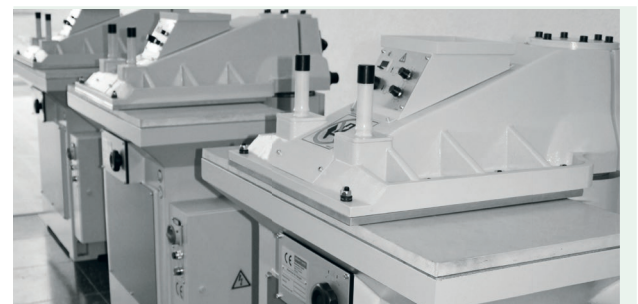
## Services

# Contract production



### Interim production on stock machines in Pirmasens.

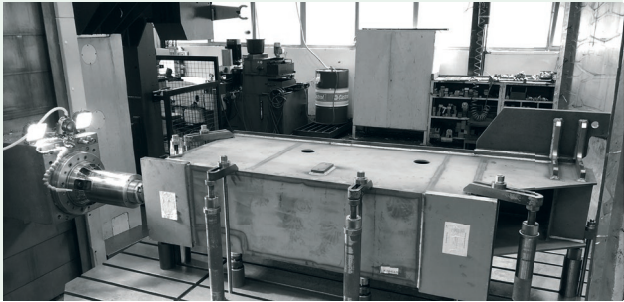
Do you have insufficient cutting capacity due to increased orders, or have production demands needing to be completed while waiting for your new schoen + sandt - cutting machine?



We always have different models of cutting machines in stock, and under certain conditions can offer an interim contract production option for your consideration.

Please contact your Sales Representative and we will check the possibility of supporting your production with one of the existing machines.

# Contract work



Take advantage of the numerous possibilities of contract work in our production plant.

## Machining

- Parts up to 10 tons can be machined on five-axis CNC machining centers
- each machine operator is also a CNC programmer, which offers extreme flexibility for small series production
- complex parts are processed with CNC programs created in a CAD/CAM system
- Development and production of hydraulic cylinders with all necessary grinding, polishing and honing technologies (these cylinders are also used in our cutting machines)

## Welding

- optimized use of flame cutting equipment
- Welding of steel structures up to 10 tons (MIG/MAG method)
- certified welders with up to 20 years of experience
- Quality assurance by welding technology specialist engineers

## Assembly

- up to 40 years of experience in the assembly of mechanical, hydraulic and pneumatic components
- Core competence in the assembly of complete cutting machines and cutting lines
- Control cabinet construction according to own planning

## Contract production

Interim production on stock machines in Eger.

Do you have insufficient cutting capacity due to increased orders, or have production demands needing to be completed while waiting for your new schoen + sandt - cutting machine?

We always have different models of cutting machines in stock, and under certain conditions can offer an interim contract production option for your consideration.


Please contact your Sales Representative and we will check the possibility of supporting your production with one of the existing machines.

## Other contract work

- Single-part and small-batch production according to customer drawings or drawings made to customer specifications in our design department
- Heat treatment for stress relief, descaling with sandblasting
- Painting in our own painting unit
- Contract assembly in mechanical and electrical areas



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