

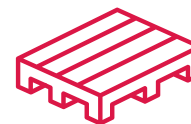
Product Catalog



**LONGITUDINAL CUTTING
TECHNOLOGY**



**CROSS CUTTING
TECHNOLOGY**



**PALLET PRODUCTION
TECHNOLOGY**



MECHANIZATION

Czech tradition with Swiss roots

Since 1995



STÖRI MANTEL

Traditional Quality and Innovation in Woodworking Machinery

Since 1995, Störi Mantel from Rožnov pod Radhoštěm has been **developing and manufacturing top-quality woodworking machines.**

We specialize primarily in:

- / Single-blade rip saws
- / Automatic, optimizing, and under the table crosscut saws
- / Pallet production technology and other equipment

Company headquarters and production center, Rožnov p. R., CZ



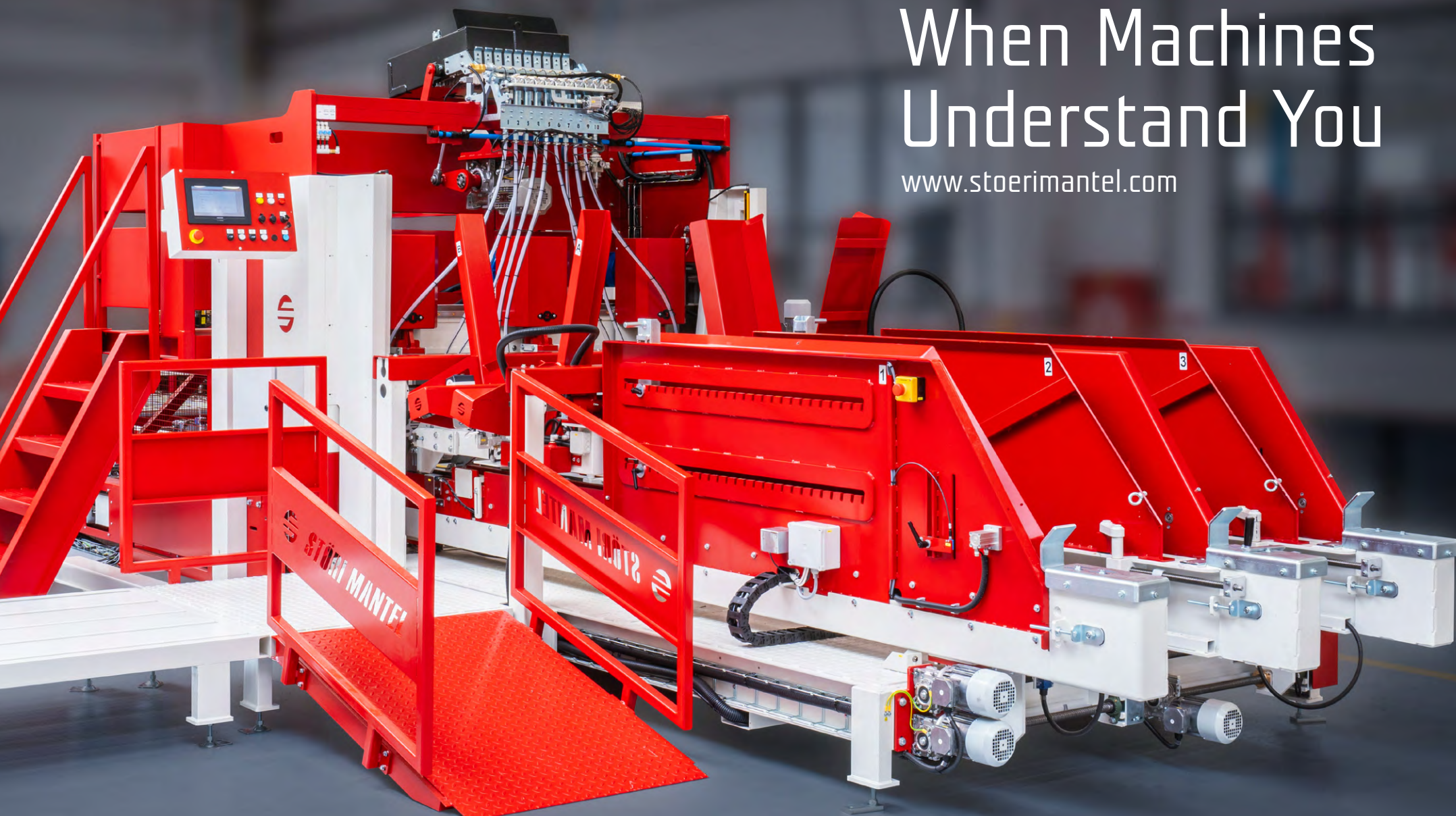
Thanks to our in-house development, we can **customize our machines to your needs.** The Störi Mantel offering includes not only sales, but also **comprehensive service and personalized consulting**, tailored to the specific requirements of each customer.

With extensive experience and a flexible approach, we design **efficient, customized solutions** focused on **increasing productivity and reducing costs.**

We'll find the right solution for you too:

www.stoerimantel.com





When Machines Understand You

www.stoerimantel.com

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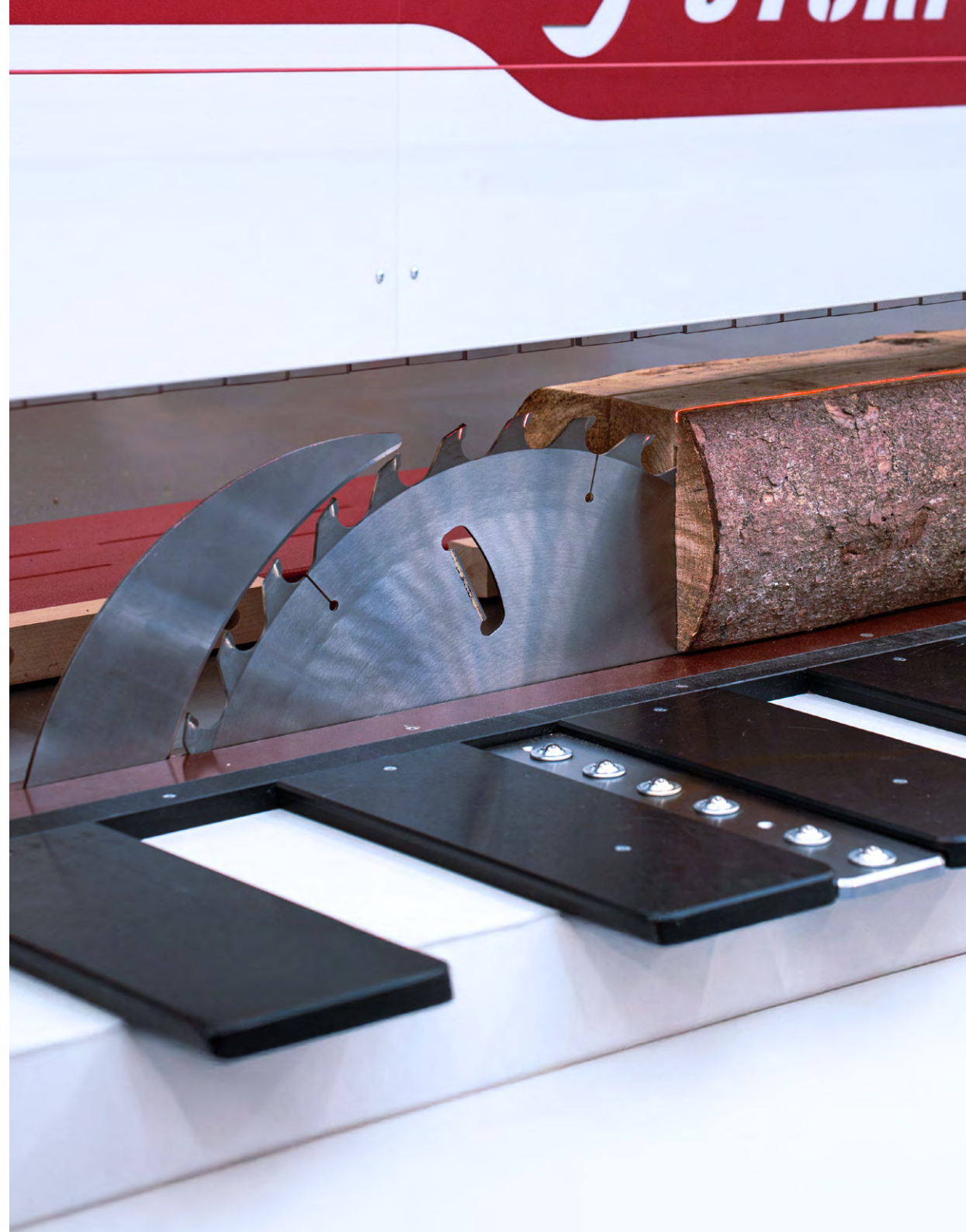


Longitudinal
Cutting Technology

FLS

Powerful and Precise Longitudinal Cutting

The single-blade rip saws *FLS* offer **efficient and precise longitudinal wood cutting**. They excel in ripping, edging, and sizing of materials, which is especially appreciated by manufacturers of edge-glued panels, solid wood furniture, stairs, or processors of construction timber (custom production). This technology **optimizes production processes and minimizes material waste**.





Key Advantages

- + Material savings and waste reduction
- + Increased yield and productivity
- + High cutting quality and efficient wood utilization
- + Easy operation and safe use

Applications

Small and Medium Operations

- / Sawmills
- / Furniture manufacturing
- / Window production
- / Staircase manufacturing
- / Carpentry workshops

Wide Range of Materials

- / Prisms
- / Boards
- / Beams
- / Slats
- / Large-format materials
- / Plastics
- / ALU
- / Insulation panels
- / Cement-fiber boards

How Does FLS Technology Work?

- 1] The material is placed on the saw's worktable.
- 2] Using a rear automatic stop, the material is positioned at the cutting point, where the saw blade path is indicated by a laser beam. The material's values are displayed on the control panel.
- 3] The material on the table is cut longitudinally by a saw blade mounted on a movable unit under the table.
- 4] After cutting, the saw blade returns below the table surface to its initial position.
- 5] The rear automatic stop repositions the material for the next cut.



FLS One Blade Ripsaw Model Series

FLS ECO

Economical solution for efficient longitudinal material cutting

The *FLS ECO* saw series offers an efficient and affordable solution for small and medium-sized operations working with wood and non-wood materials. These one blade ripsaws deliver high performance and significantly contribute to increased material yield.

FLS ARROW I.

Robust solution with extended features and a wide range of accessories

The *FLS Arrow* model represents the top line of Störi Mantel oneblade ripsaws, combining high cutting performance with a wide variety of equipment and automation options. This powerful saw is primarily designed for medium to large-scale operations.

STÖRI MANTEL

FLS Technology Capabilities

The longitudinal cutting technology enables not only longitudinal, cross, and angled cuts, but also miter cuts, bundle cutting, ripping of large-format materials, cement-bonded particle boards, and cutting of sandwich panels with steel reinforcement, etc.



One Blade Ripsaw

FLS ECO 120/160

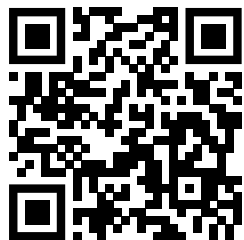
Efficient Solution for Small Operations

The basic model of the *FLS* technology is the *FLS ECO 120* rip saw. This saw is primarily suited for **small and medium-sized operations** focused on various types of wood and non-wood material processing. The *FLS ECO 120* one blade saw **significantly increases work efficiency and material yield** (by 10–15%) and can process prisms, boards, beams, and large-format material.

The input material can be edged, ripped, sized, and used to produce blanks and slats.

Detailed information about
FLS ECO 120/160
can be found on our website

www.stoerimantel.com



BASIC TECHNICAL DATA	FLS ECO 120/160
Motor	11 kW (optionally 15 kW), 2,900 rpm
Cutting height	0–120 mm (optional up to 160 mm)
Saw blade (optional)	Ø 450 mm / Ø 500 mm / Ø 550 mm
Saw blade bore	Ø 80 mm
Saw feed rate (adjustable)	0–60 m/min
Cutting length (standard)	2.2–7.2 m
Cutting width (standard)	450 mm–1,600 mm
Working height	850 ± 50 mm
Overall dimensions	/ Length = cutting length + 2,000 mm / Width = cutting width + 800 mm / Height = 1,992 mm
Dust extraction	2 × Ø 160 mm
Required air speed	25–30 m/s
Compressed air connection	0.8 MPa
Power supply	3N ~ / 400 V / 50 Hz

Due to the continuous development of our machines, the listed specifications are not binding. For up-to-date parameters, please visit our website or contact our sales representatives.





One Blade Ripsaw

FLS ECO 170

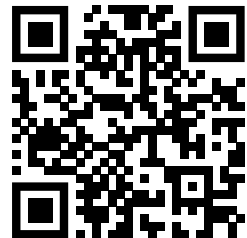
Higher Performance and Flexibility

The *FLS ECO 170* significantly **increases work efficiency and material yield** (by 10–15%). Based on the *FLS ECO 120*, this model stands out with its extended features such as increased cutting height, adjustable rear stop positioning, electric height adjustment of the blade, and a 2-meter foot pedal with smooth control.

This ripsaw is primarily used in **small and medium-sized operations** focused on various types of wood and non-wood materials. The *FLS ECO 170* can process prisms, boards, beams, and large-format materials. Input material can be **edged, ripped, sized, and used to produce blanks and slats**.

Detailed information
about FLS ECO 170
can be found on our website

www.stoerimantel.com



BASIC TECHNICAL DATA	FLS ECO 170
Motor	11 kW (optionally 15 kW), 2,900 rpm
Cutting height	0–170 mm
Saw blade (optional)	Ø 450 mm / Ø 500 mm / Ø 550 mm
Blade bore	Ø 80 mm
Saw feed rate (adjustable)	0–60 m/min
Standard cutting length	2.2–7.2 m
Standard cutting width	450 mm–1,600 mm
Working height	850 ± 50 mm
External dimensions	/ Length = cutting length + 2,000 mm / Width = cutting width + 800 mm / Height = 1,992 mm
Dust extraction	2 × Ø 160 mm
Required air speed	25–30 m/s
Compressed air connection	0.8 MPa
Power supply	3N ~ / 400 V / 50 Hz

Due to the continuous development of our machines, the listed specifications are not binding. For the latest parameters, please visit our website or contact our sales representatives.





Standard and Optional Equipment – FLS ECO

	STANDARD EQUIPMENT	
	FLS ECO 120/160	FLS ECO 170
Saw blade	Yes	
Top pressure system	3 m	
Safety guards	Yes	
Control panel	7" touchscreen + function buttons	
Rear automatic stop	Yes	
Manual wooden stop	Yes	
Foot pedal	One-leg pedal, 2 m cable	2 m pedal with smooth control
Guides and cutting kerf	Wooden	
Joystick for rear stop	Yes	
Cutting height adjustment	Manual	Electronic (7 positions)
Rear stop mount	Trapezoidal screw	Ball screw
Multi-language interface	Yes	
Laser for cut marking	Yes	

	OPTIONAL EQUIPMENT	
	FLS ECO 120/160	FLS ECO 170
Software upgrade	"Chain+Optim"	
Cross table	Yes	
More powerful engine	Yes	
Suspended extraction tunnel	Yes	
Insertable metal plates	Yes	
Plastic guides and cutting kerf	Yes	
Cutting pressure balancer	No	Yes
Start pedal (alternative)	2 m or full machine length	Full machine length
Panel/cabinet heating	Yes	

Due to the continuous development of our machines, the listed data is not binding. For up-to-date specifications, please visit our website or contact our sales representatives.



FLS Production and Application Examples

LONGITUDINAL CUTTING TECHNOLOGY





FLS One Blade Ripsaw

FLS ARROW I. 180/210

Top Performance and Broad Configuration Options

The *FLS ARROW I.* technology is the highest model in Störi Mantel's line of one blade ripsaws. Its **high cutting performance** and extremely wide range of equipment and mechanization options place it among the company's flagship machines.

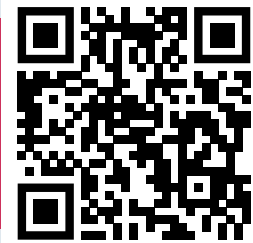
The *FLS ARROW I.* is primarily used in **medium-sized operations** focused on various wood and non-wood processing tasks. It can handle **prisms, boards, beams, and large-format materials**. Input materials can be edged, ripped, sized, and used to produce blanks and slats.

BASIC TECHNICAL DATA	FLS ARROW I. 180	FLS ARROW I. 210
Motor	11 kW (optional 15 kW, 18.5 kW), 2,900 rpm	11 kW (optional 15 kW, 18.5 kW, 22 kW), 2,900 rpm
Cutting height	0–180 mm	0–210 mm
Saw blade (optional)	Ø 600 mm / Ø 550 mm / Ø 500 mm	Ø 650 mm / Ø 600 mm / Ø 550 mm
Blade bore	Ø 80 mm	
Saw feed rate (adjustable)	0–80 m/min	
Cutting length	2.2–16.2 m	
Cutting width	450 mm (option up to 3,000 mm)	
Working height	900 ± 50 mm	
External dimensions	/ Length = cutting length + 2,250 mm / Width = cutting width + 865 mm / Height = 2,100 mm	
Dust extraction	2 × Ø 160 mm	
Required air speed	25–30 m/s	
Compressed air connection	0.8 MPa	
Power supply	3N ~ / 400 V / 50 Hz	

Due to the continuous development of our machines, the listed data is not binding. For up-to-date specifications, please visit our website or contact our sales representatives.



Detailed information
about FLS ARROW I. 180/210
can be found on our website
www.stoerimantel.com





Standard and Optional Equipment – FLS ARROW I. 180/210

STANDARD EQUIPMENT	FLS ARROW I. 180/210
Saw blade	Yes
Top pressure system	3 m
Safety guards	Yes
Control panel	10" touchscreen + function buttons
Rear movable stop	Yes
Manual wooden stop	Yes
Foot pedal	Pedal along the full machine length
Guides and cutting kerf	Wooden
Joystick for rear stop	Yes
Cutting height adjustment	Electronic (7 positions)
Rear stop mount	Ball screw
Software upgrade	"Chain+Optim"
Multi-language interface	Yes
Laser for cut marking	Yes

OPTIONAL EQUIPMENT	FLS ARROW I. 180/210
Cross table	Yes
More powerful motor	Yes
Suspended extraction tunnel	Yes
Insertable metal plates	Yes
Plastic guides and cutting kerf	Yes
Cutting pressure balancer	Yes
Panel and cabinet heating	Yes
Second laser for cut marking	Yes

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FLS + UKS Combination

The combination of **longitudinal** and **cross cutting** significantly increases material yield and can greatly **reduce manual handling** when transferring material from longitudinal to cross cutting and vice versa. The *UKS* crosscut saw **can be connected** to the *FLS* saw from the left or right side (from the operator's perspective).



Application Examples





Cross Cutting
Technology

KP/UKS

Automatic, Optimizing and Under-Table Crosscut Saws

Störi Mantel crosscut saws are the ideal solution for **small and large operations**, where **cutting precision, maximum material yield**, flexibility in order processing, and operator safety are essential.

There are many options for cross cutting of wood, which is why our wide range of crosscut saws allows every customer to find the **optimal solution for their specific needs**.





Automatic Crosscut Saws

Cross-cutting automats are primarily designed for **precise processing of entire bundles of material**, but also individual pieces.

The models *KP 500 AUTOMAT*, *KP 900 AUTOMAT*, *UKS 850 AUTOMAT*, and *UKS 1000 AUTOMAT* differ in main motor power, cutting diagrams, and production capacity. They cover a wide range of cutting requirements and can be equipped with **a variety of optional infeed and outfeed elements**.



Optimizing Crosscut Saws

The models *KP 500 OPTIM*, *KP 900 EASY CUT*, *UKS 850 OPTIM*, and *UKS 1000 OPTIM* are designed for **length and quality optimization of material**.

Each machine differs in motor power, cutting diagram, and production capacity. The design allows for extensions such as automated infeed, sorting, and outfeed of material, which further increases production efficiency.



Under-Table Crosscut Saws

The models *UKS 400*, *UKS 700*, *UKS 850*, and *UKS 1000* are equipped with a pneumatically or hydraulically lifted saw blade.

They differ in main motor power and cutting diagrams, allowing **adaptation to various production needs**. A wide range of infeed and outfeed mechanization can be added to the saw's base module.





Automatic Crosscut Saws

Efficiency and precision in cross cutting

Key features

Process automation

Reduces manual labor, increases efficiency, and optimizes costs.

Precision and consistency

Automatic positioning of material into the cut via the pusher ensures consistent cut quality and repeatability.

Intuitive touchscreen control

Program control enables fast and precise setting of cutting lengths.

Safety and error elimination

Reduces the risk of injury, minimizes operator errors, and ensures continuous production.

Ideal applications

- / Ideal for sawmills and companies focused on cross cutting of various materials.
- / Efficient processing of larger bundles as well as single pieces increases productivity and optimizes production processes.

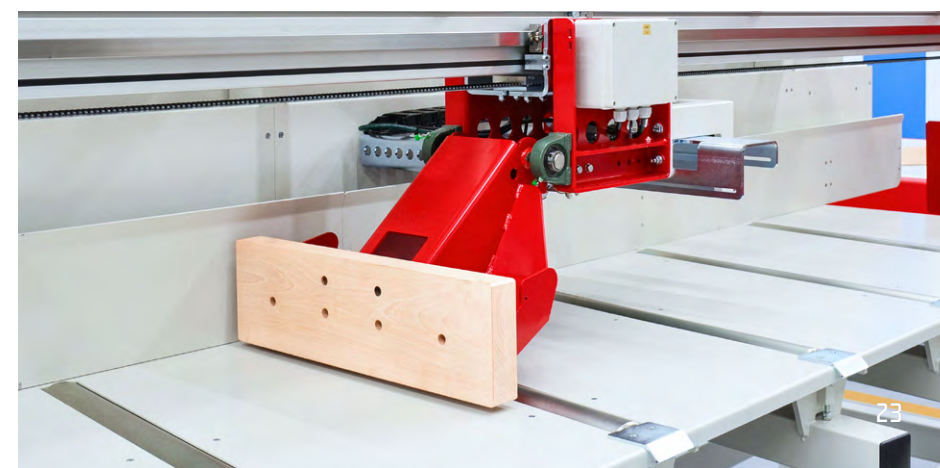
Operating principle

- 1]** The operator places an entire bundle or individual pieces on the feeding table with an automatic pusher.
- 2]** After setting the desired lengths, the cycle is started via foot pedal and the saw performs cutting according to the selected cut scheme.
- 3]** Once cutting is finished or during the cutting cycle, the operator gradually removes processed material onto the outfeed table.



Equipment and Configuration of All Automatic Crosscut Saw Models

STANDARD EQUIPMENT	OPTIONAL EQUIPMENT
Left-oriented saw – material flow from right to left	Right-oriented saw – material flow from left to right
Fixed automatic pusher	Lifting or gravity pusher
Side pressure before the cut	Side pressure after the cut (roller)
Top pressure and saw blade guard in one	Extension of fixed outfeed table
LCD control panel with 7" touchscreen and function buttons	Heating of electrical cabinet and control panel
Multi-language user interface	Infeed mechanization
Robust saw blade protection	Cross chain material feeders (only for KP 900 A, UKS 850 A, UKS 1000 A)
2 m fixed outfeed table	Outfeed mechanization
Electronic system for bundle height monitoring	Driven roller conveyor with ejector arms
Safety switch on the end flap of the infeed table	Fixed table with central ejection, with or without automatic waste flap
Infeed table extensions	Waste/block conveyor (comb conveyor)
Start pedal	



CROSS CUTTING TECHNOLOGY



Automatic Crosscut Saw

KP 500 Automat

Reliability and precision in every cut

The *KP 500 Automat* crosscut saw is a suitable solution for material preparation in **pallet production** and other wooden packaging products. On average, this saw can process **20–25 m³** of pallet blanks or approximately **13,000 pallet blocks** per shift (8 hours), depending on the cross-sectional dimensions of the processed material.

CROSS CUTTING TECHNOLOGY

BASIC TECHNICAL DATA	KP 500 AUTOMAT
Saw blade	Ø 550 mm (optionally Ø 500 mm)
Motor power	5.5 kW (optionally 7.5 kW)
Table tilt	8°
Upper pressure	160 mm
Cutting width	300 mm

BASIC DIMENSIONS (with 2 m fixed outfeed table)			
INFEEED TABLE (A)	TOTAL LENGTH (B)	DEPTH	WORKING TABLE HEIGHT
3,200 mm	7,325 mm	1,350 mm	1,000 mm
4,200 mm	8,325 mm		
5,200 mm	9,325 mm		
6,200 mm	10,325 mm		
7,200 mm	11,325 mm		

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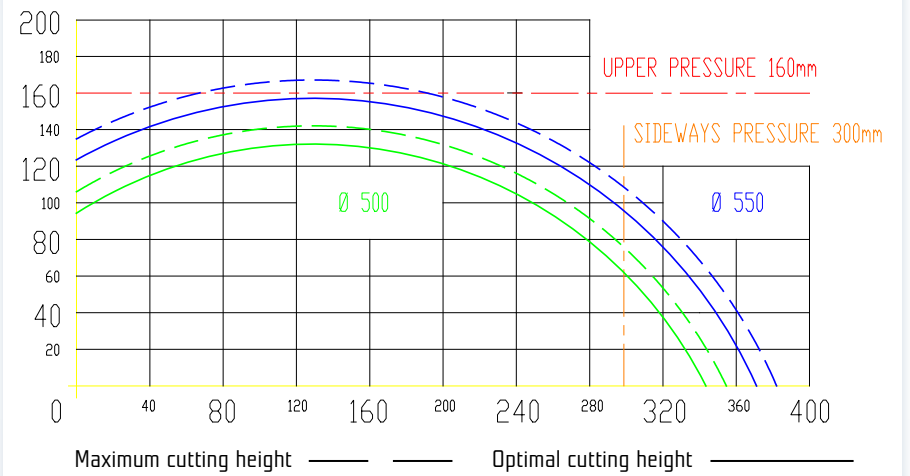
Detailed information
about KP 500 Automat
can be found on our website

www.stoerimantel.com





Cuttin Diagram KP 500 AUTOMAT





Automatic Crosscut Saw

KP 900 Automat

Fast and Precise Cutting
Without Compromise

The *KP 900 Automat* crosscut saw is a suitable solution for preparing material for **pallet production** and other wooden packaging products. On average, this saw can process **25–40 m³ of pallet blanks** or about **20,000 pallet blocks per shift (8 hours)**, depending on the cross-sectional dimensions of the processed material.

BASIC TECHNICAL DATA	KP 900 AUTOMAT
Saw blade	Ø 600 mm (optionally Ø 550 mm)
Motor power	7.5 kW (optionally 11 kW, 15 kW)
Table tilt	8°
Upper pressure	180 mm
Cutting width	390 mm

BASIC DIMENSIONS (with 2 m fixed outfeed table)			
INFEEED TABLE (A)	TOTAL LENGTH (B)	DEPTH	WORKING TABLE HEIGHT
3,200 mm	7,435 mm	1,460 mm	1,000 mm
4,200 mm	8,435 mm		
5,200 mm	9,435 mm		
6,200 mm	10,435 mm		
7,200 mm	11,435 mm		

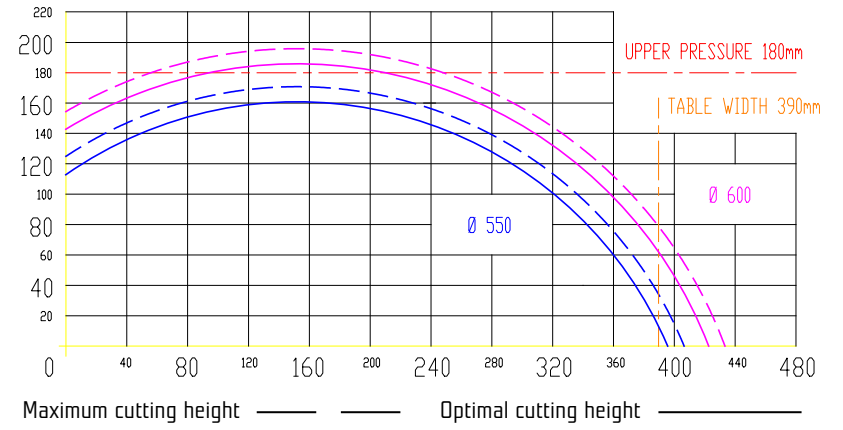
Detailed information about KP 900 Automat can be found on our website www.stoerimantel.com



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Cutting Diagram KP 900 AUTOMAT





Automatic Crosscut Saw

UKS 850 Automat

Powerful Cutting for Large Volumes

The *UKS 850 Automat* crosscut saw is designed for **cutting prisms, construction timber**, or rough-sawn boards – i.e., materials that require a large cutting diagram. It is also widely used for cutting boards and blocks in **pallet production**. On average, this saw can process **40–50 m³** of pallet blanks or approximately **23,000 pallet blocks** per shift (8 hours).

For cutting prisms 5 meters long with an average volume of 0.25 m³ per prism, the capacity is approximately 5 m³ of prisms per hour.

BASIC TECHNICAL DATA	UKS 850 AUTOMAT
Saw blade	Ø 600 mm
Motor power	11 kW (optionally 15 kW, 22 kW)
Table tilt	0°
Upper pressure	200 mm
Cutting width	720 mm

BASIC DIMENSIONS (with 2 m fixed outfeed table)			
INFEED TABLE (A)	TOTAL LENGTH (B)	DEPTH	WORKING TABLE HEIGHT
3,200 mm	7,540 mm	2,300 mm	900 mm
4,200 mm	8,540 mm		
5,200 mm	9,540 mm		
6,200 mm	10,540 mm		
7,200 mm	11,540 mm		

Detailed information about UKS 850 Automat can be found on our website

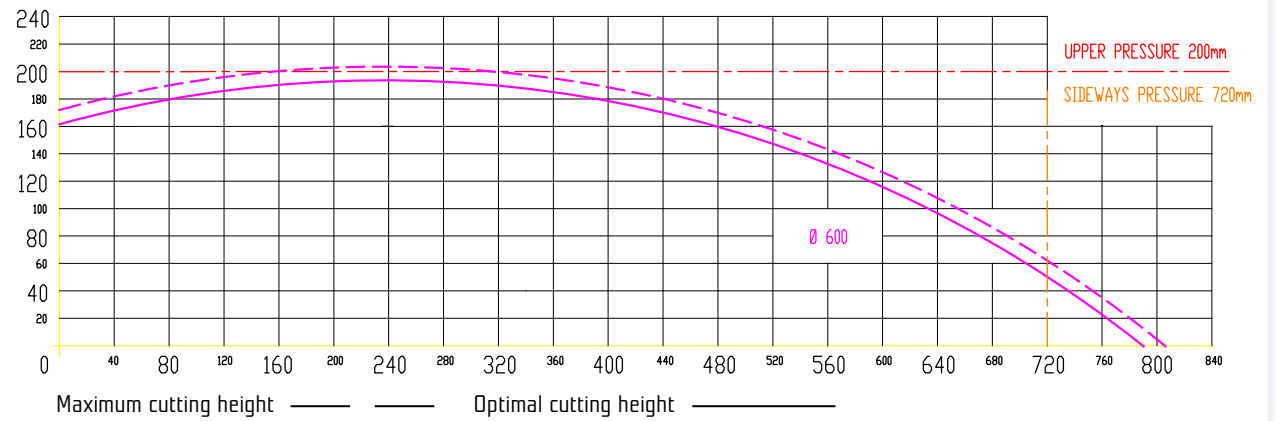
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Cutting Diagram UKS 850 AUTOMAT





Automatic Crosscut Saw

UKS 1000 Automat

Power, Speed, and Maximum Capacity

The *UKS 1000 Automat* crosscut saw is designed for **cutting prisms, construction timber**, or rough-sawn boards – i.e., materials requiring a large cutting diagram. It is also used for cutting boards and blocks in **pallet production**. On average, this saw can process **45–55 m³** of pallet blanks or approximately **25,000 pallet blocks** per shift (8 hours).

For cutting prisms 5 meters long with an average volume of 0.25 m³ per prism, the capacity is around 7 m³ of prisms per hour.

Базовые характеристики	UKS 1000 AUTOMAT
Пильный диск	Ø 700 mm
Мощность мотора	11 kW (optionally 15 kW, 22 kW)
Наклон стола	0°
Верхний прижим	250 mm
Ширина реза	760 mm

BASIC DIMENSIONS (with 2 m fixed outfeed table)			
INFEEED TABLE (A)	TOTAL LENGTH (B)	DEPTH	WORKING TABLE HEIGHT
3,200 mm	7,540 mm	2,600 mm	900 mm
4,200 mm	8,540 mm		
5,200 mm	9,540 mm		
6,200 mm	10,540 mm		
7,200 mm	11,540 mm		

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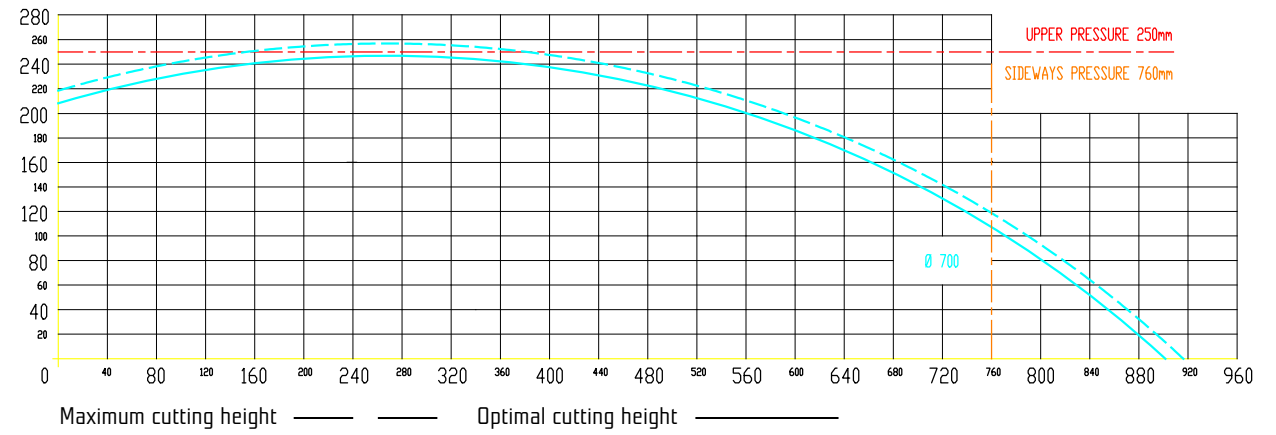
Detailed information
about UKS 1000 Automat
can be found on our website

www.stoerimantel.com





Cutting Diagram UKS 1000 AUTOMAT





Technical Specifications of Automatic Crosscut Saws

CROSS CUTTING TECHNOLOGY

	KP 500 AUTOMAT	KP 900 AUTOMAT	UKS 850 AUTOMAT	UKS 1000 AUTOMAT
MATERIAL INFEED				
Infeed table length	3.2-7.2 m			
Infeed table tilt	8°		0°	
Cross chain infeed conveyor	-	Optional		
MATERIAL OUTFEED				
Fixed table	Standard 2 m			
Fixed table with central ejection	Optional			
Pneumatic waste flap	Optional			
Roller conveyor with ejection	Optional			
CUTTING				
Pusher positioning accuracy	±0.5 mm			
Saw feed rate	Stepless control			
SAW BLADE				
Blade diameter (standard/optional)	550/500 mm	600/550 mm	600 mm	700 mm
Bore diameter	80 mm			
LOADER				
Drive	AC servo			
Loader speed	1 m/s			
SAW ENGINE				
Power standard (optional)	5.5 kW (7.5 kW)	7.5 kW (11 kW, 15 kW)	11 kW (15 kW, 22 kW)	11 kW (15 kW, 22 kW)
CONNECTIONS				
Dust extraction	1x Ø 120 mm - 30 m/s	2x Ø 120 mm - 30 m/s		
Compressed air	Min. pressure 0.6 MPa			
Capacitive air consumption	250 l/min.		350 l/min.	
Voltage	~ 3×400 V/50 Hz			
CONTROL				
LCD touchscreen	7"			
Cutting cycle start	Foot pedal			

Due to the continuous development of our machines, the listed data is not binding. For up-to-date specifications, please visit our website or contact our sales representatives.



Optional Infeed Mechanization

Pneumatic Lifting Pusher

A pushing unit that ensures very precise positioning of the workpiece for cutting. Thanks to the pneumatic lift, the operator can insert material even before the pusher returns to its starting position. This speeds up the cutting process even further.



Infeed Cross Conveyor with Roller Chains

The conveyor consists of arms equipped with moving chains and a pneumatic stopper. Individual conveyor arms can be 1 or 2 meters long. The number of conveyor arms is determined based on the saw's infeed table length, and their spacing is designed according to the typical lengths of the infeed material.





Optional Outfeed Mechanization

Driven Roller Conveyor with Ejector and Gravity Slide

Roller Conveyor – powered rollers automatically help remove the cut material from the fixed table behind the saw. Thanks to synchronized optical sensors and preset values, the ejector arms are activated, and conveyor movement is regulated.



Ejector pushes the cut material onto slide rails. Ejection facilitates and speeds up the removal process. The number of ejector arms depends on the conveyor length.



Gravity Slide assists in transferring the material to the storage location by allowing the material to accumulate temporarily. This gives the operator enough time and space to load new material into the saw.



Fixed Table with Central Ejector

An alternative outfeed option from the saw is a fixed table matching the length of the longest cut piece, equipped with an ejector. The ejector pushes material onto the fixed table immediately after the cut. Ejection can happen after each cut or once the entire batch is cut. This mechanism may affect the cutting diagram.





Application Examples





Optimizing Crosscut Saws

Maximum Yield and Quality

Key Features

Higher Material Yield

Optimized cutting reduces waste and maximizes material utilization.

Final Product Quality

Precise defect cutting ensures high final product quality.

Workplace Safety

Process automation increases work safety.

Suitable Applications

- / Optimizing crosscut saws are designed for woodworking companies that process solid wood and emphasize quality, production yield, and workplace safety.
- / Used for defect cutting and optimizing fixed lengths of lamellas in the production of glued beams, edge-glued panels, solid wood furniture components, parquet, or flooring boards. They can also be used for simple crosscutting and are suitable in operations processing engineered materials like wood composites, plastics, metals, foams, and insulating panels.

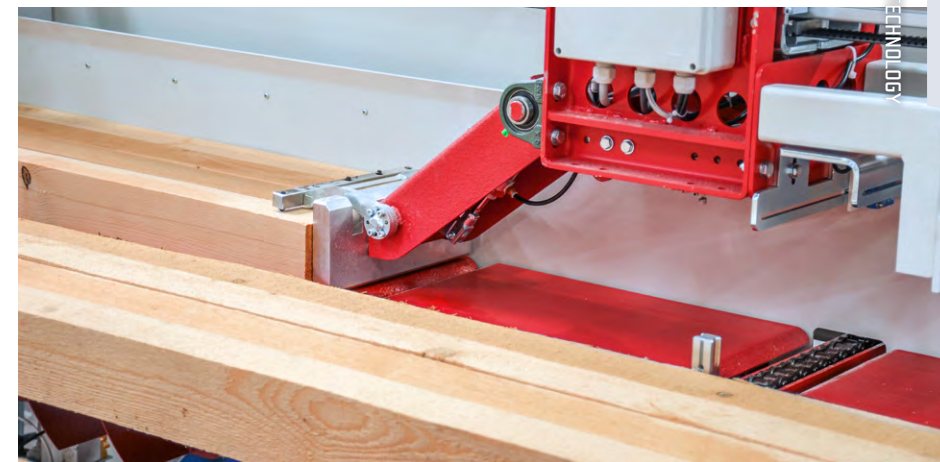
Operating Principle

- 1] The operator places individual pieces of material onto the infeed table with an automatic lifting pusher equipped with optical measuring. The operator also has the option to mark defects with fluorescent chalk for removal during cutting.
- 2] After setting the desired lengths, optimization modes, and other parameters, the operator confirms the cycle on the control panel, and the saw automatically performs the cuts according to the defined cutting pattern.
- 3] After or during the cutting cycle, the operator gradually removes the processed material from the outfeed table.



Equipment and Configuration of All Optimizing Crosscut Saw Models

STANDARD EQUIPMENT	OPTIONAL EQUIPMENT
Left saw orientation – material flow from right to left	Right saw orientation – material flow from left to right
Automatic lifting pusher with measuring optics on infeed table	Rear side pressure before the cut (roller)
Side pressure before cut	Finger pressure bar for improved squareness
Top pressure and saw blade guard combined	Pusher positioning system ±0.1 mm
LCD control panel with 15" touchscreen and function keys	Clamp on pusher device
Multilingual control interface	Electric cabinet and control panel heating
Robust saw housing	Extended fixed outfeed table
Fixed outfeed table (2 m long)	Infeed Mechanization:
Electronic package height monitoring system	Transverse chain material feeder (only for KP 900 EC, UKS 850 O, UKS 1000 O)
Safety switch at the entry table flap	Outfeed Mechanization:
Infeed table extensions	Belt conveyor with ejector arms
Safety light curtain on infeed table	Fixed table with central ejector, with or without automatic waste flap



CROSS-CUTTING TECHNOLOGY



Optimizing Crosscut Saw

KP 500 Optim

Precision and Quality in Every Cut

This saw is designed for defect cutting and length optimization. It is an ideal solution for companies working with solid wood and focused on maximizing **quality and yield in their production**.

The production capacity depends on the dimensions of the processed material, its quality, and the product range. On average, the saw can process **300 lm/hour** (for material 4 m long with 5 to 8 cuts). The saw can be operated by **one or two workers**, depending on the nature of the processed material.

CROSS CUTTING TECHNOLOGY

BASIC TECHNICAL DATA	KP 500 OPTIM
Saw blade (optional)	Ø 500 mm / Ø 550 mm
Motor power	5,5 kW (optionally 7,5 kW)
Table tilt	8°
Upper pressure	160 mm
Cutting width	275 mm

BASIC DIMENSIONS (with 2 m fixed outfeed table)			
INFEEED TABLE (A)	TOTAL LENGTH (B)	DEPTH	WORKING TABLE HEIGHT
3,200 mm	7,325 mm	1,350 mm	1,000 mm
4,200 mm	8,325 mm		
5,200 mm	9,325 mm		
6,200 mm	10,325 mm		
7,200 mm	11,325 mm		

Due to the continuous development of our machines, the listed data is not binding. For up-to-date specifications, please visit our website or contact our sales representatives.

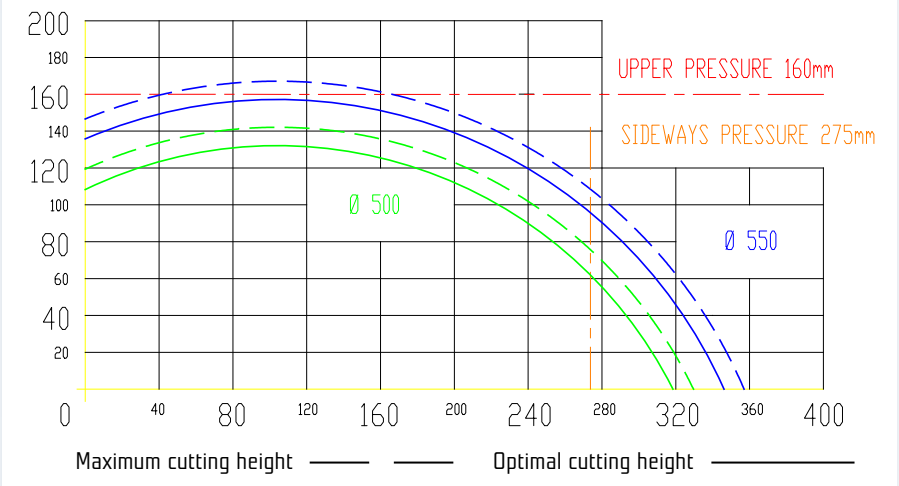
Detailed information about KP 500 Optim can be found on our website

www.stoerimantel.com





Cutting Diagram KP 500 OPTIM





Optimizing Crosscut Saw

KP 900 EasyCut

Power, Precision, Quality

The *KP 900 EasyCut* crosscut saw is an ideal solution for companies focused on processing solid wood that emphasize maximum quality and yield of their production. It enables efficient defecting and length optimization.

Thanks to its high power output, it can process up to **900 lm/h** (based on 4 m length material and 8 cuts). The saw can be operated by **one or two workers**, depending on the type and nature of the material being processed.

BASIC TECHNICAL DATA	KP 900 EASY CUT
Saw blade – long arm (optional)	Ø 600 mm / Ø 550 mm / Ø 500 mm
Saw blade – short arm (optional)	Ø 500 mm / Ø 450 mm / Ø 400 mm
Motor power	7.5 kW (optionally 11 kW, 15 kW)
Table inclination	8°
Upper pressure	180 mm
Cutting width	390 mm

BASIC DIMENSIONS (with 2 m fixed outfeed table)			
INFEED TABLE (A)	TOTAL LENGTH (B)	DEPTH	WORKING TABLE HEIGHT
3,200 mm	7,435 mm	1,460 mm	1,000 mm
4,200 mm	8,435 mm		
5,200 mm	9,435 mm		
6,200 mm	10,435 mm		
7,200 mm	11,435 mm		

Due to the continuous development of our machines, the listed data is not binding. For up-to-date specifications, please visit our website or contact our sales representatives.

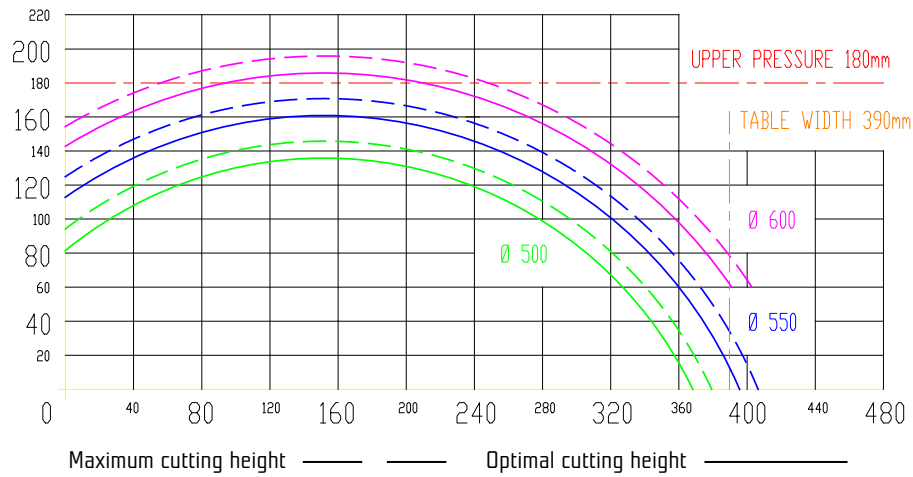
Detailed information about KP 900 EasyCut can be found on our website

www.stoerimantel.com

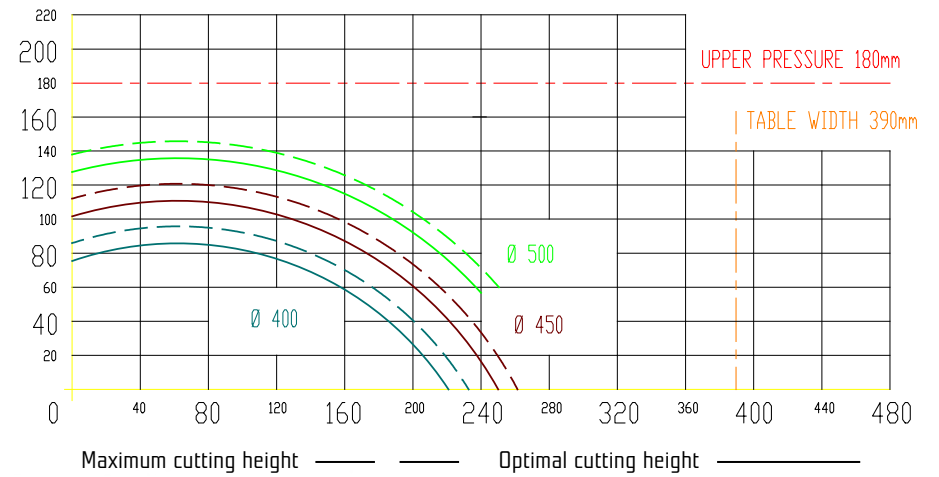




Cutting Diagram KP 900 EASY CUT - Long Arm



Cutting Diagram KP 900 EASY CUT - Short Arm





Optimizing Crosscut Saw

UKS 850 Optim

Reliable Performance for Larger Workpieces

The crosscut saw *UKS 850 Optim* is designed for defect cutting and length optimization when processing large solid wood pieces. It provides an ideal solution for companies that emphasize **production quality and yield**.

The machine's capacity can be calculated based on the parameters of the processed material. The saw allows operation by **one or two operators**, depending on the type of material.

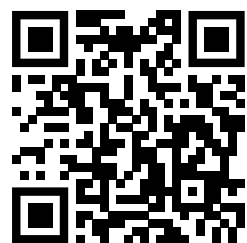
BASIC TECHNICAL DATA	UKS 850 OPTIM
Saw blade	Ø 600 mm
Motor power	11 kW (optionally 15 kW, 22 kW)
Table tilt	0°
Upper pressure	200 mm
Cutting width	720 mm

BASIC DIMENSIONS (with 2 m fixed outfeed table)			
INFEED TABLE (A)	TOTAL LENGTH (B)	DEPTH	WORKING TABLE HEIGHT
3,200 mm	7,540 mm	2,300 mm	900 mm
4,200 mm	8,540 mm		
5,200 mm	9,540 mm		
6,200 mm	10,540 mm		
7,200 mm	11,540 mm		

Due to the continuous development of our machines, the listed data is not binding. For up-to-date specifications, please visit our website or contact our sales representatives.

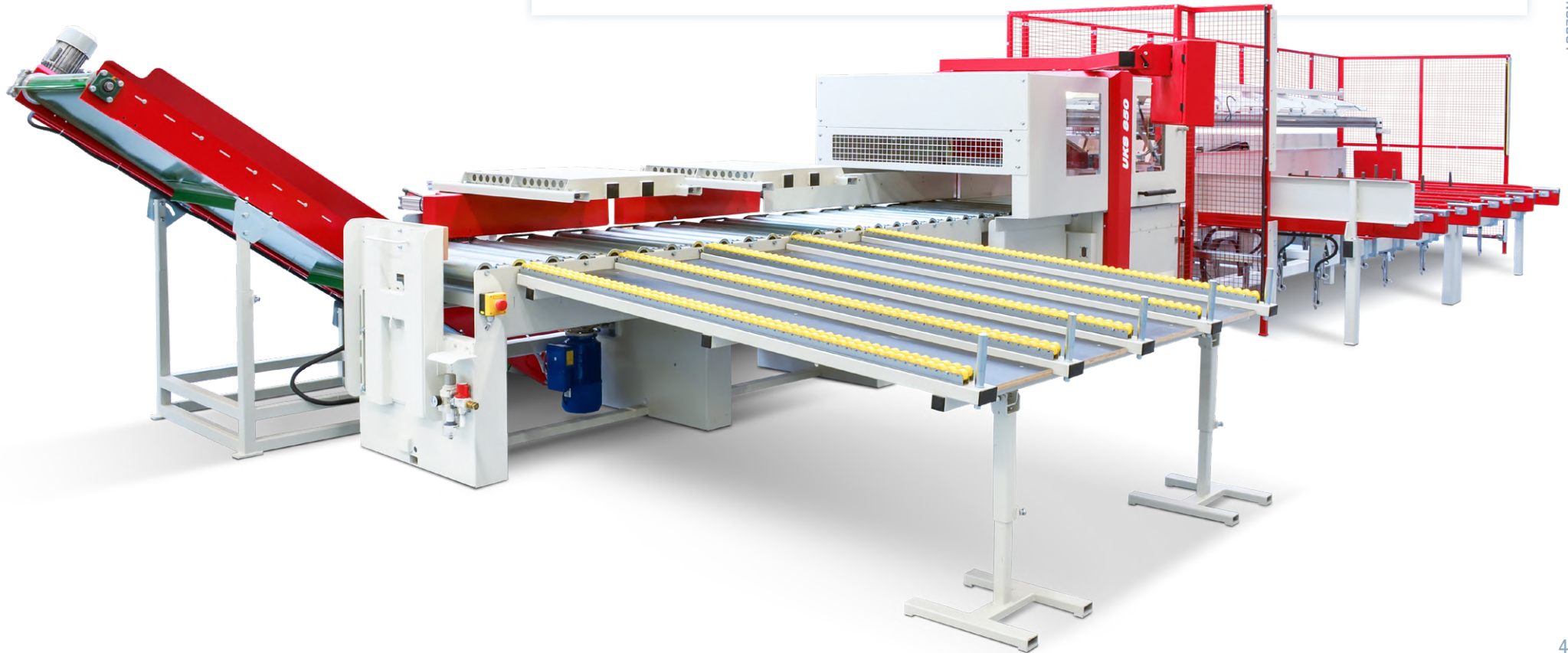
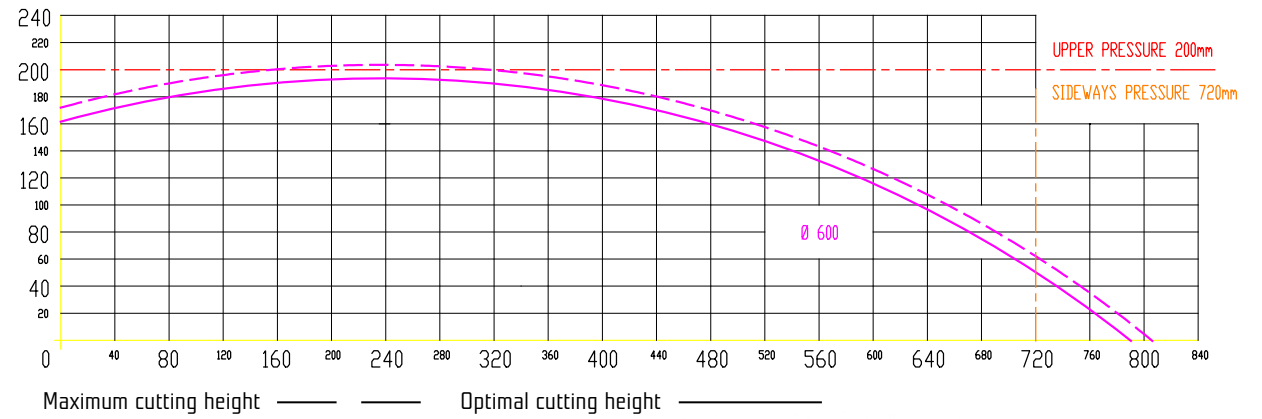
Detailed information
about UKS 850 Optim
can be found on our website

www.stoerimantel.com





Cutting Diagram UKS 850 OPTIM





Optimizing Crosscut Saw

UKS 1000 Optim

Robust Performance and Perfect Cut

The *UKS 1000 Optim* crosscut saw is designed for **defecting and length optimization**. It is a suitable solution for companies processing large-sized solid wood and placing maximum emphasis on **the quality and yield of their production**.

The machine's capacity can be defined by calculation based on material parameters. The saw can be operated by **one or two workers**, depending on the nature of the processed material.

BASIC TECHNICAL DATA	UKS 1000 OPTIM
Saw blade	Ø 700 mm
Motor power	11 kW (optionally 15 kW, 22 kW)
Table tilt	0°
Upper pressure	250 mm
Cutting width	760 mm

BASIC DIMENSIONS (with 2 m fixed outfeed table)			
INFEEED TABLE (A)	TOTAL LENGTH (B)	DEPTH	WORKING TABLE HEIGHT
3,200 mm	7,540 mm	2,600 mm	900 mm
4,200 mm	8,540 mm		
5,200 mm	9,540 mm		
6,200 mm	10,540 mm		
7,200 mm	11,540 mm		

Due to the continuous development of our machines, the listed data is not binding. For up-to-date specifications, please visit our website or contact our sales representatives.

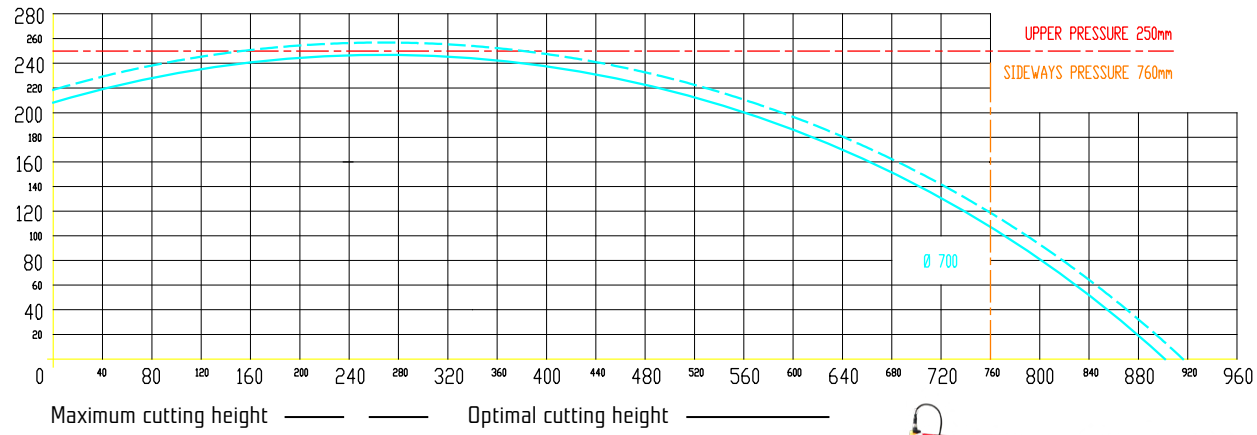
Detailed information about UKS 1000 Optim can be found on our website

www.stoerimantel.com





Cutting Diagram UKS 1000 OPTIM





Technical Specifications of Optimizing Crosscut

CROSS CUTTING TECHNOLOGY

	KP 500 OPTIM	KP 900 EASY CUT	UKS 850 OPTIM	UKS 1000 OPTIM
MATERIAL INFEED				
Infeed table length	3.2-7.2 m			
Infeed table tilt	8°		0°	
Cross chain infeed conveyor	-	Optional		
MATERIAL OUTFEED				
Fixed table	Standard 2 m			
Fixed table with central ejection	Optional			
Pneumatic waste flap	Optional			
Roller conveyor with ejection	Optional			
CUTTING				
Pusher positioning accuracy (optional)	±0.5 mm (±0.1 mm)			
Saw feed rate	Stepless control			
SAW BLADE				
Blade diameter (selected)	550/500 mm	600/550/500/450/400 mm	600 mm	700 mm
Blade bore diameter	80 mm			
PUSHER				
Drive	AC servo			
Pusher speed (optional)	2 m/s	2 m/s (3 m/s)	2 m/s	2 m/s
SAW ENGINE				
Power standard (optional)	5.5 kW (7.5 kW)	7.5 kW (11 kW, 15 kW)	11 kW (15 kW, 22 kW)	11 kW (15 kW, 22 kW)
CONNECTIONS				
Dust extraction	1x Ø 120 mm - 30 m/s	2x Ø 120 mm - 30 m/s		
Compressed air	Min. pressure 0.6 MPa			
Capacitive air consumption	250 l/min.		350 l/min.	
Voltage	~ 3×400 V/50 Hz			
CONTROL				
LCD touchscreen	15"			
Cutting cycle start	Automatically upon material insertion			

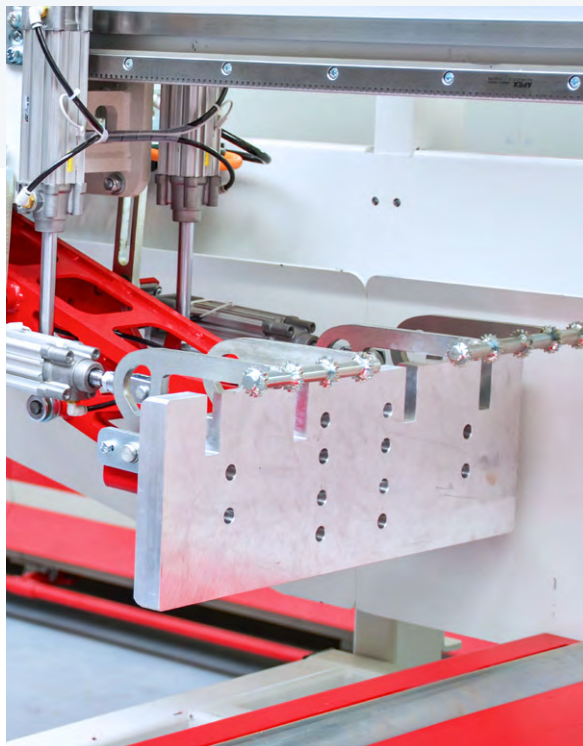
Due to the continuous development of our machines, the listed data is not binding. For up-to-date specifications, please visit our website or contact our sales representatives.



Optional Infeed Mechanization

Lifting Automatic Infeed System for Demanding Operations

For demanding and heavy-duty operations, a lifting automatic infeed system with a rack-and-pinion drive and top-suspended linear guidance is designed. This system features a powerful and dynamic feed drive combined with high positioning accuracy. An integrated clamping system is also part of the unit, ensuring material stabilization during infeed to the target position.



Infeed Cross Conveyor with Roller Chains

Designed for feeding material and transferring it onto the infeed table of the cross-cut saw. For stacking multiple boards or entire packs, the conveyor is equipped with a system of retractable stops that function as a buffer station. This allows productivity to be increased by up to 30–35%. As an optional feature, a “carpet mode” can be used, enabling continuous board feeding with minimal spacing between pieces.



Infeed Cross Conveyor with Flat Chains

The conveyor consists of arms with moving flat chains. The chains can be either metal or plastic. Thanks to their design, they do not damage surface-treated materials. Each arm is equipped with a pneumatic stopper. The length of the arms is optional – typically 1 or 2 meters. The number of arms and the distances between them are determined based on the length of the saw’s infeed table or the length of the material being cut.





Optional Outfeed Mechanization

Belt Conveyor with Ejectors and Gravity Slide

Belt Conveyor – Driven belts help remove cut material from the saw. Thanks to synchronized optical sensors and preset values, the ejector arms are activated and the conveyor movement is regulated.



Ejector pushes the cut material onto sliding rails. Ejecting simplifies and speeds up material removal. The number of ejector arms depends on the conveyor length.



Gravity Slide helps remove material to the storage area by allowing it to accumulate temporarily. This gives the operator time to load new material for cutting.



Fixed Outfeed Table with Central Ejector

A fixed outfeed table can be installed according to the length of the longest cut piece, with an ejector. The ejector pushes the material onto the fixed table immediately after the cut. Ejection can occur after each cut or after all pieces in a batch have been cut. This configuration may slightly reduce the cutting diagram size.



Label Printer

The printer allows real-time labeling of cut pieces for easier identification, such as for warehouse storage. Any information can be printed on the label (most commonly EAN code, QR code), with size being the only limitation.



Application Examples





Under the Table Crosscut Saws

Compact Solution for Precise Crosscutting

This is a compact semi-automatic machine designed for trimming edged and unedged timber as well as other materials. UKS crosscut saws are widely used in the sawmill and furniture industries, as well as for cutting plastics, thin-walled steel profiles, pipes, and sandwich insulation panels with steel reinforcements. **We supply the saw with a wide range of optional equipment and mechanization.**

Key Features

High Cutting Accuracy and Quality

Robust frame and stable material clamping.

Design Variability

Available in both left and right-hand versions to suit your layout needs.

Customization Options

Various conveyor options (powered/unpowered) for infeed and outfeed, adjustable stops (manual, pneumatic), saw lift and material clamping (pneumatic, hydraulic).

Safe Operation

Two-handed control and safety guards (saw blade cover with top pressure hold-down, fixed or retractable front guard).



STÖRI MANTEL



Suitable Applications

- / An ideal choice for operations where fast, precise and safe crosscutting of materials is needed while maintaining high productivity and reliability.
- / Capable of cutting individual pieces or entire packs thanks to its robust construction.
- / Widely used in sawmill and furniture manufacturing, but also suitable for cutting plastics, steel profiles, pipes and insulated panels with steel reinforcement.

Operating Principle

- 1] The saw operates on the principle of under-table blade lift, where the saw blade moves upward through the material during cutting.
- 2] Material is manually placed from the front or side of the machine (depending on the configuration) onto the work table and then manually moved against the measuring stop.
- 3] The cutting cycle is activated by pressing two buttons simultaneously. During cutting, the material is automatically clamped by the upper pressure beam, ensuring a precise and safe cut.





Under the Table Crosscut Saw

UKS 400

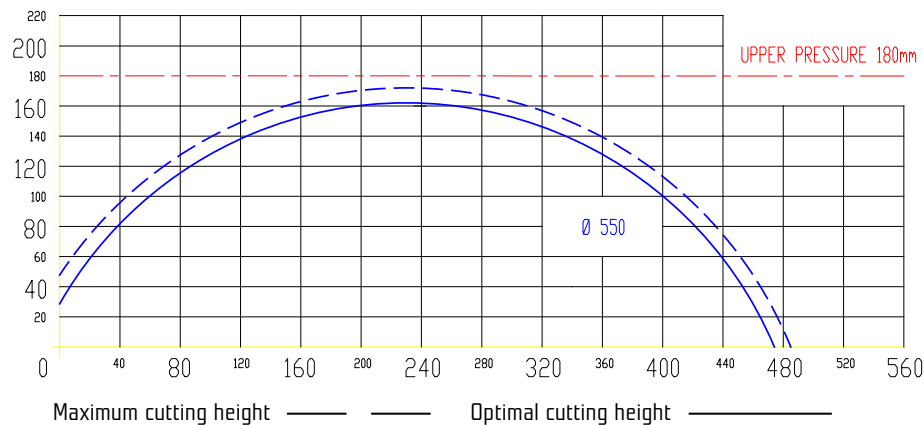
CROSS CUTTING TECHNOLOGY

BASIC TECHNICAL DATA	UKS 400
Saw blade	Ø 550 mm
Motor power	5.5 kW (optionally 7.5 kW)
Dimensions (W × H × D)	1074 × 1089 × 1750 mm
Upper pressure	180 mm
Cutting width	480 mm
Max. cutting height	140 mm (at 220 mm width)
Cutting width	460 mm (at 25 mm height)

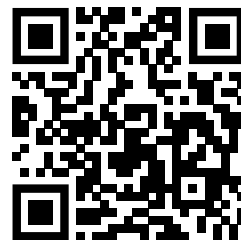
Due to the continuous development of our machines, the listed data is not binding. For up-to-date specifications, please visit our website or contact our sales representatives.



Cutting Diagram UKS 400



Detailed information about UKS 400 on our website www.stoerimantel.com





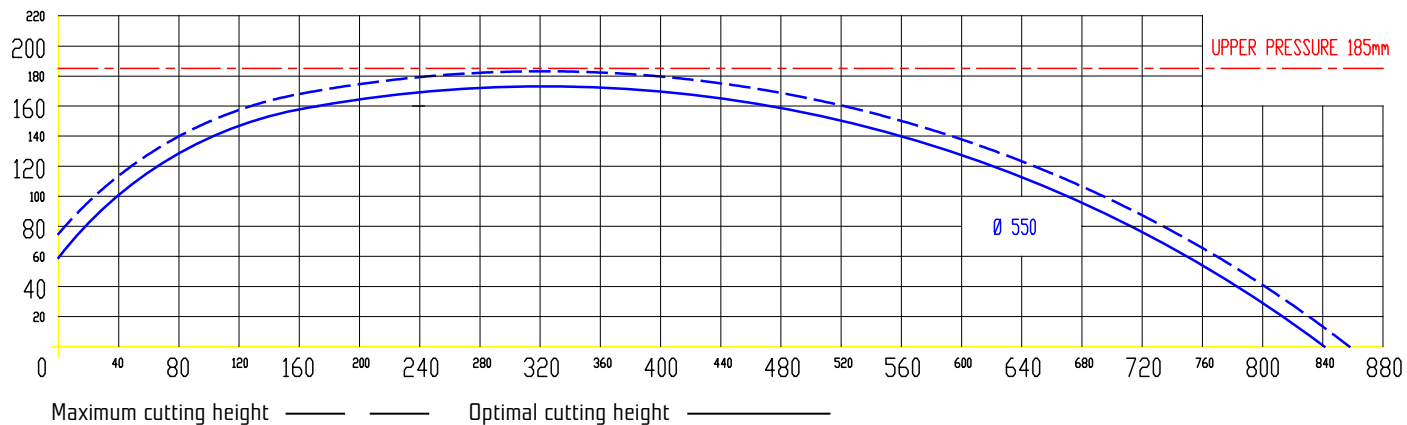
Under the Table Crosscut Saw UKS 700

BASIC TECHNICAL DATA	UKS 700
Saw blade	Ø 550 mm
Motor power	5.5 kW (optionally 7.5 kW)
Dimensions (W × H × D)	1106 × 1790 × 1538 mm
Upper pressure	185 mm
Cutting width	850 mm
Max. cutting height	170 mm (at 200 mm width)
Cutting width	820 mm (at 20 mm height)

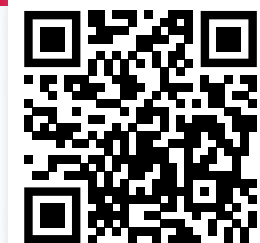
Due to the continuous development of our machines, the listed data is not binding. For up-to-date specifications, please visit our website or contact our sales representatives.



Cutting Diagram UKS 700



Detailed information
about UKS 700
on our website
www.stoerimantel.com





Under the Table Crosscut Saw

UKS 850

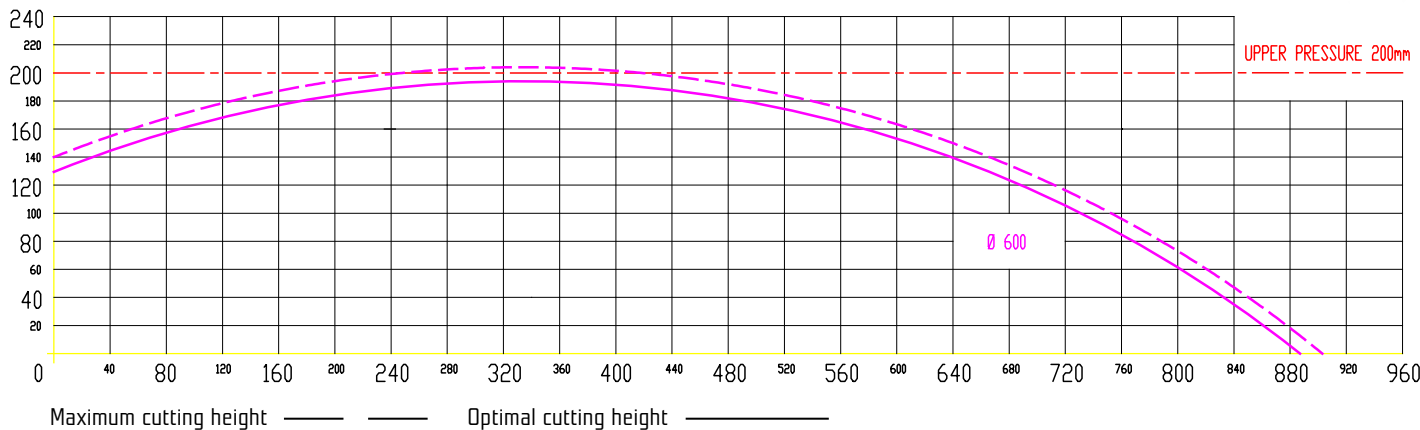
BASIC TECHNICAL DATA	UKS 850
Saw blade	Ø 600 mm
Motor power	7.5 kW (optionally 11 kW, 15 kW)
Dimensions (W × H × D)	1271 × 1820 × 1611 mm
Upper pressure	200 mm
Cutting width	900 mm
Max. cutting height	200 mm (at 190 mm width)
Cutting width	860 mm (at 20 mm height)

Due to the continuous development of our machines, the listed data is not binding. For up-to-date specifications, please visit our website or contact our sales representatives.



CROSS CUTTING TECHNOLOGY

Cutting Diagram UKS 850



Detailed information about UKS 850 on our website www.stoerimantel.com





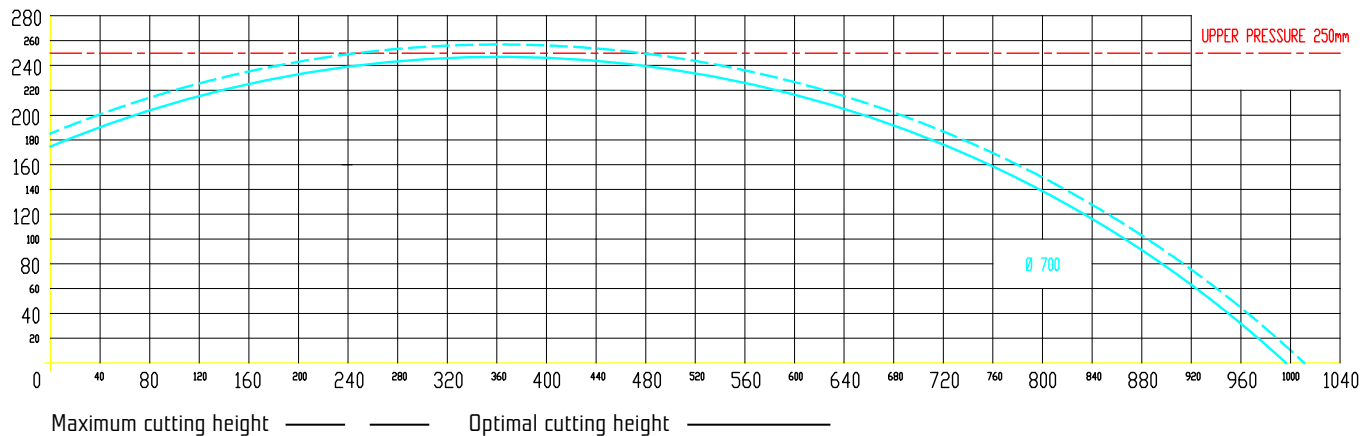
Under the Table Crosscut Saw UKS 1000

BASIC TECHNICAL DATA	UKS 1000
Saw blade	Ø 700 mm
Motor power	11 kW (optionally 15 kW)
Dimensions (W × H × D)	1260 × 1820 × 1727 mm
Upper pressure	250 mm
Cutting width	1010 mm
Max. cutting height	240 mm (at 280 mm width)
Cutting width	980 mm (at 20 mm height)

Due to the continuous development of our machines, the listed data is not binding. For up-to-date specifications, please visit our website or contact our sales representatives.



Cutting Diagram UKS 1000



Detailed information
about UKS 1000
on our website
www.stoerimantel.com





Technical Parameters of Under the Table Crosscut Saws

CROSS CUTTING TECHNOLOGY

	UKS 400	UKS 700	UKS 850	UKS 1000
INSTALLATION PARAMETERS				
Dimensions (W × H × D)	1074 × 1750 × 1082 mm	1106 × 1790 × 1538 mm	1271 × 1820 × 1611 mm	1260 × 1820 × 1727 mm
Working height of saw	860 mm	870 mm	880 mm	880 mm
Saw orientation (optional)	Left (right)			
LIFTING SYSTEM				
Blade lifting system into cut (optional)	Pneumatic (hydraulic)			
INFEED AND OUTFEED MECHANIZATION				
Driven and non-driven roller conveyors	Optional			
CUTTING				
Cutting parameters	According to cutting diagram			
Saw feed rate	Stepless adjustment			
SAW BLADE				
Blade diameter standard (optional)	Ø 550 mm	Ø 550 mm	Ø 600 mm	Ø 700 mm
Inner diameter of mounting hole	80 mm			
SAFETY				
Safety guard (optional)	Fixed (pneumatically liftable)			
SAW ENGINE				
Power output standard (optional)	5.5 kW (7.5 kW)	5.5 kW (7.5 kW)	7.5 kW (11 kW, 15 kW)	11 kW (15 kW)
CONNECTION				
Dust extraction	2x Ø 120 mm - 30 m/s			
Compressed air	Min. pressure 0.6 Mpa			
Air consumption capacity	7.5 l/cycle	26 l/cycle	26 l/cycle	30 l/cycle
Electric voltage	~ 3×400 V/50 Hz			
CONTROL				
Cycle start (optional)	Two-hand (foot pedal)			

Due to the continuous development of our machines, the listed data is not binding. For up-to-date specifications, please visit our website or contact our sales representatives.



Application Examples





Pallet Production Technology

SMPT

Produce Pallets
More Efficiently

Do you manufacture pallets and want to take your production to a higher level of automation? Are you looking for a solution for **nauling, branding, trimming, milling, or pallet stacking**?

We offer **individual solutions** tailored to your needs. We supply both standalone nailing machines and complete production lines with a capacity of **500–2,000 pallets** per shift.

In addition, we also offer machines for the production of pallet components, such as **deck boards, bottom boards (legs)** and machines for **milling chamfered edges**.



Key Advantages

+ High Efficiency

Capacity from 1–2 up to 9 pallets per minute (depending on the model).

+ Easy Maintenance

No hydraulics means fewer service interventions, quiet operation, and no risk of oil leakage.

+ Various Pallet Sizes

From compact 600×600 mm up to oversized 1,500×3,000 mm.

+ Energy Savings

Minimal consumption thanks to electro-mechanical systems – for example, the Standard line uses just 1.2 kWh per 90 pallets.

+ Efficient Space Utilization

Standard layout in an “I” shape, with “L” or “U” options depending on the factory layout.

+ Support for Different Pallet Types

Compatible with 2-way and 4-way variants, including both standard and complex designs.

+ Flexible Configuration

Possibility of adjustment according to specific customer requirements and conditions.

+ Reduced Staffing Requirements

Only 2–4 operators are needed to run the nailing line (depending on the model).

+ Remote Access

Diagnostics and management via modem for fast technical support.



Nailing Machine for Single-Operation Pallets

SMPA 500.2 ED

Efficient Pallet Production with Precision and Energy Savings

The SMPA 2.ED nailing machine is **designed for nailing single-operation** 2-way and 4-way pallets. The machine has a capacity of 1–2 pallets per minute. It is equipped as standard with a universal template for preparing the top and bottom deck of the pallet.

The nailing process itself is carried out using a **patented** system that achieves the **lowest energy consumption** in its class for this type of technology. The nail driving mechanism is based on two linear actuators operating on an electromechanical principle.

The machine can work independently or **be integrated into an automatic palletizing line** including pallet turning and stacking. The machine is operated by 2–3 workers.

BASIC TECHNICAL DATA	SMPA 500.2 ED (Single-Operation)
Production Capacity	500 pallets per 8-hour shift
Pallet Types	/ Single-operation pallets / 2-way and 4-way pallets
Operators	2–3
Pallet Dimensions	Width: 600–1,200 mm (optionally up to 1,500 mm without after-treatment in processing line)
	Length: 600–1,500 mm (optionally up to 3,000 mm)
Nail Length	27–90 mm
Height	100–160 mm
Pallet Component Dimensions (W × H × D)	/ Top deck boards: 60–150 × 16–25 × 600–1,500 mm (optionally up to 3,000 mm) / Stringers: 60–150 × 16–25 × 60–1,200 mm (optionally up to 1,500 mm) / Blocks: 60–145 × 60–100 × 60–145 mm / Bottom deck boards: 60–150 × 16–25 × 600–1,500 mm (optionally up to 3,000 mm)
Drive	Patented electromechanical system with the lowest energy consumption in its class
Operation	/ Standalone unit / Integration into automatic palletizing lines – Standard, Standard Dual, Universal, and Tandem, with additional processing and pallet stacking options

Due to the continuous development of our machines, the listed data is not binding. For up-to-date specifications, please visit our website or contact our sales representatives.



Detailed information about SMPA 500.2 ED Single Operation can be found on our website www.stoerimantel.com





Nailing Machine for Two-Operation Pallet

SMPA 500.2 ED

Precise Nailing on a Single Table

The machine is designed for nailing 2-way and 4-way **single and two-operation pallets**. It is equipped with universal templates as standard — the first template is used for the initial operation, and the second template finalizes the nailing of the pallet.

The nailing process itself is carried out using a **patented** system that achieves the **lowest energy consumption** in its class for this type of technology. The nail driving mechanism is based on two linear actuators operating on an electromechanical principle.

The nailing machine can work independently or be **integrated into an automatic palletizing line** with pallet handling and stacking. The machine is operated by 2–3 workers.

BASIC TECHNICAL DATA	SMPA 500.2 ED (Two-Operation)
Production Capacity	450 pallets per 8-hour shift
Pallet Types	/ Two-operation and one-operation pallets / 2-way and 4-way pallets
Operators	2–3
Pallet Dimensions	Width: 600–1,200 mm
	Length: 600–1500 mm
Nail Length	27–90 mm
Height	100–160 mm
Pallet Component Dimensions (W × H × D)	/ Top boards: 60-150 × 16-25 × 600-1,500 mm / Stringer boards: 60-150 × 16-25 × 60-1,200 mm / Blocks: 60-145 × 60-100 × 60-145 mm / Bottom boards: 60-150 × 16-25 × 600-1,500 mm
Drive	Patented electromechanical system with the lowest energy consumption in its class
Operation	/ Standalone unit / Integration into automatic palletizing lines Standard 2 and Standard 2 Dual with additional options for processing and pallet stacking

Due to the continuous development of our machines, the listed data is not binding. For up-to-date specifications, please visit our website or contact our sales representatives.



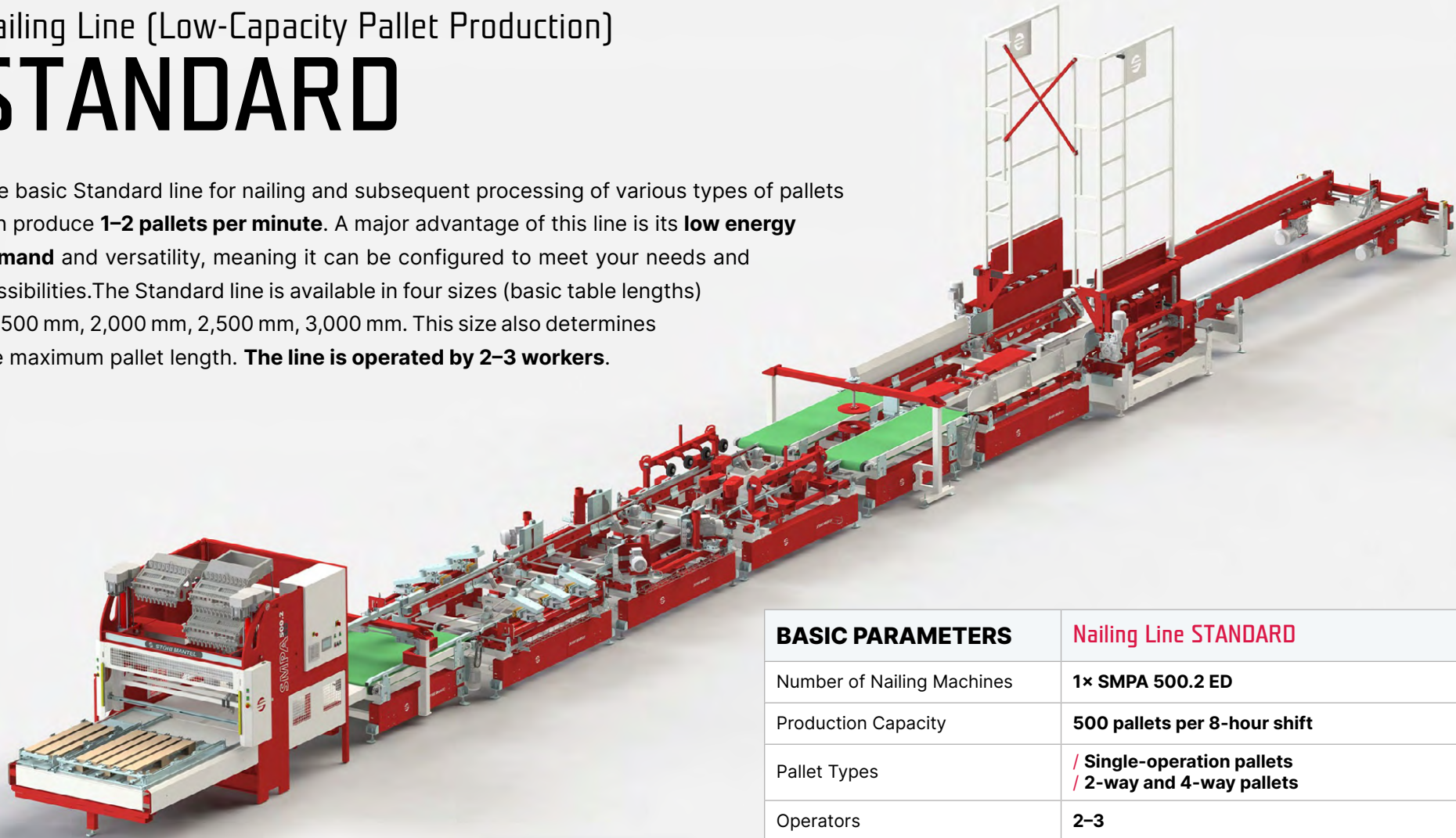
Detailed information about SMPA 500.2 ED Two-Operation can be found on our website www.stoerimantel.com





Nailing Line (Low-Capacity Pallet Production) STANDARD

The basic Standard line for nailing and subsequent processing of various types of pallets can produce **1–2 pallets per minute**. A major advantage of this line is its **low energy demand** and versatility, meaning it can be configured to meet your needs and possibilities. The Standard line is available in four sizes (basic table lengths) – 1,500 mm, 2,000 mm, 2,500 mm, 3,000 mm. This size also determines the maximum pallet length. **The line is operated by 2–3 workers.**



PALLET PRODUCTION

Detailed information about STANDARD line can be found on our website
www.stoerimantel.com



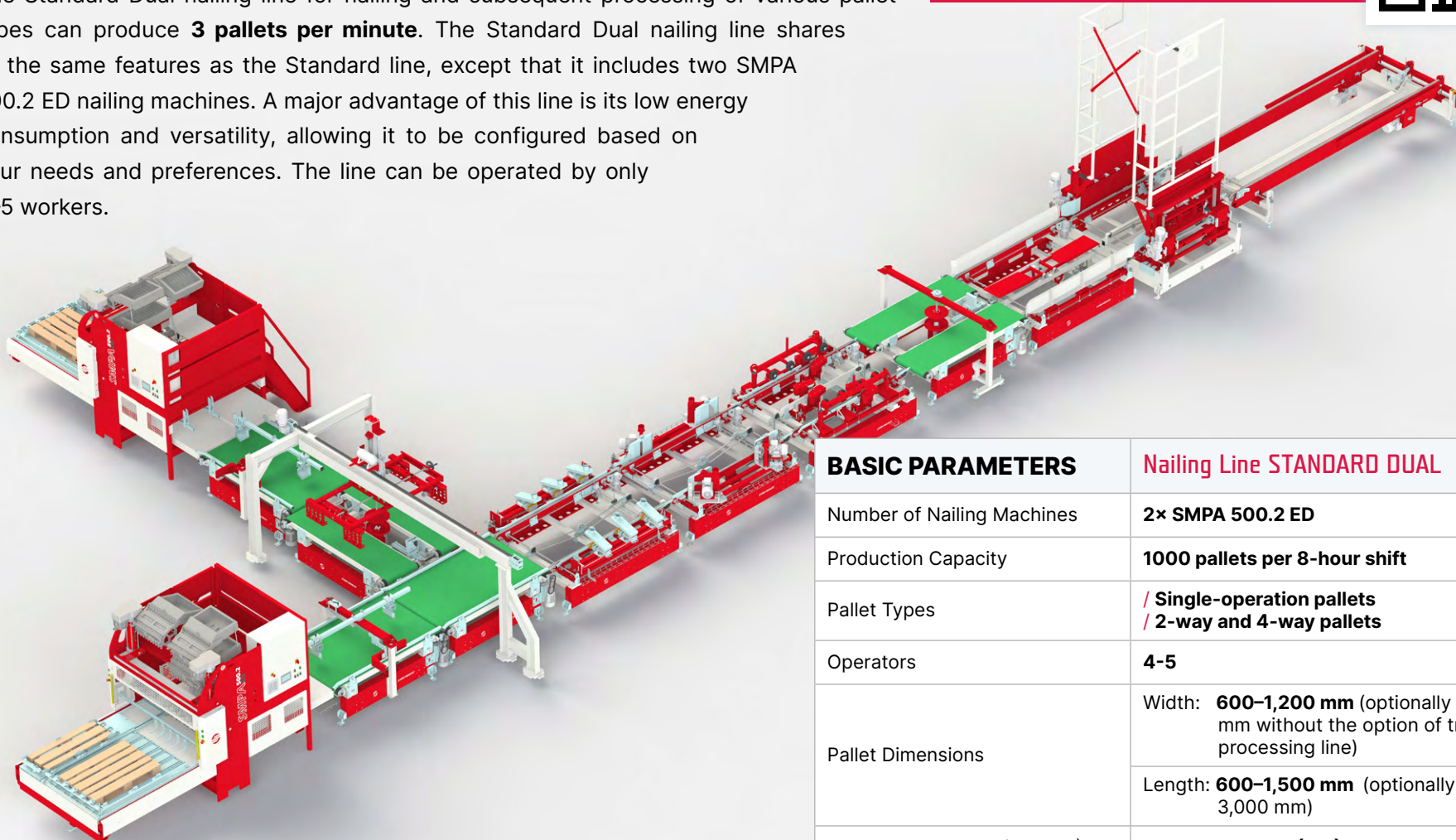
BASIC PARAMETERS	Nailing Line STANDARD
Number of Nailing Machines	1× SMPA 500.2 ED
Production Capacity	500 pallets per 8-hour shift
Pallet Types	/ Single-operation pallets / 2-way and 4-way pallets
Operators	2–3
Pallet Dimensions	Width: 600–1,200 mm (optionally up to 1,500 mm without the option of transfer to processing line)
	Length: 600–1,500 mm (optionally up to 3,000 mm)
Overall Dimensions (L×W×H)	27 × 3.45 × 3.3 (4.3) m

Due to the continuous development of our machines, the listed data is not binding. For up-to-date specifications, please visit our website or contact our sales representatives.

Nailing Line (Low-Capacity Pallet Production) STANDARD DUAL

The Standard Dual nailing line for nailing and subsequent processing of various pallet types can produce **3 pallets per minute**. The Standard Dual nailing line shares all the same features as the Standard line, except that it includes two SMPA 500.2 ED nailing machines. A major advantage of this line is its low energy consumption and versatility, allowing it to be configured based on your needs and preferences. The line can be operated by only 4–5 workers.

Detailed information about STANDARD DUAL line can be found on our website
www.stoerimantel.com



BASIC PARAMETERS	Nailing Line STANDARD DUAL
Number of Nailing Machines	2× SMPA 500.2 ED
Production Capacity	1000 pallets per 8-hour shift
Pallet Types	/ Single-operation pallets / 2-way and 4-way pallets
Operators	4-5
Pallet Dimensions	Width: 600–1,200 mm (optionally up to 1,500 mm without the option of transfer to processing line)
	Length: 600–1,500 mm (optionally up to 3,000 mm)
Overall Dimensions (L×W×H)	29.9 × 11.6 × 3.3 (4.3) m

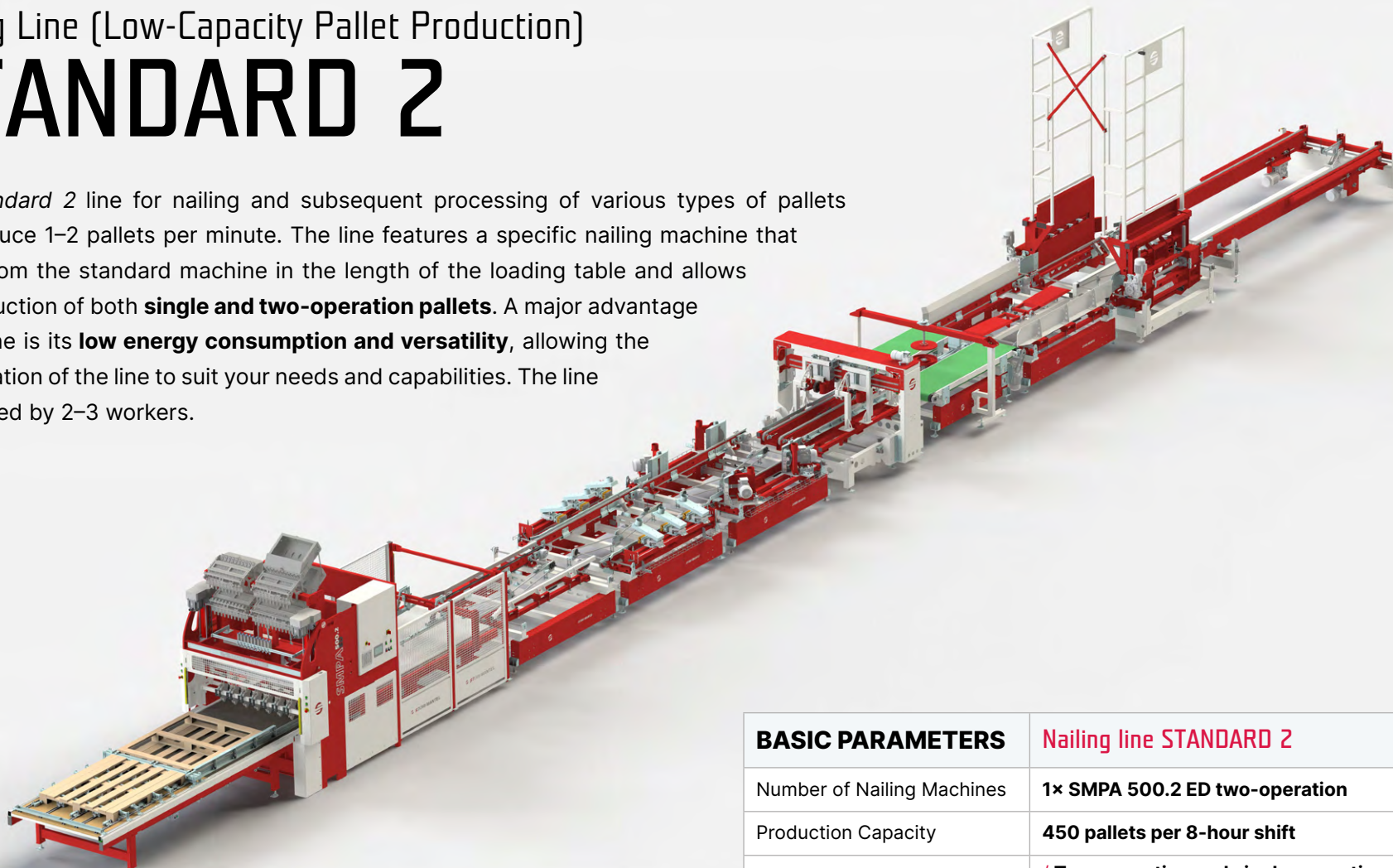
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Nailing Line (Low-Capacity Pallet Production)

STANDARD 2

The *Standard 2* line for nailing and subsequent processing of various types of pallets can produce 1–2 pallets per minute. The line features a specific nailing machine that differs from the standard machine in the length of the loading table and allows the production of both **single and two-operation pallets**. A major advantage of this line is its **low energy consumption and versatility**, allowing the configuration of the line to suit your needs and capabilities. The line is operated by 2–3 workers.



PALLET PRODUCTION

Detailed information about STANDARD 2 line can be found on our website

www.stoerimantel.com



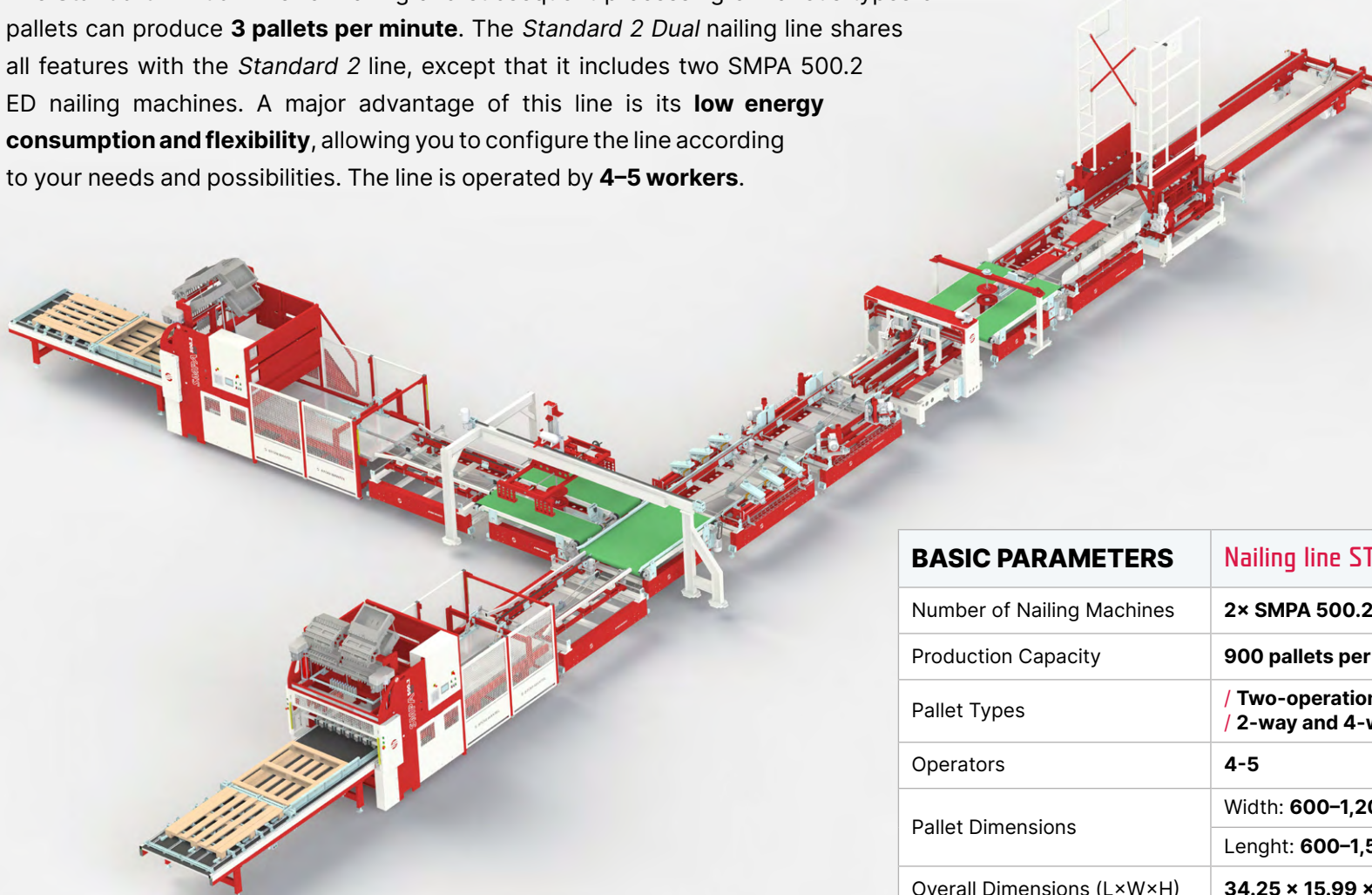
BASIC PARAMETERS	Nailing line STANDARD 2
Number of Nailing Machines	1× SMPA 500.2 ED two-operation
Production Capacity	450 pallets per 8-hour shift
Pallet Types	/ Two-operation and single-operation pallets / 2-way and 4-way pallets
Operators	2–3
Pallet Dimensions	Width: 600–1,200 mm
	Length: 600–1,500 mm
Overall Dimensions (L×W×H)	31 × 3.25 × 3.3 (4.3) m

Due to the continuous development of our machines, the listed data is not binding. For up-to-date specifications, please visit our website or contact our sales representatives.

Nailing Line (Low-Capacity Pallet Production) STANDARD 2 DUAL

The **Standard 2 Dual** line for nailing and subsequent processing of various types of pallets can produce **3 pallets per minute**. The *Standard 2 Dual* nailing line shares all features with the *Standard 2* line, except that it includes two SMPA 500.2 ED nailing machines. A major advantage of this line is its **low energy consumption and flexibility**, allowing you to configure the line according to your needs and possibilities. The line is operated by **4–5 workers**.

Detailed information about **STANDARD 2 DUAL** line can be found on our website
www.stoerimantel.com



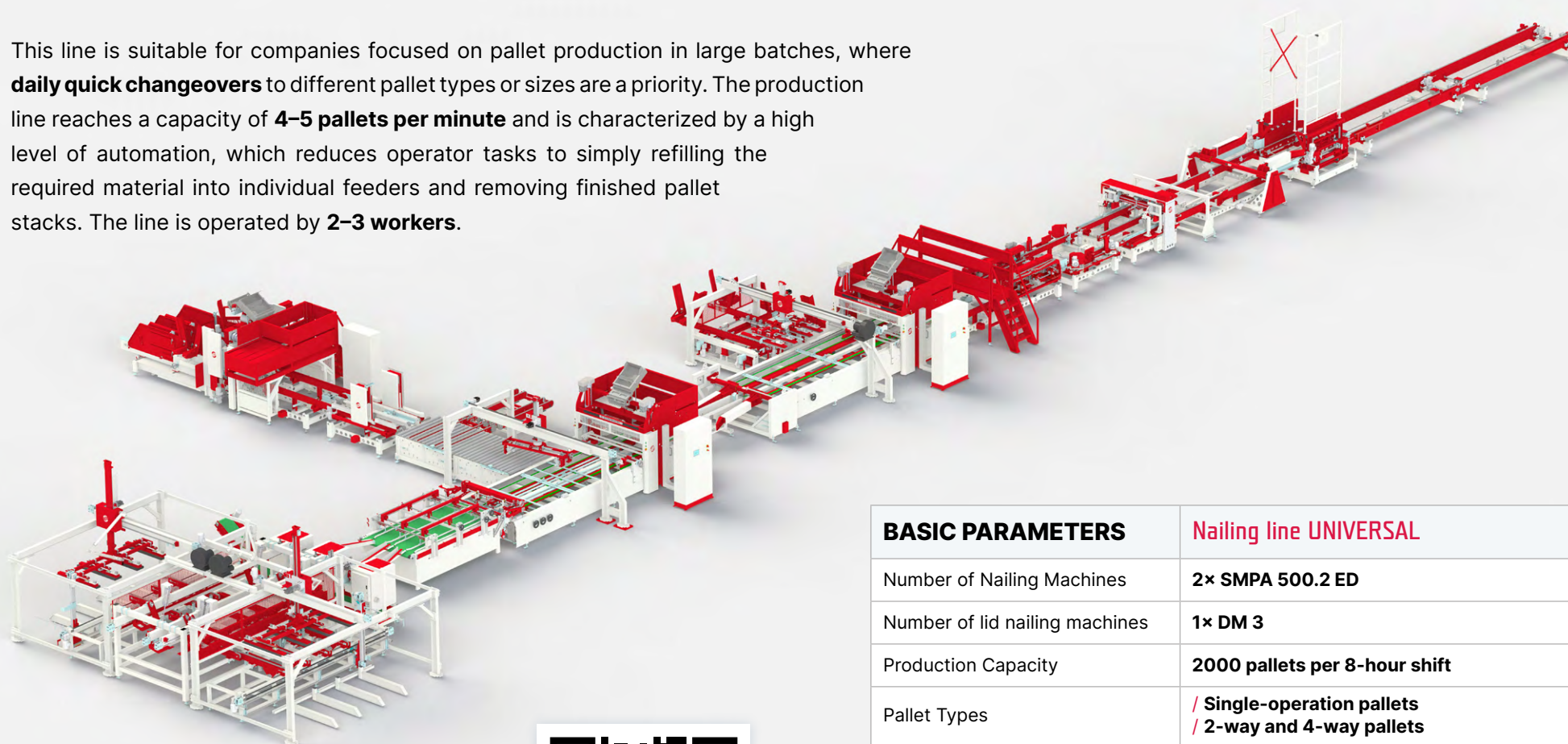
BASIC PARAMETERS	Nailing line STANDARD 2 DUAL
Number of Nailing Machines	2× SMPA 500.2 ED two-operation
Production Capacity	900 pallets per 8-hour shift
Pallet Types	/ Two-operation and single-operation pallets / 2-way and 4-way pallets
Operators	4-5
Pallet Dimensions	Width: 600–1,200 mm
	Length: 600–1,500 mm
Overall Dimensions (L×W×H)	34.25 × 15.99 × 3.3 (4.3) m

Due to the continuous development of our machines, the listed data is not binding. For up-to-date specifications, please visit our website or contact our sales representatives.

Nailing line (high-capacity pallet production)

UNIVERSAL

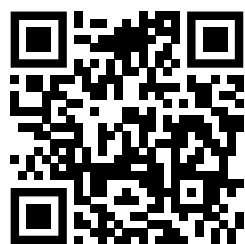
This line is suitable for companies focused on pallet production in large batches, where **daily quick changeovers** to different pallet types or sizes are a priority. The production line reaches a capacity of **4–5 pallets per minute** and is characterized by a high level of automation, which reduces operator tasks to simply refilling the required material into individual feeders and removing finished pallet stacks. The line is operated by **2–3 workers**.



PALLET PRODUCTION

Detailed information about UNIVERSAL line can be found on our website

www.stoerimantel.com



BASIC PARAMETERS	Nailing line UNIVERSAL
Number of Nailing Machines	2× SMPA 500.2 ED
Number of lid nailing machines	1× DM 3
Production Capacity	2000 pallets per 8-hour shift
Pallet Types	/ Single-operation pallets / 2-way and 4-way pallets
Operators	2-3
Pallet Dimensions	Width: 600–1,200 mm
	Length: 600–1,500 mm
Overall Dimensions (L×W×H)	57 × 19.90 × 3.3 (4.3) m

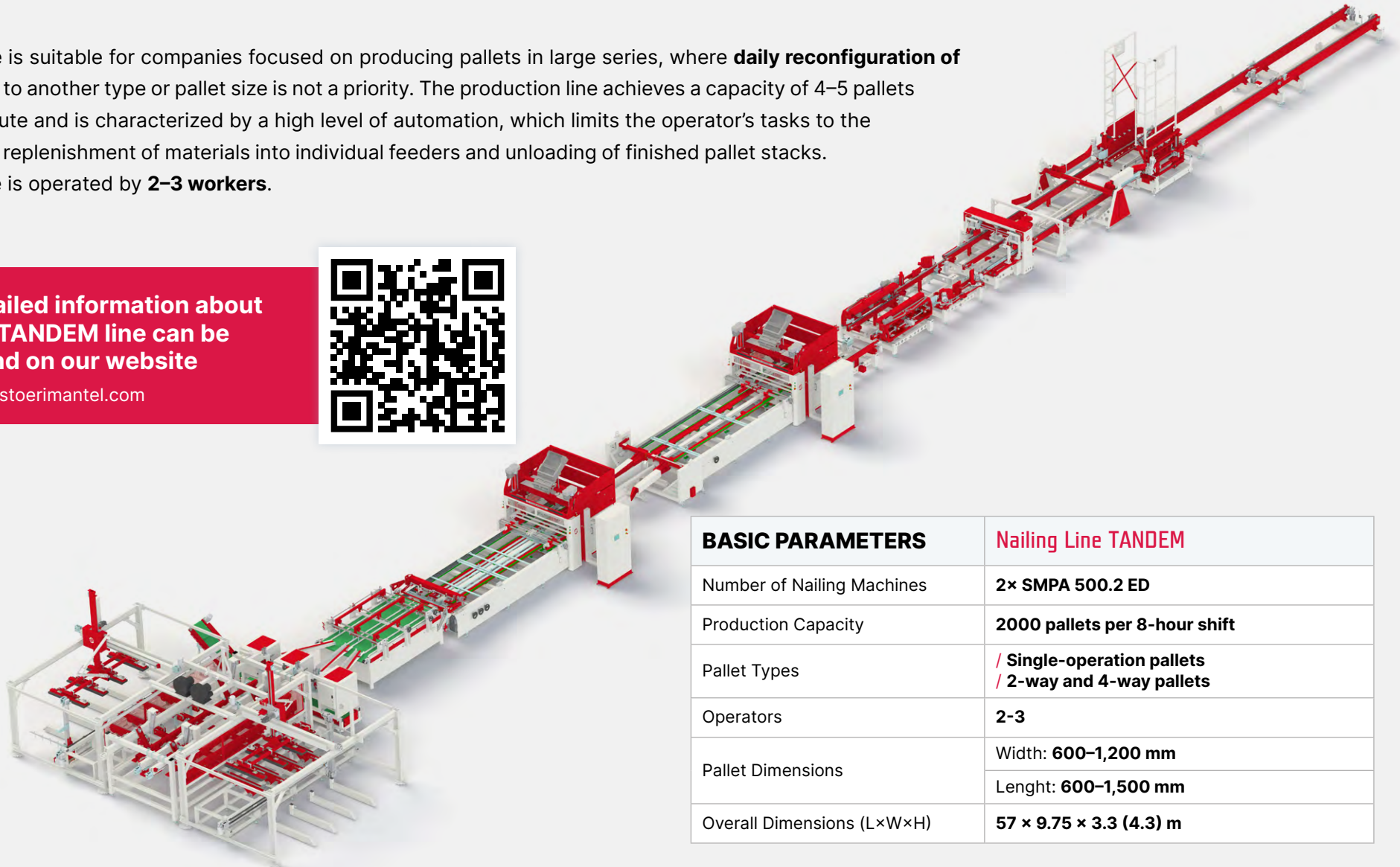
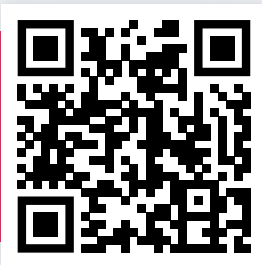
Due to the continuous development of our machines, the listed data is not binding. For up-to-date specifications, please visit our website or contact our sales representatives.

Nailing Line (High-Capacity Pallet Production)

TANDEM

The line is suitable for companies focused on producing pallets in large series, where **daily reconfiguration of the line** to another type or pallet size is not a priority. The production line achieves a capacity of 4–5 pallets per minute and is characterized by a high level of automation, which limits the operator’s tasks to the smooth replenishment of materials into individual feeders and unloading of finished pallet stacks. The line is operated by **2–3 workers**.

Detailed information about the TANDEM line can be found on our website www.stoerimantel.com



PALLET PRODUCTION

BASIC PARAMETERS	Nailing Line TANDEM
Number of Nailing Machines	2× SMPA 500.2 ED
Production Capacity	2000 pallets per 8-hour shift
Pallet Types	/ Single-operation pallets / 2-way and 4-way pallets
Operators	2-3
Pallet Dimensions	Width: 600–1,200 mm
	Length: 600–1,500 mm
Overall Dimensions (L×W×H)	57 × 9.75 × 3.3 (4.3) m

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Nailing Line (High-Capacity Pallet Production)

DYNAMIC MACHINE DM 1

The *DM 1* line is designed for nailing **2-way pallets**, but with the right configuration, it can also handle **pallet decks**. Its main advantage is speed. The *DM 1* line can produce **6–9 pallets per minute**. The line is operated by 2–3 workers.



PALLET PRODUCTION

BASIC PARAMETERS	Nailing line DYNAMIC MACHINE DM 1
Number of Nailing Machines	1× Dynamic Machine
Production Capacity	6–9 pallets per minute
Pallet Types	/ Single-operation pallets / 2-way pallets
Operators	2-3
Pallet Dimensions	Width: 600–1,500 mm
	Length: 600–1,500 mm
	Height: 30-130 mm
Pallet Component Parameters (L×W×H)	Top boards: 600-1,500 × 50 - 150 × 15-30 mm
	Stringers: 600-1,500 × 50-150 × 15-100 mm
Overall Dimensions (L×W×H)	19.9 × 4.99 × 3.3 (4.3) m

Detailed information about the DYNAMIC MACHINE DM 1 line can be found on our website
www.stoerimantel.com



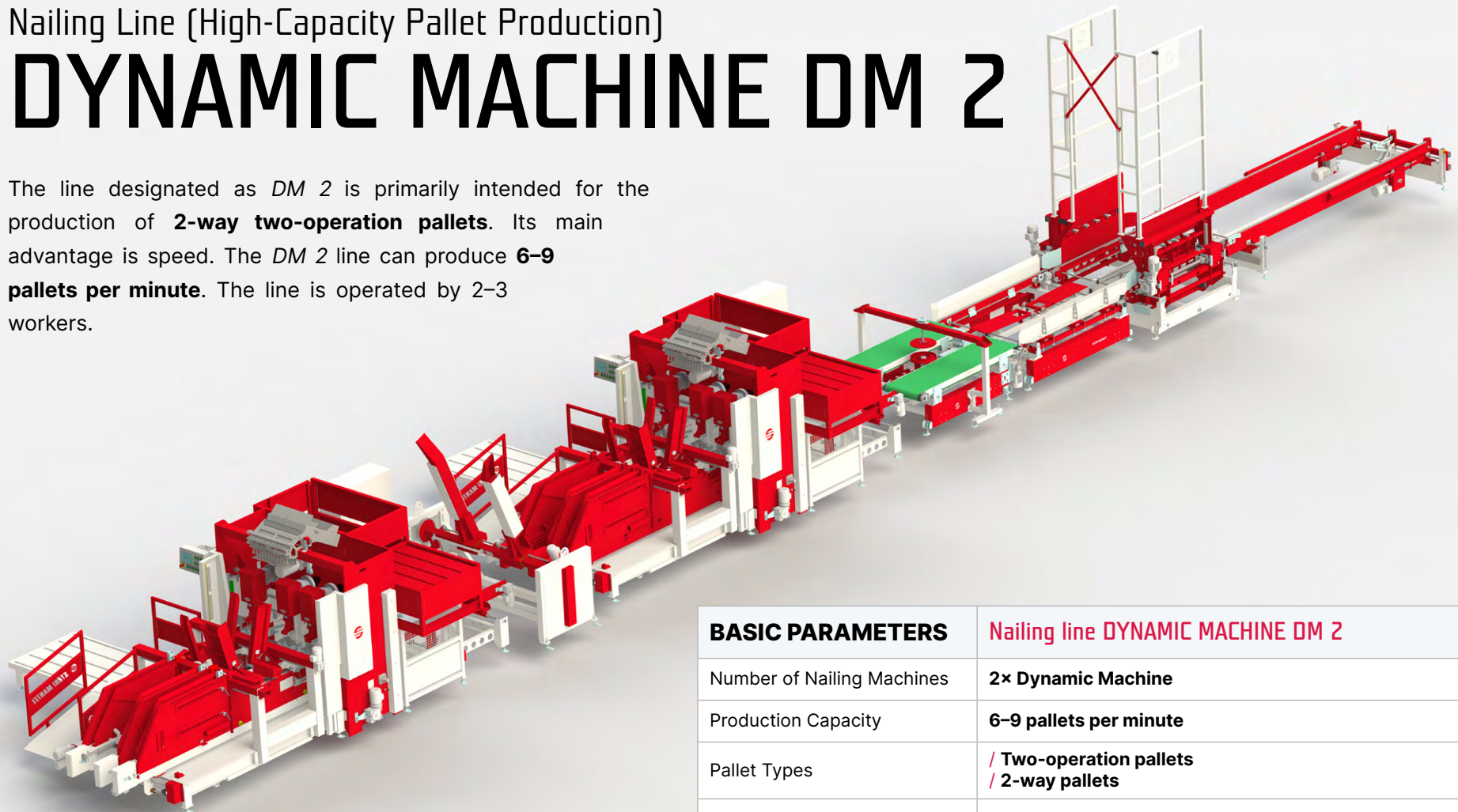
Due to the continuous development of our machines, the listed data is not binding. For up-to-date specifications, please visit our website or contact our sales representatives.



Nailing Line (High-Capacity Pallet Production)

DYNAMIC MACHINE DM 2

The line designated as *DM 2* is primarily intended for the production of **2-way two-operation pallets**. Its main advantage is speed. The *DM 2* line can produce **6–9 pallets per minute**. The line is operated by 2–3 workers.



Detailed information about the **DYNAMIC MACHINE DM 2** line can be found on our website www.stoerimantel.com



BASIC PARAMETERS	Nailing line DYNAMIC MACHINE DM 2
Number of Nailing Machines	2× Dynamic Machine
Production Capacity	6–9 pallets per minute
Pallet Types	/ Two-operation pallets / 2-way pallets
Operators	2-3
Pallet Dimensions	Width: 600–1,500 mm
	Length: 600–1,500 mm
Pallet Component Parameters (L×W×H)	Top boards, Bottom boards: 600–1,500 × 50–150 × 15–30 mm
	Stringers: 600–1,500 × 50–150 × 30–100 mm
Overall Dimensions (L×W×H)	27.99 × 4.99 × 3.3 (4.3) m

Due to the continuous development of our machines, the listed data is not binding. For up-to-date specifications, please visit our website or contact our sales representatives.



Production of Pallet Decks (Pallet Components)

DYNAMIC MACHINE DM 3

This line is primarily designed for the production of **pallet decks**, but with the right configuration, it can also handle **2-way pallets**. Its main advantage is **speed**. The *DM 3* line can produce **6-9 decks per minute**. The line is operated by 2-3 workers.



PALLET PRODUCTION

BASIC PARAMETERS	Nailing line DYNAMIC MACHINE DM 3
Number of Nailing Machines	1× Dynamic Machine
Product Types	/ Pallet decks / Single-operation pallets / 2-way pallets
Operators	2-3
Lids Dimensions	Width: 600-1,500 mm
	Length: 600-1,500 mm
	Height: 30-60 mm
Lids Component Dimensions (L×W×H)	Top boards, Stringer boards: 600-1,500 × 50-150 × 15-30 mm
Overall Dimensions (L×W×H)	13.99 × 5.29 × 3.3 m

Detailed information about the DYNAMIC MACHINE DM 3 line can be found on our website

www.stoerimantel.com



Due to the continuous development of our machines, the listed data is not binding. For up-to-date specifications, please visit our website or contact our sales representatives.



Production of Pallet Legs (Pallet Components)

LEG MACHINE SMLM 4K ED

The *LEG MACHINE* is a specialized machine designed for the **production of pallet legs**, also referred to as pallet base components. It is used to nail together lower deck boards and blocks of wooden pallets and operates using a proven electromechanical nailing system.

Thanks to its high production speed, **easy single-operator control**, and low maintenance requirements, the machine significantly boosts manufacturing efficiency, reduces operating and labor costs, and accelerates the overall pallet production process.



PALLET PRODUCTION

Detailed information about the LEG MACHINE SMLM 4K ED can be found on our website
www.stoerimantel.com



BASIC PARAMETERS	LEG MACHINE SMLM 4K ED
Production capacity	6–9 base components per minute
Product Types	Legs made of boards and blocks of the same size
Operators	1-2
Base dimensions	Length: 600–1,500 (optionally up to 3,000 mm)
	Board width: 60-150 mm
	Board thickness: 12-25 mm
	Blocks (L×W×H): 60-150 × 60-150 × 60-100 mm
Overall Dimensions (L×W×H)	5 (8) x 2.3 x 3.3 m

Due to the continuous development of our machines, the listed data is not binding. For up-to-date specifications, please visit our website or contact our sales representatives.



Chamfering and Cutting Line

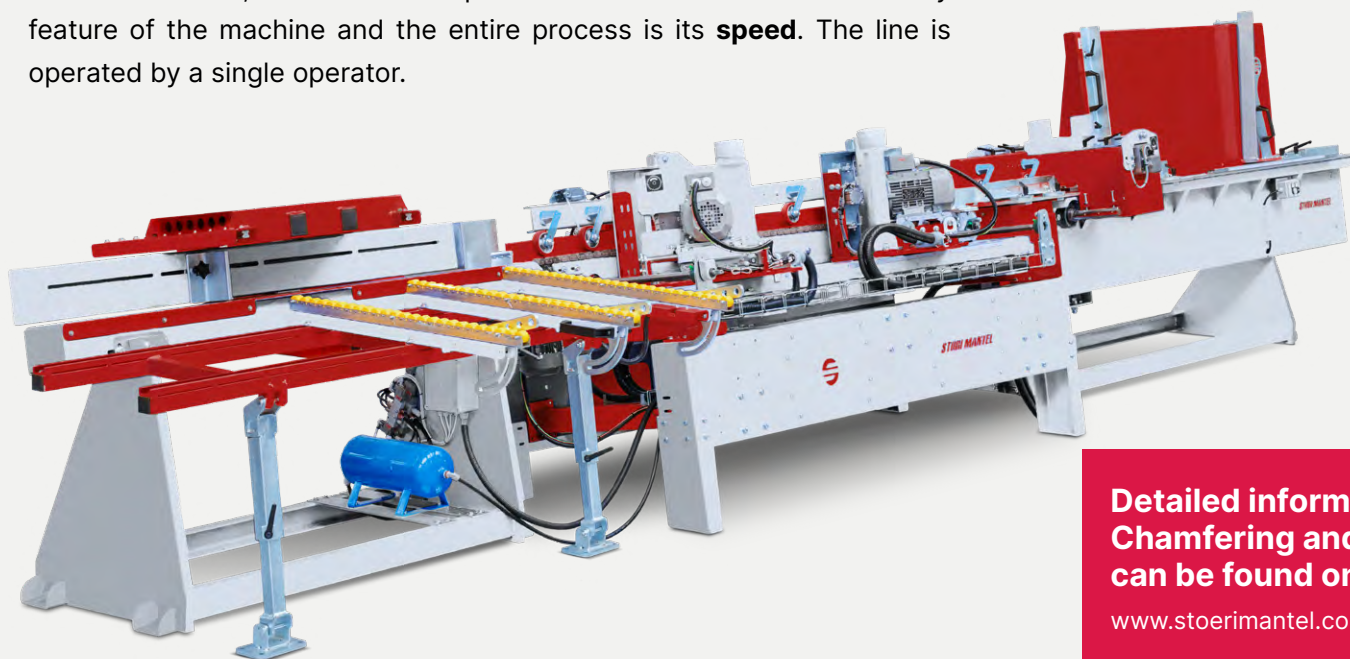
SMBF

This is a simple device designed for the **preparation of deck boards**, which are subsequently inserted into pallet nailing machines. The line is equipped with a board magazine from which the material is transferred onto a conveyor and into the chamfering station. The **chamfering unit mills the leading edge** of the board, which is then used as part of the pallet base most commonly for EUR pallets.

The line can also be equipped with a station for **cutting board corners**. At the outfeed, there is a stacking system that stacks approximately five boards at a time, which are then pushed onto the outfeed table. A key feature of the machine and the entire process is its **speed**. The line is operated by a single operator.

BASIC PARAMETERS	SMBF
Production capacity	6–9 boards per minute
Product Types	Boards with chamfered leading edges, optionally with trimmed corners
Operators	1
Board Dimensions	Length: 700–1,500 mm (optionally up to 3,000 mm)
	Width: 50-150 mm
	Thickness: 15-30 mm

Due to the continuous development of our machines, the listed data is not binding. For up-to-date specifications, please visit our website or contact our sales representatives.



Detailed information about the Chamfering and Cutting Line - SMBF can be found on our website

www.stoerimantel.com





Nailing Quality Control

Smart Nail System

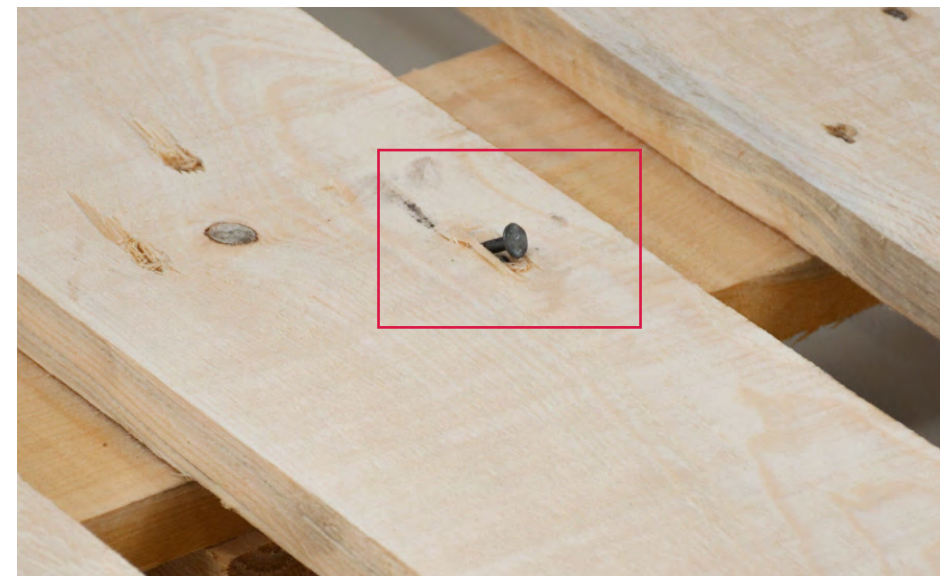
Because every nail matters

During automatic pallet nailing, it can occasionally happen that a nail is not properly driven in. A camera system continuously monitors the output from the nailing machine and analyzes the image using software.

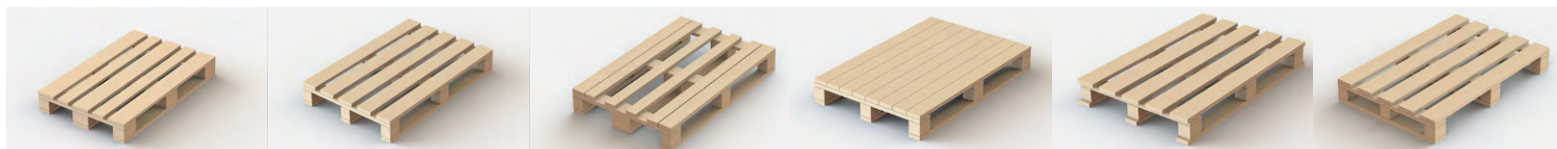
It uses **artificial intelligence** algorithms, similar to those found in autonomous vehicles that detect pedestrians, vehicles, and other road users, or like inspection systems in modern production lines that continuously monitor the quality and precision of component assembly.

In this case, the software is trained to inspect nailed pallets and **detect anomalies**, such as improperly driven nails or other defects. If any of these issues are detected, the system **alerts the operator** via visual and acoustic signals.

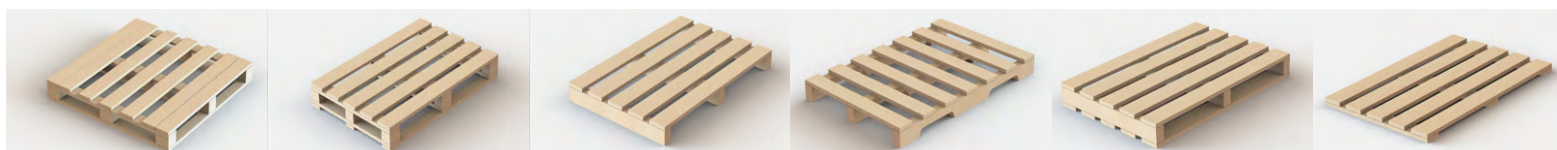
In this way, an additional **final quality** inspection is ensured.



Pallets



LINE	PALLET TYPE	4-way entry Euro (Epal)	4-way entry Classic	4-way entry Even Top Boards	4-way entry Fully Decked	4-way entry Winged	4-way entry Crossed
STANDARD		✓	✓	✓	✓	✓	-
STANDARD DUAL		✓	✓	✓	✓	✓	-
STANDARD 2		✓	✓	✓	✓	✓	✓
STANDARD DUAL 2		✓	✓	✓	✓	✓	✓
TANDEM		✓	✓	✓	✓	✓	✓
UNIVERSAL		✓	✓	✓	✓	✓	✓
DYNAMIC MACHINE 1		-	-	-	-	-	-
DYNAMIC MACHINE 2		-	-	-	-	-	-
DYNAMIC MACHINE 3		-	-	-	-	-	-



LINE	PALLET TYPE	4-way entry Perimeter Base	4-way entry Doubled	2-way entry Classic	2-way entry Stringer	2-way Reversible	Pallet Deck
STANDARD		-	-	✓	✓	-	✓
STANDARD DUAL		-	-	✓	✓	-	✓
STANDARD 2		✓	✓	✓	✓	✓	✓
STANDARD DUAL 2		✓	✓	✓	✓	✓	✓
TANDEM		✓	✓	✓	✓	✓	-
UNIVERSAL		✓	-	✓	✓	✓	✓
DYNAMIC MACHINE 1		-	-	✓	✓	-	✓
DYNAMIC MACHINE 2		-	-	✓	✓	✓	✓
DYNAMIC MACHINE 3		-	-	-	-	-	✓

Application Examples



PALLET PRODUCTION



Mechanization

SM-VM 01

Vacuum Handler

The Vacuum handler *SM-VM 01* is suitable wherever **unattended** handling of material from a stack to the next operation is needed. The material in the stack can be interleaved with stabilization sheets or spacers in each layer.



Learn more about SM-VM 01
on our website

www.stoerimantel.com



SM-RH

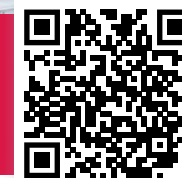
Timber Dismantler

The Timber dismantler *SM-RH* is designed for separating individual layers of material, specifically wooden boards or bottom deck boards from a stack. For faultless separation, it is essential to place interleaves between each layer. This mechanization replaces manual layer separation, which is physically demanding for operators.



Learn more about SM-RH
on our website

www.stoerimantel.com



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