

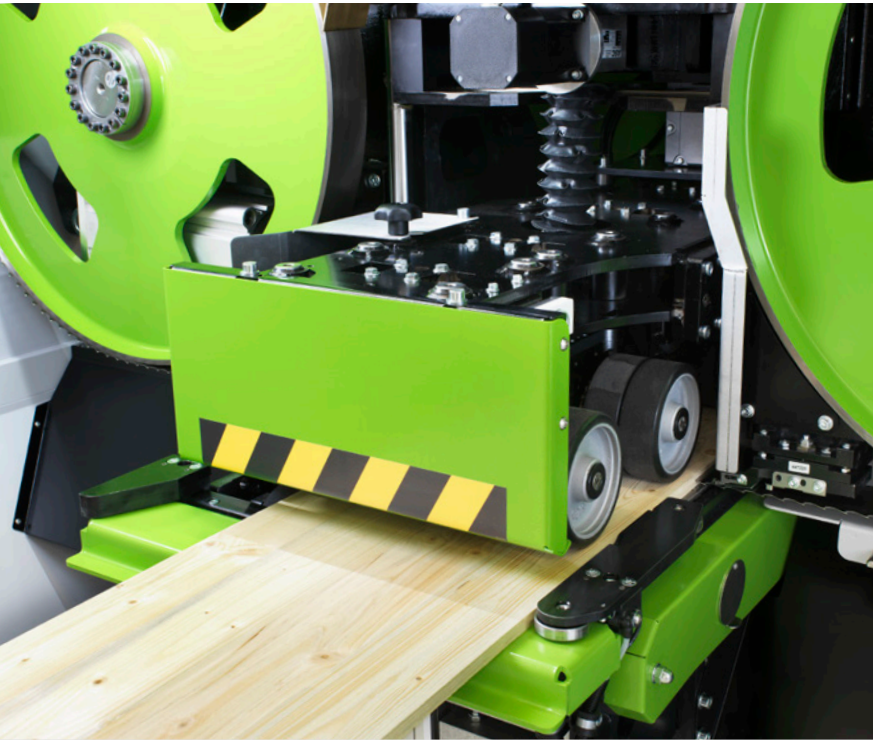
Thin-cutting band saw

DSB Singlehead Pro XM

 **WINTERSTEIGER**
Thinking about tomorrow.

DSB Singlehead Pro XM

Flexible thin-cutting band saw



Highest precision for maximum efficiency and flexibility.

The DSB Singlehead Pro XM is perfect for when changing demands require maximum flexibility. Numerous features make cutting wood possible even under the most difficult conditions – regardless of the wood type and application area.

The machine's intelligent design makes future capacity expansions child's play: A simple in-line extension of the band saw up to 6 machines allows for complete flexibility. The robust design and WINTERSTEIGER's decades of expertise guarantee maximum machine performance and a quick reinvestment.

As the global market leader, WINTERSTEIGER band saws are used in many sectors where the focus is on efficiency and quality.

If you are looking for customized solutions for non-wood materials, please ask us!



Your benefits:

Robust block guide for a wide range of applications

- Driven feed rollers at top and bottom
- Continuous, solid supporting table with special coating
- Processing of any block characteristics

High-tech saw control for the greatest precision

- Gentle saw blade entry for better cutting performance
- Sensor-controlled saw monitoring
- High-tech carbon guides

Maximum flexibility and efficiency

- Optimized for wet and dry cutting
- Designed for diverse applications
- Extendable to up to 6 machines in-line

Maximum profit – minimal kerf

Those who want to remain successful in the future must keep a firm hand on conserving material in these times of raw material shortages and subsequent high prices, as this trend will only become more prevalent going forward.

Fortunately, conserving material is a specialty of the DSB Singlehead Pro XM. WINTERSTEIGER promises minimal kerf, paired with maximum precision. This allows an increase in timber yield of up to 40 % compared to conventional wood-cutting methods.

Lamella thickness from 1.3 mm.

The highly innovative combination of thin saw blades along with a precise saw blade guiding and a sturdy block feeding system makes it possible to produce extremely thin lamellas.

Thanks to this masterly technical performance, the DSB Singlehead Pro XM closes the gap between classic veneer and high-quality saw veneer.



Your gain: Up to 40 % more timber yield

Regular cut with increased loss caused by a lack of precision.

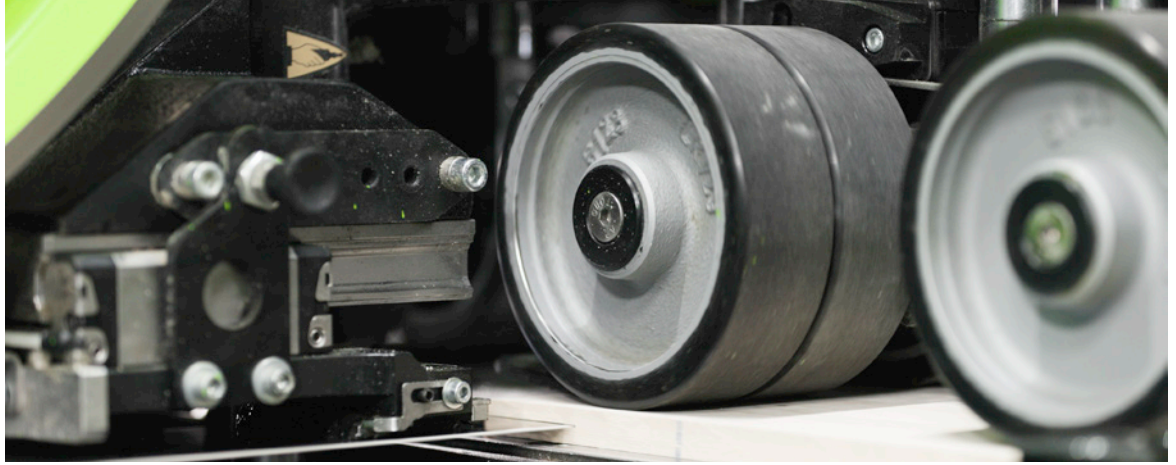


WINTERSTEIGER thin-cutting with minimal cutting loss and maximum precision!



With its flexible design, extremely low cutting loss and 32 kW drive as standard, the DSB Singlehead Pro XM impresses with outstanding performance and efficiency gains. These gains result from savings in both materials and machine time that have a positive effect for any kind of application.

No matter whether you are cutting wood or alternative materials, wet or dry conditions, irrespective of plank dimensions or XXL formats, requests for a single cut or a high-capacity production line – WINTERSTEIGER assures the most precise cut with the lowest possible material loss.



Robust block guide for a wide range of applications

Innovative feeding system.

Driven feed rollers above and below guarantee continuous block feeding, even when faced with extreme workpiece characteristics. The specially rubberized feed rollers and the innovative counter-pressure system guarantee optimum grip as well as minimum friction for wet or dry material.

The specially coated supporting table simultaneously ensures that the workpiece is as stable as possible. The feed rollers are electronically controlled and infinitely adjustable at the infeed and out-feed (4 – 20 m/min). The vertical stabilization of the workpiece in the cutting area is the basis for the perfectly precise cut.

The DSB Singlehead Pro XM owes its unusually high level of precision to the specially coated supporting table. Additional driven pressure rollers immediately above the cutting area guarantee the constant stability of the workpiece across its full width. This gives you the ability to cut not only pre-planed material, but also uneven and rough-sawn blocks with longitudinal or latitudinal deformations or that are warped or cupped.

Optimal feeding for every application.

The DSB Singlehead Pro XM facilitates high-speed feeding of 8 to 45 m/min for high-performance applications in the highest capacity range. For precision or special applications with sensitive materials or XXL dimensions, infinitely variable feed control (from 1 to 15 m/min) is available.



Blocks with longitudinal/latitudinal deformation, cupped or warped



Block dry cutting



Block wet cutting

DSB Singlehead Pro XM

Think digital

High-tech saw control for the greatest precision

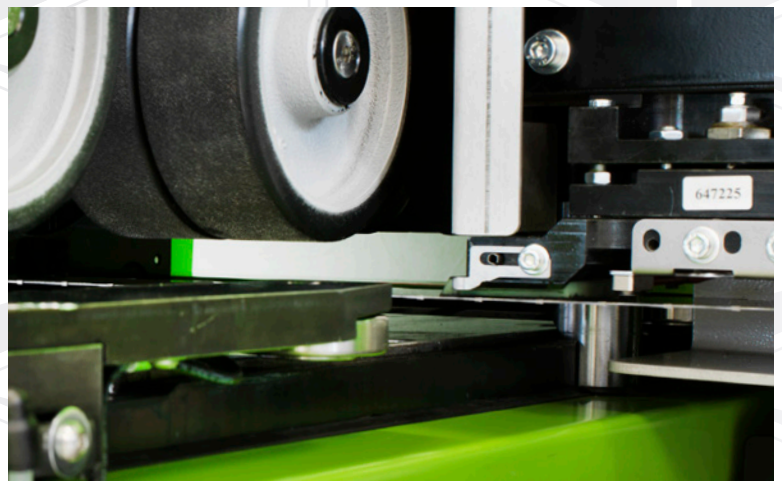


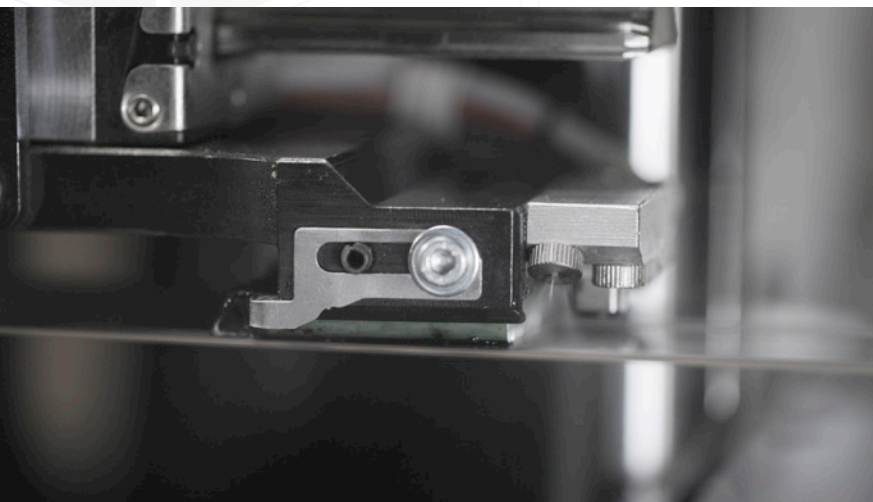
Smooth saw blade entry for better cutting performance.

The smooth saw blade entry system goes easy on the saw and improves the quality of the output. Thanks to the reduced speed at entry of the sawblade into the wooden block, the forces working on the saw are minimized: the deflection of the blade is reduced. Once the blade is completely submerged in the wooden block, the speed of the feed is increased again.

Sensor-controlled saw monitoring.

The system has sensors for monitoring the pressure on the saw blade guide and the space between the saw blade and the saw blade guide. When a certain level of tolerance is exceeded, for example by the blade jumping out of the guide and drifting while cutting the wood, the material feed is automatically stopped and the wood remains in its current position. Once the cause has been remedied, the feed can be restarted and the machine returns to normal operation. Stopping the saw prevents greater deviation from the desired cut.

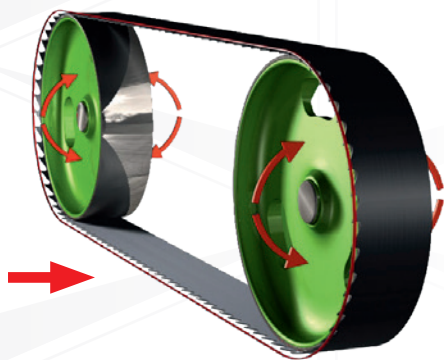




Extrem abriebfeste Hightech-Carbon-Führung

High-tech carbon guides.

This high-tech composite material made of abrasion-proof carbon fibers and heat-resistant epoxy resin guarantees precise blade guiding and an extremely long lifetime.



Automatic saw blade regulation.

When cutting non-homogeneous materials such as wood, the saw blade is exposed to different cutting forces. The automatic saw blade regulation uses a sensor to detect the displacement of the saw blade caused by differences in cutting force. An adjusting mechanism driven by an electromotor controls the pulleys accordingly and guarantees the optimum positioning of the saw blade. This prevents also the saw blade running off the pulley.



Servo-pneumatic saw blade tensioning.

A servo valve controls the saw blade tension, which is adjusted to match the saw blade dimensions. During non-operating hours, the tension is reduced to prevent wear on the saw blade.

Your benefits:

- **Saw blade protection:** A loss of tension on the saw blade through overstretching is prevented.
- **Machine protection:** The machine components are protected because the feed or the machine is stopped when the blade drifts.
- **Material protection:** Saw blade drift is detected early, preventing tolerances from being exceeded and reducing waste.
- **Tool costs:** The graphic display allows proactive retooling at precisely the right time.

DSB Singlehead Pro XM

Maximum flexibility and efficiency

Optimized for wet and dry cutting.

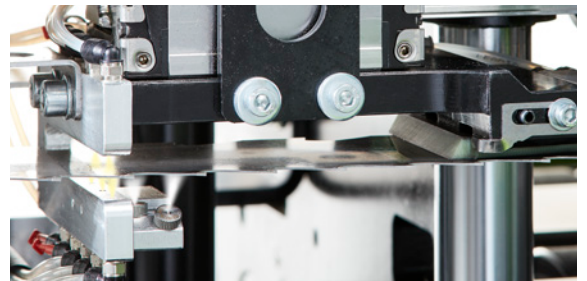
Flexibility means being equipped for any demands and the challenges they bring. Whether it is the cutting width, maximum block height of 165 mm or the innovative spraying system – everything about the DSB Singlehead Pro XM is geared toward flexibility.

Innovative spraying system for wet cutting.

Spraying the saw tooth with a special, highly wood-compatible spraying agent creates a vapor that lubricates and cools the saw blades. The spraying intervals can be customized according to necessity. The benefits: improved lifetime of the thin-cutting saw band thanks to reduced friction and the prevention of resin build-up. The benefits of the spraying system are particularly evident when cutting wet wood. But it also demonstrates its performance in applications involving wood species with a high resin or silicate content.

Optional spraying with water.

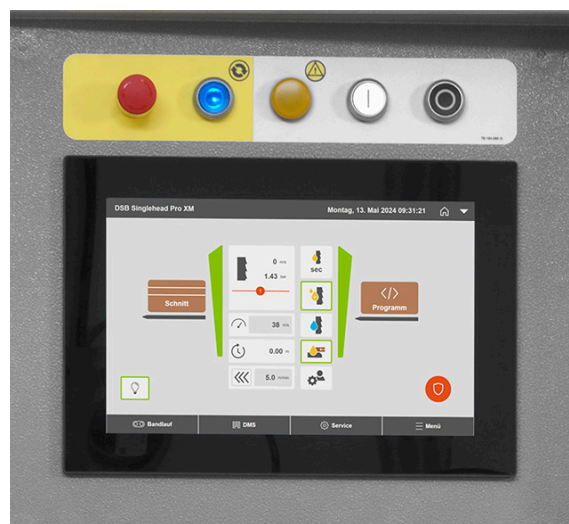
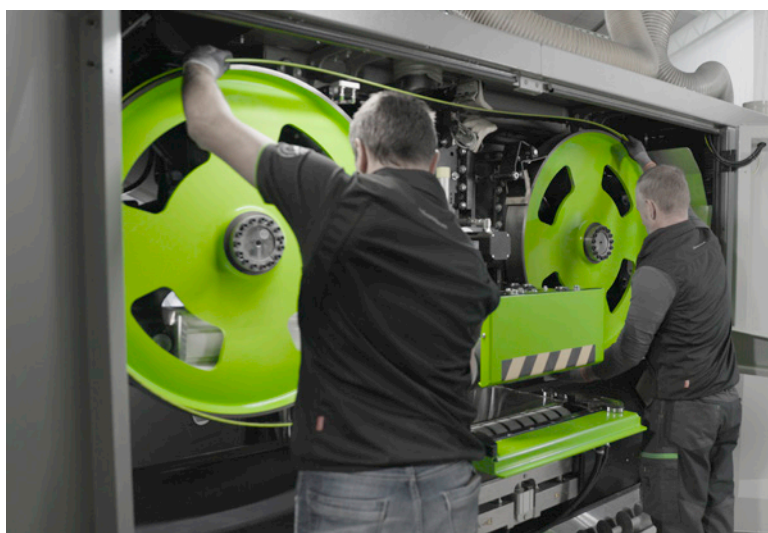
As an alternative to conventional spraying agents, water is also well-suited for the processing of certain kinds of wet wood. A small amount is sprayed on the tips of the teeth and loosens the mass of wet sawdust, resin and lubricant. The lateral clearance angles of the saw therefore remain clean and functional. Water as a spraying agent can be combined with conventional agents or employed separately as needed.



Clear and straightforward with a practical wood program.

The clear user interface facilitates quick and straightforward setting of all desired parameters. From apprentices to experts – the user guidance is comprehensible for everyone. All important settings can be applied clearly on the start screen.

A practical feature is the memory function in the software for commonly recurring process parameters. Multilingual user guidance and numerous service and help menus are further bonuses, aiding the user with cutting, wood and sawing programs, operating data logging, diagnosis and maintenance indicators, etc.



First-class ergonomics and ease of maintenance

First-class ergonomics and ease of maintenance for maximum machine availability.

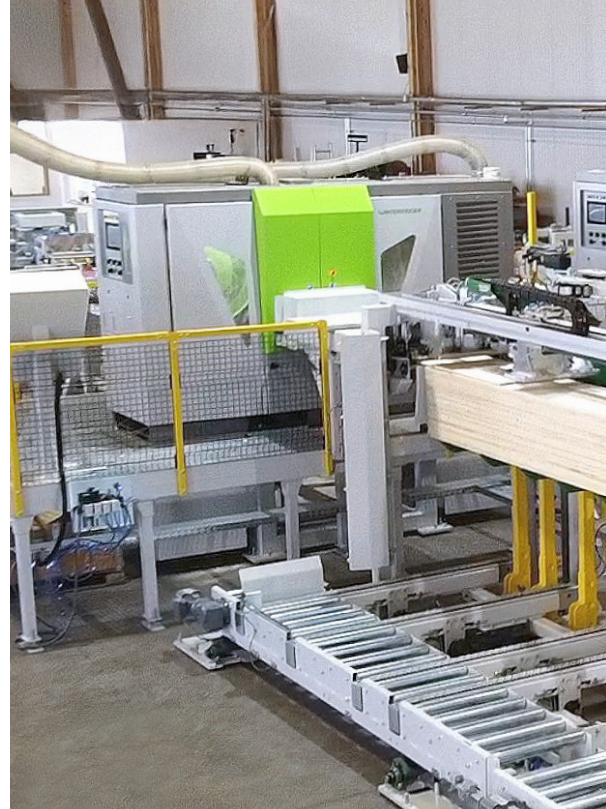
The DSB Singlehead Pro XM also offers maximum comfort for maintenance. The arrangement of the components and accessibility to the infeed and outfeed areas guarantee rapid retooling and quick maintenance work.

The design of the machine floor and the optional dust transport auger significantly aid cleaning. This minimizes maintenance and cleaning-related machine downtimes: A basic requirement for high machine availability.

Conveyor systems

Diverse applications require flexible material-handling options

Depending on the application area and its requirements, WINTERSTEIGER offers a wide range of timber transport options. From robust roller conveyors to fully automated production systems, the possibilities for optimizing your production processes are almost endless.



Hinged roller conveyors and powered roller conveyors.

The stable support for long blocks at the machine's in- and out-feed ensures precise cutting. For this purpose WINTERSTEIGER has developed massive roller conveyors and powered roller conveyors in lengths of 2.5 m, 4 m and 5.5 m. The hinged conveyor systems also offer easy access to the machine door for rapid tool change.

Feeding magazine – an easy way to boost efficiency.

Inserting multiple blocks of wood into the feeding magazine helps to eliminate interruptions in the workflow and the use of materials. It enables employees to operate multiple machines or run multiple work processes at the same time.

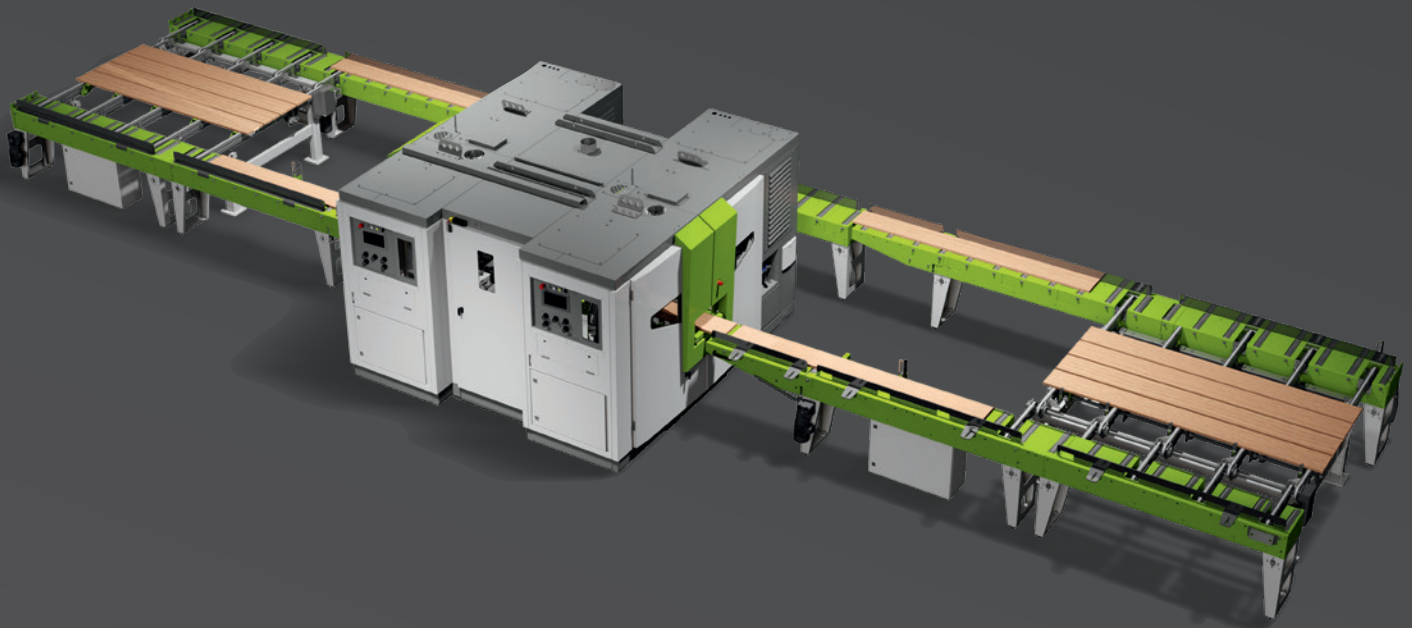
The feeding magazine and the thin-cutting band saw work together perfectly: Combined software controls prevent operating errors – the feeding magazine adapts to the feeding speed of the machine.

It is very easy to set different block heights mechanically.



Customer-specific complete systems

Within the WINTERSTEIGER Group, VAP-WINTERSTEIGER is the plant engineering and automation specialist. Renowned manufacturers from around the world swear by the „MADE IN AUSTRIA“ systems.



Convenient reversing system.

The reversing system is a user-friendly solution to use a stand-alone DSB Singlehead Pro XM with one operator only. Working with the reversing system, the operator positions the workpiece manually on the roller conveyor. After the cut, the block is returned to its starting position, and the saw blade is automatically positioned for the next cut. This process is repeated – without the need to reset the machine – until the whole block has been cut. One major benefit of this option is that the complete cutting process is fully automated. Apart from removing the cut lamella, there is no need for manual intervention. And there is no need to reposition the saw blade manually.

Merry-go-round:

Minimal staff – maximum profit.

Let the block run around in circles while you minimize your personnel requirements. The tried and tested merry-go-round system can be individually adapted to your requirements. A number (defined by the customer) of wooden blocks are positioned on the merry-go-round system. Full integration into DSB Singlehead Pro XM's machine software allows individual programs to be stored and wooden blocks to be processed almost fully automatically. The entire process can be operated by just one employee. This employee always loads the wooden blocks and unloads the cut lamellas from the same position.



6 DSB Singlehead Pro XM connected in series with a total of 6 saw modules

From an individual machine to a multi-module production system

DSB Singlehead Pro XM – a machine concept that grows with your capacity requirements. You start with an individual thin-cutting band saw and expand as required into a complete production system with up to 6 machines. The production systems form complete manufacturing units with a compact design. The automation of, and integration into, individual process solutions are among WINTERSTEIGER's core competences.

In comparison to alternative machine concepts, accessibility to all saw units and machine components – despite their compact design – is WINTERSTEIGER's core premise, even with multi-module arrangements. This accessibility improves ergonomics and reduces setting-up, configuration and saw-blade replacement times to a minimum, thus increasing machine output.



Remote service

Quality and speed are the deciding factors in the event of a breakdown



WINTERSTEIGER sales and service networks guarantee optimum support in case of technical queries and fastest possible support by professional service technicians.

In addition, to improve availability and reduce response times, you also have the option of equipping your WINTERSTEIGER thin-cutting band saws with remote service. You are always only seconds away from professional troubleshooting with WINTERSTEIGER remote service. Your machine's online connection is the direct link to our Technical Customer Service. Error detection and diagnosis are done almost in real time, along with data analyses, optimizations, and service measures. WINTERSTEIGER remote service works with LAN/WAN/GPRS/UMTS/HSDPA.

YOUR BENEFITS:

- Increased machine availability
- Shorter downtimes thanks to remote diagnosis
- Reduced maintenance costs
- Routine transmission of current software updates
- Data backup and secure spare part identification
- Support of maintenance staff and service crew
- Machine downtime is avoided

OUR SERVICES:

- Provision of the hardware (router)
- Registration on the WINTERSTEIGER remote service portal
- Free remote service for the first year (service can be extended by maintenance agreement)



After-sales service

When the delivery ends the support begins

The best time to evaluate the quality of an investment is several years after delivery. For this reason, WINTERSTEIGER has an after-sales service that is available to you all over the world.

Installation and training.

WINTERSTEIGER ensures both with its experts world-wide and of course on site.

Support.

We provide continuous support to quickly optimize the profitability of the machine for our customers.

Proactive maintenance.

Maintenance and preventive active replacement of pre-defined wear parts at firmly defined times (e.g. during company holidays) which also helps to keep maintenance and repair costs to a minimum.

Contracts for consumables and saw blades.

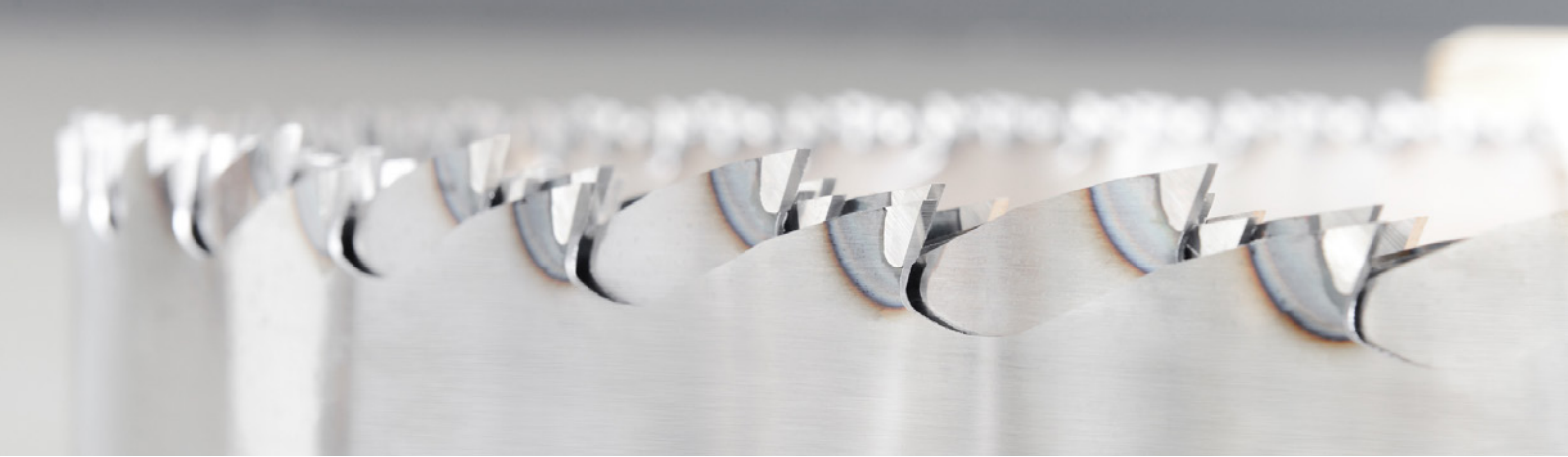
These agreements enable us to plan our annual requirements in advance and save costs which of course we pass on immediately to our customers.

Other benefits:

- Just-in-time delivery of saw blades
- Availability at short notice
- Warehousing of saw blades by WINTERSTEIGER

Helpdesk on call service.

This service underlines our high level, global service commitment to our partners and ensures first-class support even outside our normal business hours.



Saw blades

Developed and produced by
Wintersteiger itself



Customers with exacting requirements require individual tools. WINTERSTEIGER supplies the best material, optimum saw blade dimensions, and tooth geometries in line with requirements.

WINTERSTEIGER is able to supply the perfect blade for frame or band saws, meeting all customer needs. The extremely thin kerf, along with the highest possible precision, is the ideal basis for manufacturing high-quality products and is providing additional earning opportunities for each customer. For WINTERSTEIGER, shortest delivery times with greatest possible flexibility go without saying.

Thin-cutting systems and band saws from WINTERSTEIGER are impressive!

OPTIMUM SOLUTION

- 30 years of know-how with all types of wood
- References from all over the world
- Broad product range with different base materials, tooth pitches and kerfs
- Customer-oriented saw development
- Optimum wood yield using appropriate tools

MAXIMUM COST-EFFECTIVENESS

- Immediate further processing of the lamella without subsequent calibration
- Kerf from 0.7 mm
- Clean lamella surface
- Maximum lamella precision
- Efficient use of material thanks to constantly perfect kerf

RELIABLE PARTNER

- Top quality servicing of machines, tools and saws
- Customized systems for your success
- Consistently high quality and ability to supply
- High level of customer satisfaction

The pooled timber expertise of WINTERSTEIGER



The company started out in 1970 with the development of the thin-cutting frame saw and has since become the world market leader in precision thin-cutting of wood. We have gradually expanded our portfolio along the value chain of our customers.

Today we offer solutions spanning the entire timber industry – from the saw blade through fully automated woodworking machines to optimizing your production area with customer-specific automation solutions.

The World of Solutions combines four WINTERSTEIGER companies, each of which is a top player in its own right:

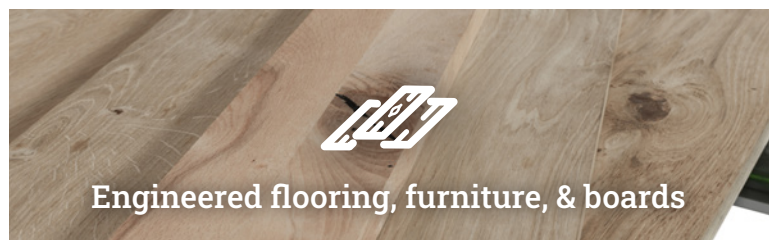
- WINTERSTEIGER Solutions GmbH in Ried, Austria, an international provider of thin-cutting saws, process solutions for parquet, furniture, and panels, TRC timber surface repair & cosmetics, as well as plant and automation solutions.
- WINTERSTEIGER Sägen GmbH in Arnstadt, Germany, one of the largest and most modern saw blade manufacturers in Europe
- SERRA Maschinenbau GmbH in Rimsting, Chiemsee, leading manufacturer of broadband sawmills in Germany
- Heermann Maschinenbau GmbH Frickenhausen, Germany, an internationally active company specializing in cutting solutions for lightweight materials and technical composites



Saw blades



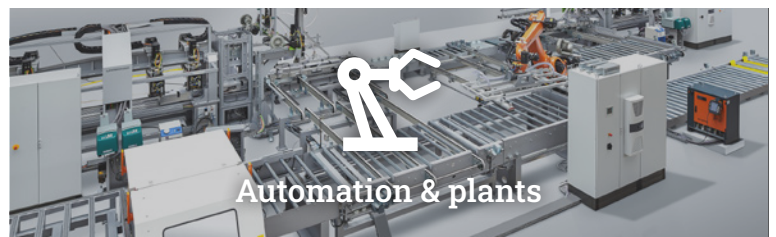
Sawmill technology



Engineered flooring, furniture, & boards



Composite cutting systems



Automation & plants

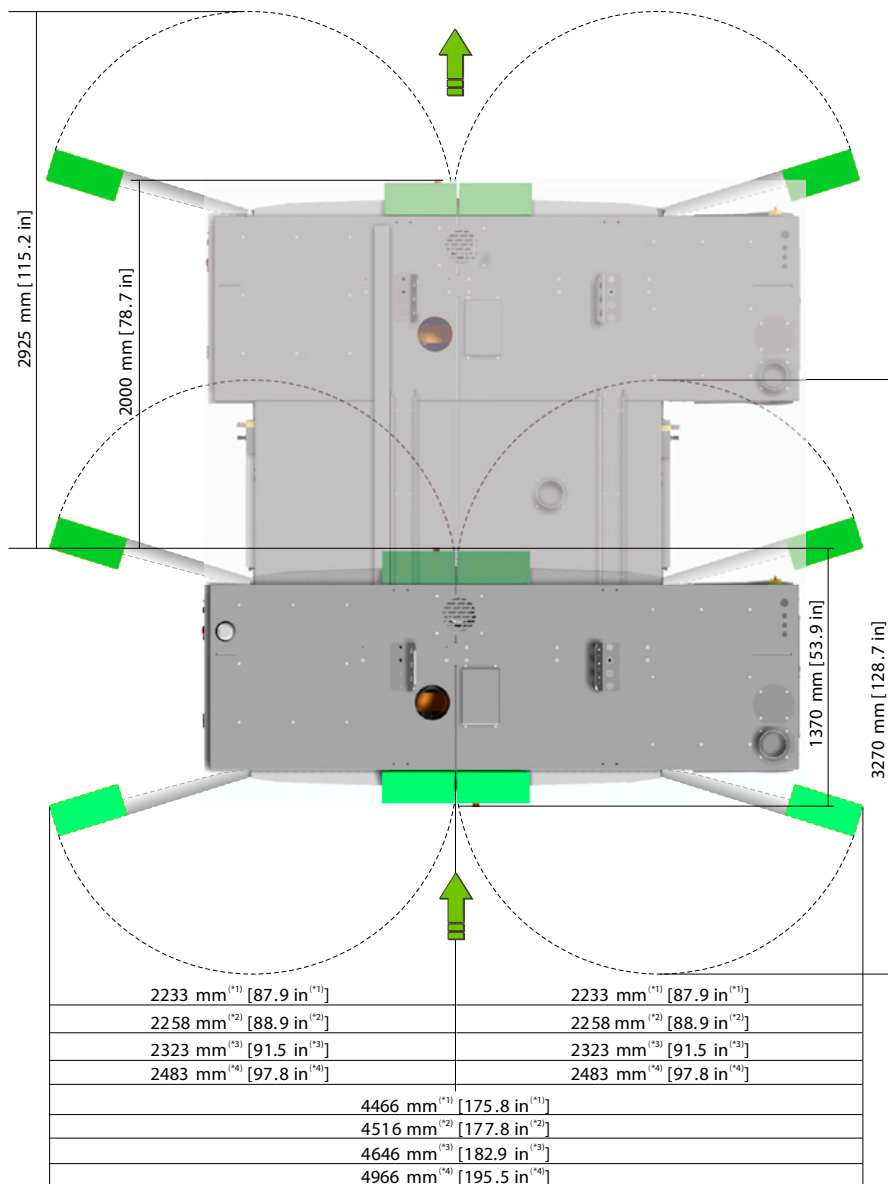
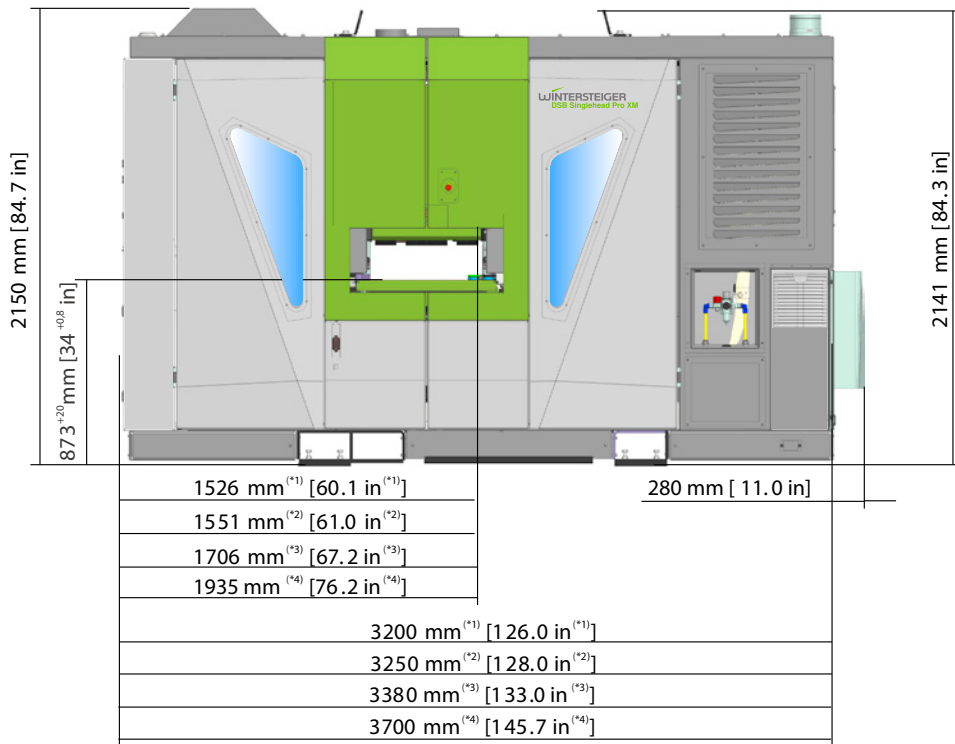
Technical data

DSB Singlehead	Pro 350	Pro 400	Pro 530	Pro 660
Main drive	32 kW	37 kW	37 kW	37 kW
Supply voltage*2	3AC 380-480V 50/60Hz			
Diameter – saw blade deflection pulleys	Ø 915 mm (36")			
Width of saw blade	80 mm / 100 mm (3.15" / 3.97")			
Expandability	Up to 6 machines			
Saw blade speed, infinitely adjustable	Up to 60 m/sec (197 ft/sec)	Up to 50 m/sec (164 ft/sec)	Up to 50 m/sec (164 ft/sec)	Up to 50 m/sec (164 ft/sec)
Feeding speed*1	1 – 18 m/min (3 – 59ft/min), optional 8 – 45 m/min (26 – 148ft/min)			
Compressed air connection	Operating pressure 7 bar (100 psi)			
Spraying system for wet cutting	For cutting wet wood and for wood species with a high resin or silicate content			
Saw blade tensioning system	Servo-pneumatic			
Saw blade guide	Carbon guide, Adjustable on one side			
Block width min. / max.	30 mm / 350 mm (1.18" / 13.78")	30 mm / 400 mm (1.18" / 15.75")	30 mm / 530 mm (1.18" / 20.87")	30 mm / 660 mm (1.18 / 25.98")
Block height min. / max.	5 mm / 165 mm (0.2" / 6.5")			
Block length min. / max.	350 mm (13.78") / unlimited			
Cutting height adjustment of saw blade min. / max.	1,5 mm / 165 mm (0.059" / 6.49")			
Lamella thickness min.*1	1,5 mm (0.059")			
Cutting precision*1	Approx. +/- 0.15 mm (0.006")	Approx. +/- 0.15 mm (0.006")	Approx. +/- 0.15 mm (0.006")	Approx. +/- 0.20 mm (0.008")
Thickness of cutting kerf	From 1.1 mm (0.043")			
Height	2150 mm (84.7 in)			
Width	3200 mm (126.0 in)	3250 mm (127.95 in)	3380 mm (128.0 in)	3700 mm (145.7 in)
Depth	1370 mm (53.9 in)			
Depth with doors open	3270 mm (128.7 in)			
Weight	3800 kg (8.378 lbs)	3900 kg (8.598 lbs)	4200 kg (9.260 lbs)	4500 kg (9.920 lbs)
Foundation load	4000 kg (8.819 lbs)	4100 kg (9.039 lbs)	4400 kg (9.700 lbs)	5000 kg (11.020 lbs)
Transport options for machine	Brackets for forklift on underside of machine, 2 lifting eyes on top of machine			
Transport dimensions with pallet (W x D x H)	4150 x 1500 x 2250 mm, 4100 kg (163.4 x 59 x 88.6", 9.093 lbs)	4150 x 1500 x 2250 mm, 4200 kg (163.4 x 59 x 88.6", 9.259 lbs)	4150 x 1500 x 2250 mm, 4500 kg (163.4 x 59 x 88.6", 9.920 lbs)	4150 x 1500 x 2250 mm, 4500 kg (163.4 x 59 x 88.6", 10.582 lbs)
Transport dimensions with wooden crate (W x D x H)	4200 x 1560 x 2380 mm, 4380 kg (165.4 x 61.4 x 93.7", 9.656 lbs)	4200 x 1560 x 2380 mm, 4480 kg (165.4 x 61.4 x 93.7", 9.876 lbs)	4200 x 1560 x 2380 mm, 4780 kg (165.4 x 61.4 x 93.7", 10.540 lbs)	4200 x 1560 x 2380 mm, 5080 kg (165.4 x 61.4 x 93.7", 11.200 lbs)

*1 Depending on type of wood and block dimensions

*2 Further optional versions available for worldwide network requirements

We reserve the right to make technical modifications.



*1 Series 350
 *2 Series 400
 *3 Series 530
 *4 Series 660



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