





### **DSB Twinhead NG XM**

The next-generation thin-cutting band saw with multiple modules.

# Flexibility is adapting to customers' wishes not to common practice.

The quality of investments is measured on the realization of meeting predetermined targets.

Thanks to its cutting kerf, the DSB Twinhead NG XM is the perfect choice when high output and maximum flexibility are the key factors.

Following the development of the technically revolutionary DSB Singlehead and the success of the DSB Twinhead, with its sawing units arranged in parallel, merging the two models was the next logical step. The impressive result is a new generation of machines: the multiple-module thin-cutting band saw DSB Twinhead NG XM. The strong points – price and performance – are already available in the compact twin-module basic configuration. In addition, the DSB Twinhead NG XM machines can be set up in series to create an entire production system, thus revolutionizing high-quality thin-cutting in terms of performance and accessibility. Specifically for these applications:

- Parquet flooring / Engineered floors
- Multi-layer boards
- Glue-laminated wood
- Doors

- Windows
- Furniture
- Pencil slats
- Ski/snowboard components
- Musical instruments
- Saw mill secondary cut

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



#### Your benefits summed up:

## 2 modules evolution for modular revolution

- 2-modular basic configuration
- Parallel arranged saw moduls
- Unique price-/performance ratio

## High performance and maximum dimensions

- Expandable to a full production system
- Optimum accessibility with minimum footprint
- Cutting width up to 310 mm, block height up to 165 mm, cutting height up to 160 mm

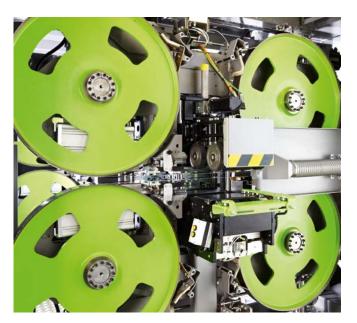
# Outstanding precision thanks to leading technology

- Innovative cutting-edge sawing systems for highest precision
- Unique feed system for any material characteristics
- Machine and tool from our own development and production

### How to exceed high expectations? By being able to offer benefits as standard.

Future-oriented success strategies originate in the minds of people whose passion is to achieve something which is above average. Only in this way is it possible to create developments which anticipate not just tomorrow but the day after tomorrow. The DSB Twinhead NG XM does this in the field of thin-cutting technology.

#### Twin-module evolution meets modular revolution.



#### Save space thanks to horizontal saw units.

Already the twin-module basis version of the new DSB Twinhead NG XM offers two saw units, making it the double-cutting system with smallest footprint.

The parallel design of the saw modules (= Twinhead concept) is the ideal solution wherever multiple cutting is required.

The servo-driven module adjustment via precision threaded spindles allows up to 10x faster height adjustment. This allows for fast and optimized use of the 160 mm cutting height of the DSB Twinhead NG XM.

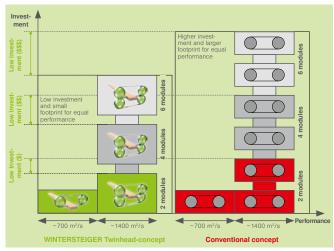
#### Cutting width up to 310 mm, block height up to 165 mm.

For the DSB Twinhead NG XM, the proven block transport system of the DSB Singelhead was duplicated.

The maximum block height is 165 mm at a cutting height of up to 160 mm. Depending on the configuration, the feed speed of the DSB Twinhead NG XM is infinitely variable up to 45 m/min.

#### Unrivaled price/performance ratio.

Already the basic configuration of the DSB Twinhead NG XM – with its ergonomic advantages, minimum footprint and maximum performance – is a highlight. The Twinhead concept with two modules in one machine keeps the costs of investment within comfortable limits.



The Twinhead concept – an unrivaled price/performance ratio

### High performance and maximum dimensions.



# Expandable to a full production system.

Machines connected in series are designed as a complete production system.

It is also possible to extend existing machines by adding on additional machines in line at any time upon request.

The automation and integration of individual process solutions are another part of WINTERSTEIGER's core competence.

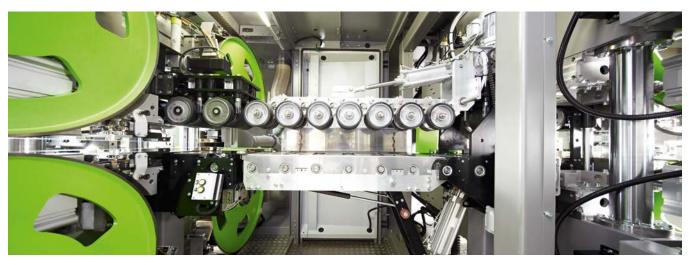
#### Accessible production systems.

The innovative design of both machine and serial installations, ensures that all machine components are optimally accessible while requiring minimum space.



These ergonomics minimize both time and cost required for the tooling, setting up and changing of saw blades. This concept also offers full access to the machine area.





# Outstanding precision thanks to leading technology.

#### Innovative cutting-edge sawing systems for highest precision.

Instead of simply overstretching the band-saw blade, WINTERSTEIGER uses an automatic band tracking control to keep the band-saw blade in position on the saw pulleys. Apart from preventing wear and retaining the inner saw blade tension, this also preserves the working surface of the saw pulleys.

Combined with the carbon guides, this optimal saw blade tension allows an aggressive positioning of the saw blade guides. As a result, the saw blade tension is concentrated in the cutting area.

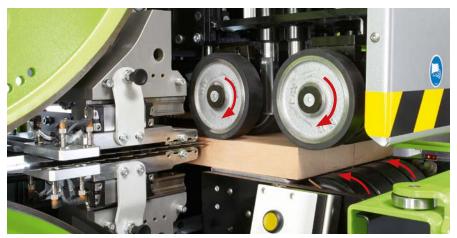
This unique technology package, in combination with the rigid block feeding system ensures maximum cutting precision when using minimum cutting kerfs starting at 1.0 mm.

# Innovative cutting-edge sawing systems

- Unique feed system
- Automatic saw blade regulation
- Servo-pneumatic saw blade tensioning
- High-tech carbon-guide

## Unique feed system for all block characteristics.

Driven feed rollers top and bottom guarantee a continuous block feeding despite extreme workpiece characteristics. The transport rollers, rubbershored and special treated, and the highly innovative counter-pressure loaded system guarantee optimum grip as well as minimum friction for wet or dry material. At the same time, the hard chrome-plated supporting table ensures that the workpiece is as stable as possible (optimally aligned).



Driven feed rollers top and bottom

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 maximum precise cut. The DSB Twinhead NG XM owes its unusually high level of precision to the hard chrome-plated supporting table.

Additional driven pressure rollers immediately above the cutting area guarantee the constant stability of the



Blocks with longitudinal/latitudinal deformation, cupped or warned

workpiece across its full width. This gives you the ability to cut not only pre-planed material, but also uneven



Block dry cutting

and rough-sawn-blocks with longitudinal or latitudinal deformations, twisted, bend or cupped.



Block wet cutting

#### 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.

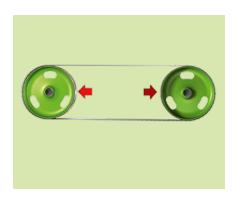
This prevents also the saw blade

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.



#### Versatile wood program.

Using the special wood program of the DSB Twinhead NG XM, you can store the cutting, lamella and saw blade parameters for each wood type and retrieve them as needed.



The saw blade guiding system is individually adjustable to match the workpiece width. The benefit: optimum saw blade tension in the cutting area resulting in maximum cutting precision.

#### High-tech carbon-guide.

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.



Extremely abrasion-resistant high-tech carbon guide

#### Great operating comfort.

The DSB Twinhead NG XM is impressively easy to use. The touch screen display and the easy-to-understand menus guide the user through the program. Practical: The software includes a memory function for regularly recurring cutting parameters.

It also features a multilingual user interface as well as numerous service and help menus. Programs are available for cutting, wood type and saw blade, for example, along with production data logging, diagnostics and maintenance displays.



### We make you a clear offer. And still leave you the freedom to choose.

The quality of an offer lies not only in its clearly redeemable value promise. Its quality also increases with the opportunity to choose, for example, between options which further improve the result depending on individual needs.

#### Powerful 32 kW main drive.

When dimensional and capacity requirements grow, more power is the only answer. In this case, WINTERSTEIGER recommends the powerful 32 kW quality motor as the main drive.

#### The perfect feed for all applications.

For high-performance requirements at maximum capacity ranges, the DSB Twinhead NG XM allows high-speed feeding from 8 to 45 m/min. For even higher precision, special applications, sensitive materials or XXL dimensions, feeding can be reduced to speeds from 1 to 15 m/min.

## 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 bands. The spraying intervals can be customized according to necessity.

The benefits: improved lifetime of the thin-kerf saw blade 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.



Spraying system for wet cutting

## Additional spraying system for water.

As an alternative to conventional spraying agents, water is also a suitable spraying agent for the processing of certain kinds of wet wood: a small amount of water is sprayed on the saw teeth that dissolves the residue of mo-



ist saw dust, resin and lubricant. The lateral clearance angles of the saw remain clean and functionally intact.

Combined or separate spraying with water or conventional agents is of course possible as conditions may require.



## Hinged roller conveyors and powered roller conveyors.

The stabile 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.

### WINTERSTEIGER After Sales Service. Support starts where delivery ends.

The best time for assessing the quality of an investment is in the many years after its delivery. Therefore WINTERSTEIGER has established a global after sales service.

#### 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.



# Quick help. With the WINTERSTEIGER Remote Service.

Quality and speed are the deciding factors in the event of a breakdown. The global WINTERSTEIGER sales and service networks guarantee optimum support in case of technical queries and fastest possible support by professional service engineers.

Additionally to improve availability and reduce response times, you also have the option of equipping your WINTERSTEIGER thin-cutting band saws with remote service. To detect a problem takes only seconds with the WINTERSTEIGER Remote Service. Your machine's online

connection is the directly link to our technical customer service. Error detection and diagnosis are done almost in real time, along with data analyses, optimizations and service measures. The WINTERSTEIGER Remote Service works with LAN/WAN/GPRS/UMTS/HSDPA.

#### Your benefits:

- Increased machine availability for operation
- 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 standstills are avoided

#### Our services:

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







### Saw blades from in-house development and production.

Demanding customers 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.

#### Compelling thin-cutting systems and band saws by WINTERSTEIGER!

#### **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 efficiency:

- 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



# DSB Twinhead NG XM Figures. Data. Facts.

Technical data					
	Standard	Option			
Main drive rating	18.5 kW (25 HP)	32 kW (44 HP)			
Max. cutting width	310 mm (12.2")				
Feed speed, infinitely adjustable (depending on wood type and block dimensions)	Standard feed: 4 - 20 m/min (13 - 66 ft/min)				
Saw blade speed, infinitely adjustable	10 - 50 m/sec (33 - 164 ft/sec)	10 - 60 m/sec (33 - 197 ft/sec) (with 32 kW / 44 HP main drive)			
Wet cutting – spraying system		For wet cutting as well as for wood types with a high content of resin or silica's			
Saw blade tensioning system	Servo-pneumatic				
Saw blade motion control (saw blade motion visible via sight window)	Automatic saw blade regulation				
Voltages*	3 x 400 VAC / 50 Hz 3 x 480 VAC / 60 Hz External switch cabinet at front of main drive for following voltages: 3 x 208 VAC / 60 Hz 3 x 575 VAC / 60 Hz				
Diameter – saw pulleys	Ø 915 mm (36")				
Arrangement of sawing module	Horizontal				
Operating height	Approx. 1,300 mm (51") (approx. 1,100 mm / 43" with sunken fundament)				
Cutting height adjustment of saw blade	Approx. 1.7 to 160 mm (0.067" - 6.29")				
Durable saw blade guide	Carbon guide				
Saw blade lubrication	Via compressed air lubricator				
Compressed air connection	Operating pressure 6 bar (90 psi)				
Required extraction force	Min. 500 liters/min (17.7 cubic feet/min) per machine				
Suction fittings top	1 x Ø 200 mm + 1 x Ø 100 mm per machine				
Extraction capacity	Min. 4,500 m³/h (158,900 cubic feet/hour) per machine				
Required air speed	30 to 32 m/sec (100 - 105 feet/sec) per machine				
Power and compressed air inlet	Optionally at top or side				

<sup>\*</sup> Other voltages available on request

#### Block/lamella data

	Standard
Block width	Min. 30 mm / max. 310 mm (1.2" / 12.2")
Saw blade guiding	Adjustable on one side
Cutting precision (depending on original material and tool characteristics)	Approx. +/- 0.15 mm (0.006")
Block height min. / max.	5 mm / 165 mm (0.19" / 2.95")
Block length min. / max.	350 mm (13.78") / unlimited
Lamella thickness (depending on wood type and block dimensions)	> 1.7 mm (0.067")
Individually selectable block guide	Lateral or central block guide

We reserve the right to make technical alterations.

#### Saw blade data

Thickness of cutting kerf	From 1.0 mm (0.039")
Thickness of base material	From 0.7 mm (0.027")
Width of saw band	80 mm (3.15")
Length saw band	5500 mm (216.5")
Easy & ergonomical saw blade change (sash doors swivel through 125°)	Approx. 2 min (2 persons)

# DSB Twinhead NG XM Figures. Data. Facts.

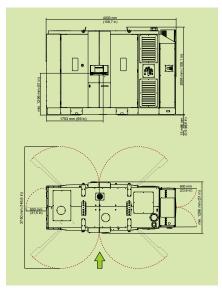
Dimensions	DSB Twinhead NG 2 XM	DSB Twinhead NG 4 XM	DSB Twinhead NG 6 XM
Height	2695 mm (160.1")		
Width	4030 mm (158.66")		
Depth	1550 mm (61")	3920 mm (154.33")	6235 mm (245.47")
Depth with doors open	3750 mm (147.64")	6050 mm (238.19")	8365 mm (329.33")
Weight	Approx. 8000 kg (17637 lbs)	Approx. 16000 kg (35274 lbs)	Approx. 24000 kg (52911 lbs)
Foundation load	10000 kg (22046 lbs)	20000 kg (44093 lbs)	30000 kg (66139 lbs)
Transport options for machine	brackets for fork-lift on underside of machine     fittable crane eyes on top of machine		
Transport dimensions machine (W x D x H)	4030 x 1550 x 2695 mm (158.66" x 61" x 106.1")	4030 x 1550 x 2695 mm (158.66" x 61" x 106.1") per machine	
Transport dimensions with pallet (W x D x H)	4200 x 2340 x 2950 mm (165.35" x 92.13" x 116.14")	4200 x 2340 x 2950 mm (165.35" x 92.13" x 116.14") per machine	
Transport dimensions with wooden crate (W x D x H)	4250 x 2400 x 2980 mm (167.32" x 94.49" x 117.32")	4250 x 2400 x 2980 mm (165.35" x 92.13" x 116.14") per machine	
Transport dimensions in seaworthy crate (W x D x H)	4250 x 2400 x 3115 mm (167.32" x 94.49" x 122.64")	4250 x 2400 x 3115 mm (165.35" x 92.13" x 116.14") per machine	

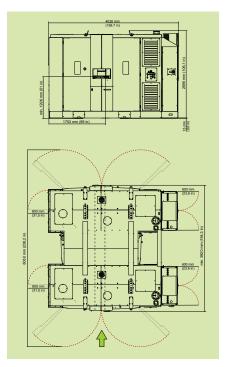
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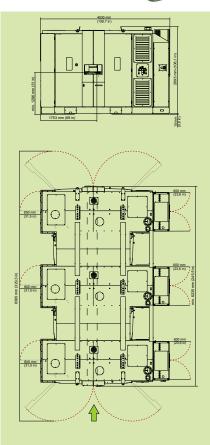












# WINTERSTEIGER WOODTECH. The value of wood increases with the level of its finish.

Wood as a sustainable and growing resource with all its brilliant properties is being rediscovered more intensively than ever before. Thin-cutting in particular is proving to be one of the key technologies in the processing of wood. WINTERSTEIGER already has over 30 years of know-how in this segment and has been a market leader for many years.

Sales of more than 1500 thin-cutting frame saws underline WINTERSTEIGER's global market leadership which is based on a philosophy that is transparent and pursued consistently: To create clear added values for the future by being receptive to innovation whilst offering high-performance and excellent operating reliability.

WINTERSTEIGER's technology offers absolutely perfect conditions for the production of products like

- Engineered floors
- Multi-layer boards
- Doors
- Windows
- Furniture
- Pencil boards
- Musical instruments and many more

Conceived and put into practice by a team of users, technicians and designers, the entire product range of thincutting frame saws to the technology for gluing and pressing excels with a wide variety of advantages.

- High precision
- Minimum cutting kerfs
- Ready to glue surfaces
- Further processing of lamellas without additional work stages











#### Precise cutting of all non-wood materials.

As the quality leader, WINTERSTEIGER is present wherever precise cutting with minimal material loss is at a premium. This applies to various materials not made of wood. Ask for our customized solutions!



### WINTERSTEIGER. A Global Player.

WINTERSTEIGER AG is an international machinery and plant engineering group. Founded in 1953, it has gradually established itself as a leading provider of innovative solutions for customers in technically sophisticated niche markets. The business fields of the company consist of:

#### ■ SEEDMECH

■ Turnkey solutions for plant breeding and research

#### SPORTS

- One-stop supplier for ski and snowboard rental and servicing
- Systems for hygienic drying of sports goods and work clothes
- Fit-optimizing solutions and individual sports shoe adjustments

#### ■ WOODTECH

- Process solutions for precision thin-cutting, wood repairs and cosmetics
- Saw blades for wood and food

#### METALS

■ Levelling technology machines and systems

#### AUTOMATION

■ Plants and automation solutions for industrial manufacturing companies



Headquarters at Ried im Innkreis, Upper Austria

# Success begins with the right decisions. At the right time. We look forward to you!





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#### Representations: