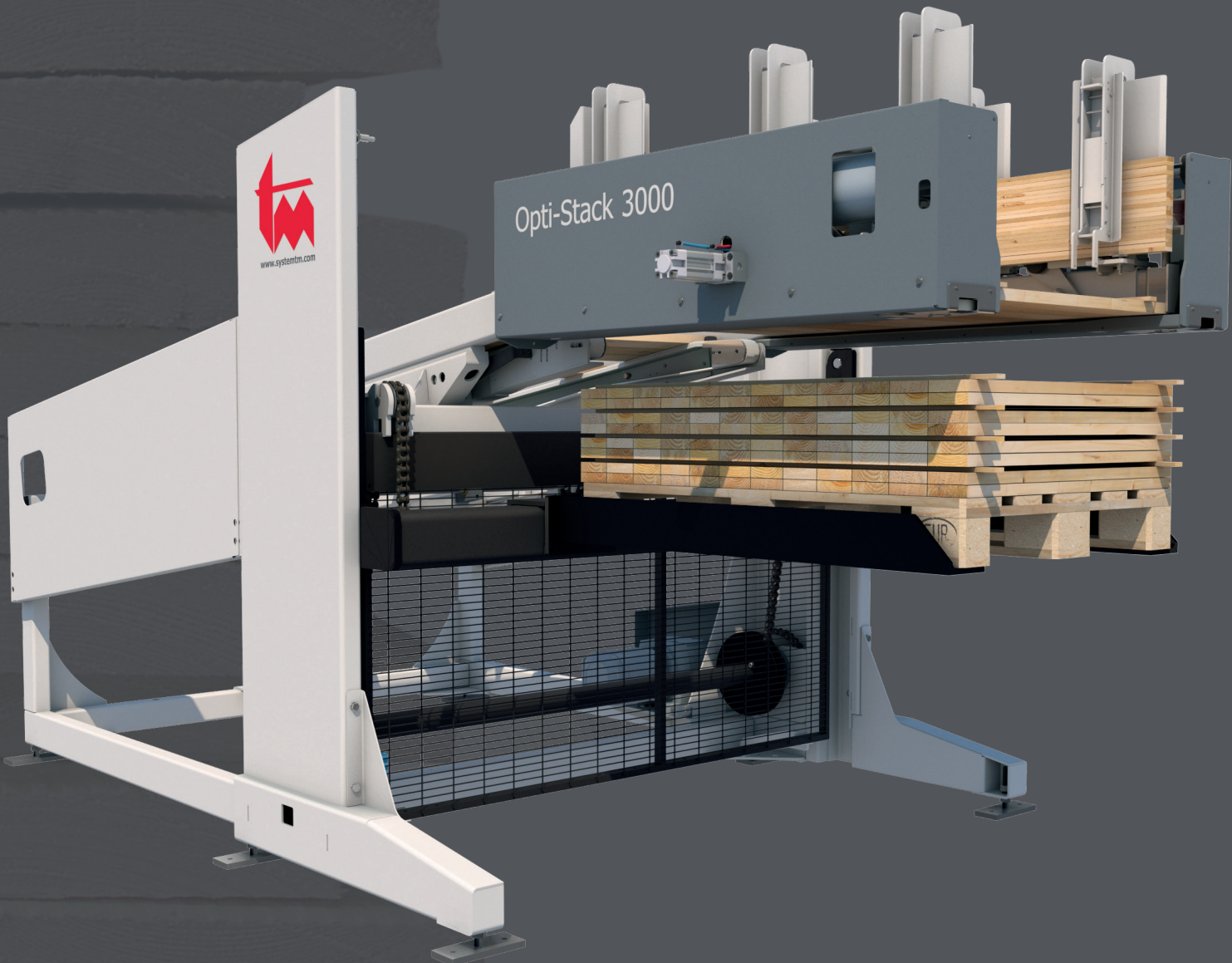




# Opti-Stack

Automated Stacking Systems

- Opti-Stack 3000 Vack
- Opti-Stack 3000
- Opti-Stack 6000 Vack
- Opti-Stack 6000



**Optimization of staff and wood resources**

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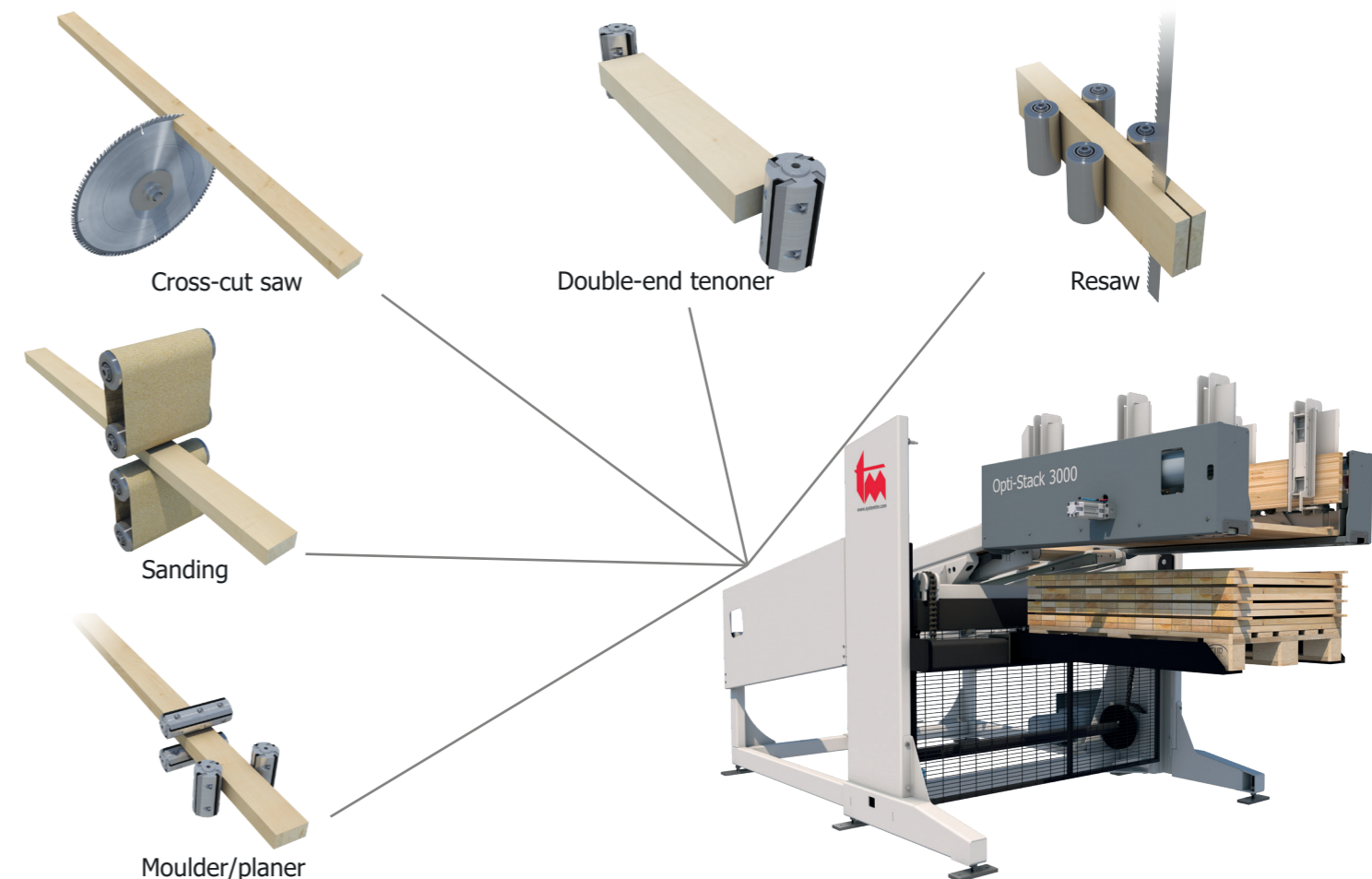
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## Automated stacking systems

System TM offers a wide range of standard automated handling systems for main machine automation such as:



System TM's automated stacking systems are designed to increase the capacity of main machines and reduce labor costs. With System TM's Opti-Stack series we are able to advise you on the right solution to fulfil your specific requirements to obtain a more efficient and more profitable production.

This automated stacking system provides full utilization of main machine capacity and maximum usage of staff and wood resources.

► **Make a wise move**

- Let a System TM Opti-Stack solution do all the hard and repetitive work!



# Opti-Stack 3000 Vack

## Automated stacking system - Opti-Stack 3000 Vack

Opti-Stack 3000 Vack is a vacuum stacking unit for stacking of complete or partial workpiece layers after main machines such as cross-cut saws, moulding machines, double-end tenoners, resaws and sanding machines.

The Opti-Stack 3000 Vack consists of two vacuum heads, suitable for stacking short workpieces of 380 – 2,500 mm (15" - 98") at a capacity of up to 5 layers per minute of both random and uniform lengths.

The vacuum head features check valve technology which automatically identifies and closes valves in areas without workpieces. This ensures secure lifting of layers of random lengths or widths without having to adjust vacuum heads.

Due to its modular design, the Opti-Stack 3000 Vack stacking unit is suspended from a portal, enabling the stacking of layers to packs positioned on the floor. Packs can easily and automatically be removed from the floor during operation.

### Advantages

- ▶ Stacking from multiple locations
- ▶ Stacking to multiple destinations
- ▶ Liberates operators from hard and repetitive work
- ▶ Better utilization of main machine capacity
- ▶ Gentle handling without damaging workpieces or layers
- ▶ Minimum space requirement
- ▶ Stacking of random lengths and widths

### Features

- ▶ Automatic placement of stabilizing sticks
- ▶ Automatic pack transport
- ▶ Feeding conveyor
- ▶ Customized features upon request



▶ The foam of the vacuum head adjusts to the shape of workpieces before lifting the layers. This minimizes false air and maximizes lifting load.



# Opti-Stack 3000

## Automated stacking system - Opti-Stack 3000

The Opti-Stack 3000 is a mechanical high-performance stacking system, designed to stack short workpieces of 380-2,500 mm (15" – 98"), at a capacity of up to 150 workpieces or 12 layers per minute of uniform lengths.

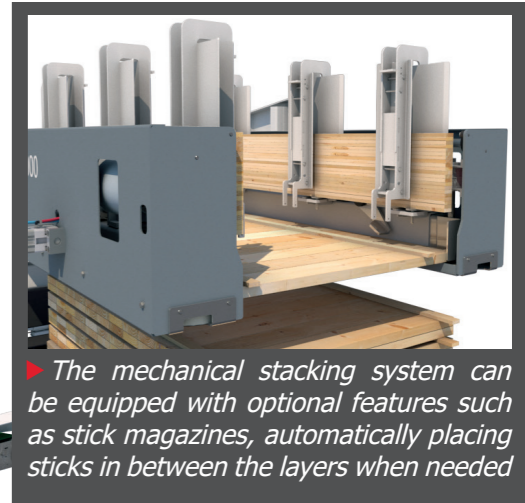
The Opti-Stack 3000 has a modular design that can be customized to meet your exact requirements for workpiece stacking after main machines such as moulders, double-end tenoners, cross-cut saws and resaws.

### Advantages

- ▶ High capacity
- ▶ Stacking of narrow workpieces
- ▶ Liberates operators from hard and repetitive work
- ▶ Better utilization of main machine capacity
- ▶ Gentle handling without damaging workpieces or layers
- ▶ Minimum space requirement

### Features

- ▶ Automatic placement of stabilizing or drying sticks
- ▶ Automatic pack transport
- ▶ Brick and zig-zag stacking
- ▶ Stacking of random widths
- ▶ Connecting belts to double-end tenoner
- ▶ Board turning device
- ▶ Customized features upon request



▶ The mechanical stacking system can be equipped with optional features such as stick magazines, automatically placing sticks in between the layers when needed



# Opti-Stack 6000 Vack

## Automated stacking system - Opti-Stack 6000 Vack

Opti-Stack 6000 Vack is a vacuum stacking unit for stacking of complete or partial workpiece layers from main machines such as cross-cut saws, moulding machines, double-end tenoners, resaws and sanding machines.

The Opti-Stack 6000 Vack consists of an adjustable number of vacuum heads, customized to match all stacking requirements. The stacking unit is suitable for stacking long workpieces of 900 – 6,300 mm (3' - 21') at a capacity of up to 4 layers per minute, of random or uniform lengths and widths. The vacuum head features check valve technology which automatically identifies and closes valves in areas without workpieces. This ensures secure lifting of layers, random lengths or widths, without having to adjust.

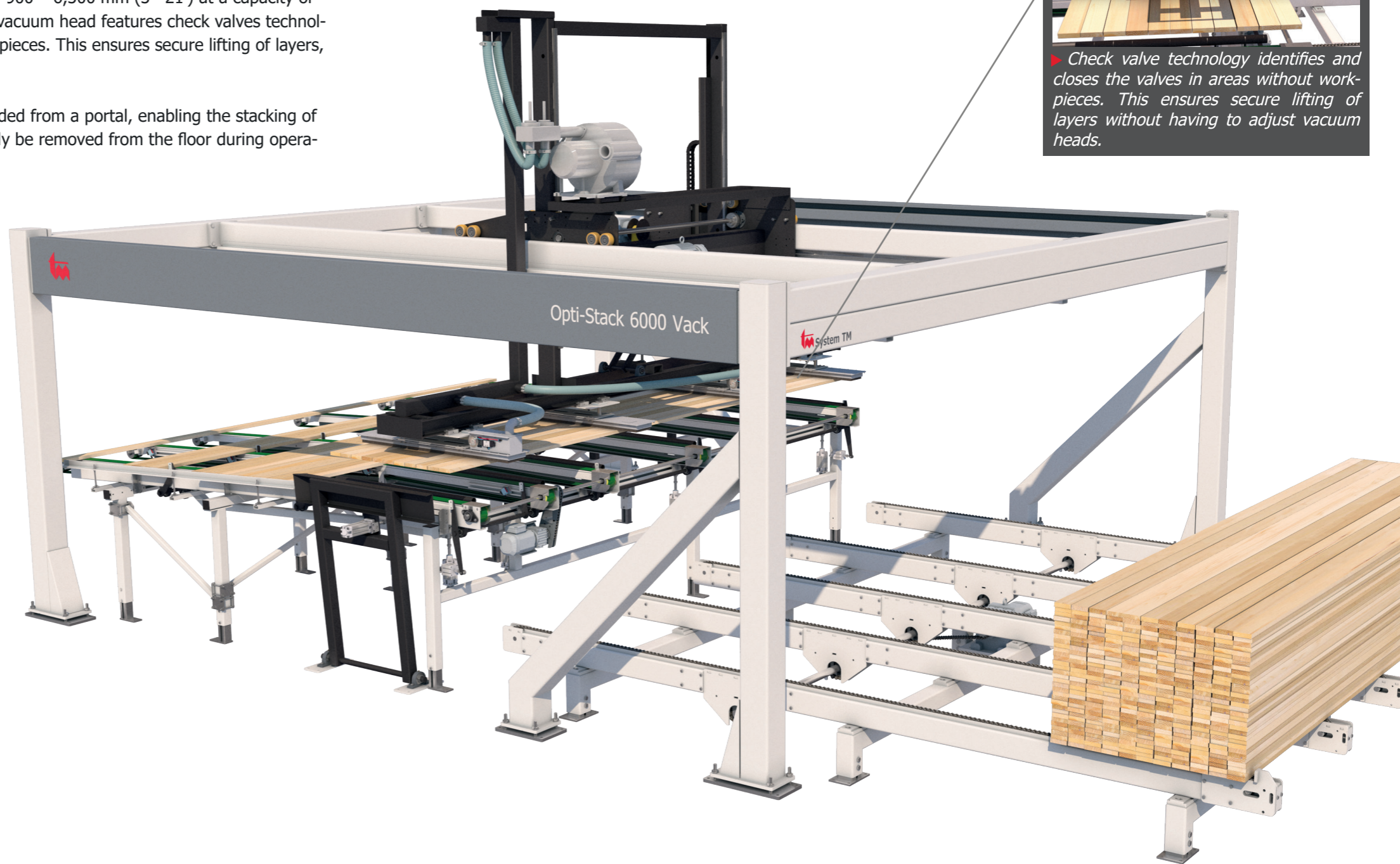
Due its modular design, the Opti-Stack 6000 Vack stacking unit is suspended from a portal, enabling the stacking of layers into packs positioned on the floor. Packs can easily and automatically be removed from the floor during operation.

### Advantages

- ▶ Stacking from multiple locations
- ▶ Stacking to multiple destinations
- ▶ Liberates operators from hard and repetitive work
- ▶ Better utilization of main machine capacity
- ▶ Gentle handling without damaging workpieces or layers
- ▶ Minimum space requirement
- ▶ Stacking of random lengths and widths

### Features

- ▶ Automatic placement of stabilizing sticks
- ▶ Automatic pack transport
- ▶ Feeding conveyor
- ▶ Customized features upon request



▶ Check valve technology identifies and closes the valves in areas without workpieces. This ensures secure lifting of layers without having to adjust vacuum heads.



# Opti-Stack 6000

## Automated stacking system - Opti-Stack 6000

The Opti-Stack 6000 is designed to stack workpieces from main machines such as cross-cut saws, moulding machines, resaws and rip saws.

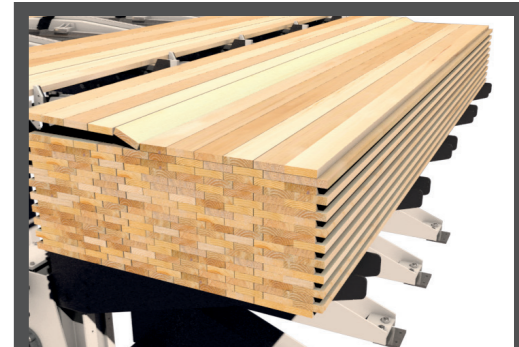
The Opti-Stack 6000 is a high-performance mechanical stacking system, designed to stack long workpieces of 900 – 6,300 mm (3'- 21'). The Opti-Stack 6000 has capacity of up to 6 layers per minute of random or uniform lengths and widths. Packs can easily and automatically be replaced during operation.

### Advantages

- ▶ High capacity
- ▶ Stacking of uniform or random lengths and widths
- ▶ Stacking of narrow workpieces
- ▶ Liberates operators from hard and repetitive work
- ▶ Better utilization of main machine capacity
- ▶ Gentle handling without damaging workpieces or layers

### Features

- ▶ Automatic placement of stabilizing or drying sticks
- ▶ Automatic pack transport
- ▶ Reject gate
- ▶ Brick stacking
- ▶ Random lengths and widths stacking
- ▶ Board turning device
- ▶ Customized features upon request



▶ The mechanical stacking system can be equipped with optional features such as brick stacking, which provides a high stacking stability without the need to use stabilizing sticks.



# Opti-Stack solution

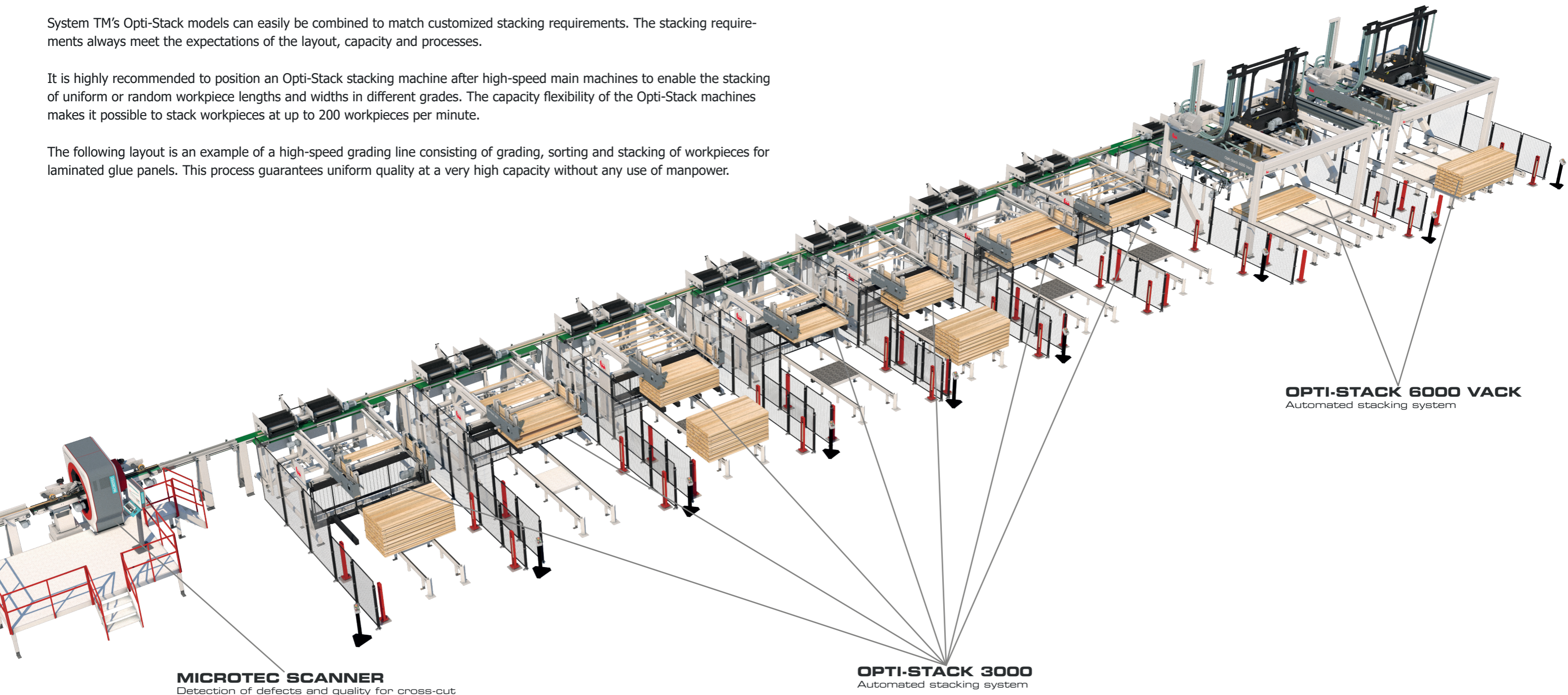
## Automated stacking solution

System TM's standard Opti-Stack stacking machines are unique due to their high degree of flexibility and many combination options.

System TM's Opti-Stack models can easily be combined to match customized stacking requirements. The stacking requirements always meet the expectations of the layout, capacity and processes.

It is highly recommended to position an Opti-Stack stacking machine after high-speed main machines to enable the stacking of uniform or random workpiece lengths and widths in different grades. The capacity flexibility of the Opti-Stack machines makes it possible to stack workpieces at up to 200 workpieces per minute.

The following layout is an example of a high-speed grading line consisting of grading, sorting and stacking of workpieces for laminated glue panels. This process guarantees uniform quality at a very high capacity without any use of manpower.



**MICROTEC SCANNER**  
Detection of defects and quality for cross-cut

**OPTI-STACK 3000**  
Automated stacking system

**OPTI-STACK 6000 VACK**  
Automated stacking system



# Technical data

## Opti-Stack series data overview

	<b>Opti-Stack 3000 Vack</b>	<b>Opti-Stack 3000</b>	<b>Opti-Stack 6000 Vack</b>	<b>Opti-Stack 6000</b>
Board length	380 - 2,500 mm (15" - 98")	380 - 2,500 mm (15" - 98")	900 - 6,300 mm (3' - 21')	900 - 6,300 mm (3' - 21')
Board width	63 - 1,225 mm (2.5" - 48")	50 - 200 mm (2" - 8")	63 - 1,225 mm (2.5" - 48")	50 - 300 mm (2" - 12")
Board thickness	15 - 50 mm (0.6" - 2")	15 - 75 mm (0.5" - 3")	15 - 50 mm (0.5" - 2")	15 - 100 mm (0.5" - 4")
Number of vacuum head	2	None	4	None
Random length	Yes	No	Yes	Yes
Maximum length variation	30 %	+/- 5 mm (0.25")	30 %	30 %
Maximum work-piece weight	Depends on board dimension	12 kg (26.5 lb)	Depends on board dimension	40 kg (88 lb)
Maximum layer weight	100 kg (220.5 lb)	80 kg (176 lb)	200 kg (441 lb)	300 kg (661 lb)
Maximum pack height	1,225 mm incl. pallet (48")	1,225 mm incl. pallet (48")	1,225 mm incl. pallet (48")	1,225 mm incl. pallet (48")
Maximum pack width	1,225 mm (48")	1,225 mm (48")	1,225 mm (48")	1,225 mm (48")
Maximum pack weight		1,500 kg (3,307 lb)		4,000 kg (8,818 lb)
Capacity	5 layers per minute	150 workpieces or 12 layers per minute	4 layers per minute	6 layers per minute
Optional capacity	8 layers per minute	None	8 layers per minute	10 layers per minute

**All of the above data can be customized upon request**

**All equipment is built to metric standards. Dimensions shown in imperial units are approximate and for comparison purposes only.**



# Additional products

## System TM A/S

System TM products and system solutions can be equipped with automatic handling or scanning systems for best lumber utilization and capacity with minimum use of labor power.

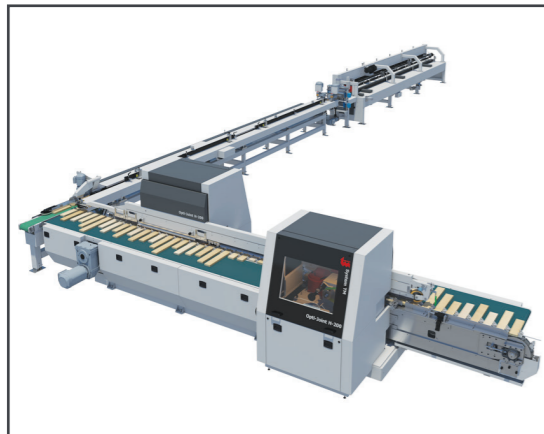
In order to meet all customer demands, our selection of material handling systems consists of both standard and fully customized solutions.



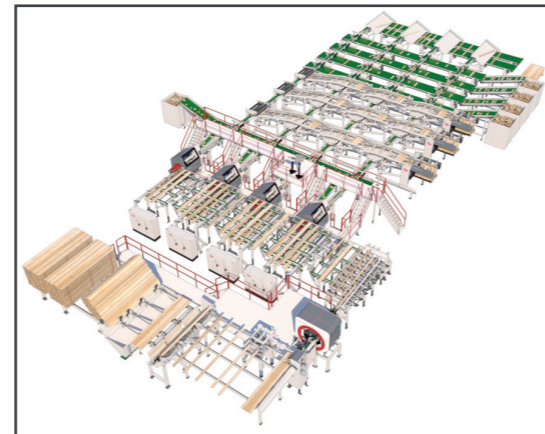
**Opti-Feed**  
Automated feeding systems



**Opti-Kap**  
Optimizing cross-cut saws



**Opti-Joint**  
Automated finger jointing systems



**Opti-Solution**  
Customized system solutions

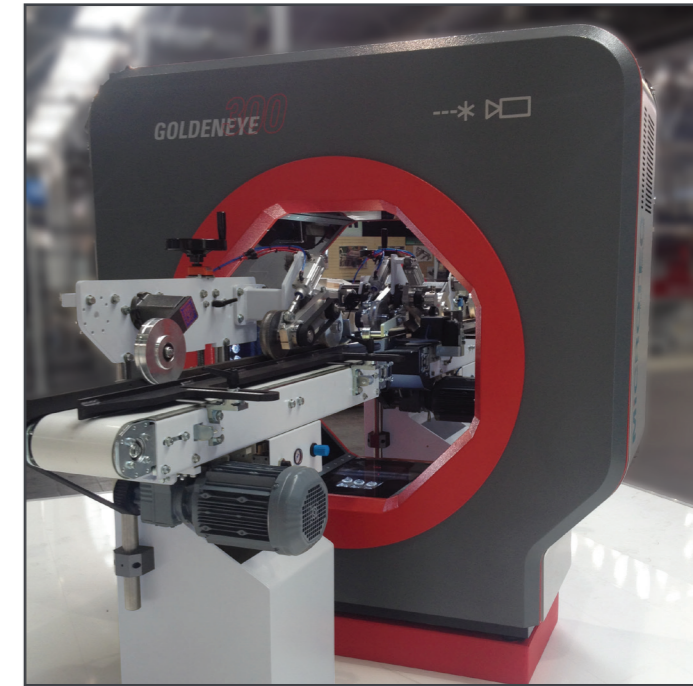
## MICROTEC

To achieve best lumber utilization and production optimization, System TM's products and solutions can be combined with automatic scanning.

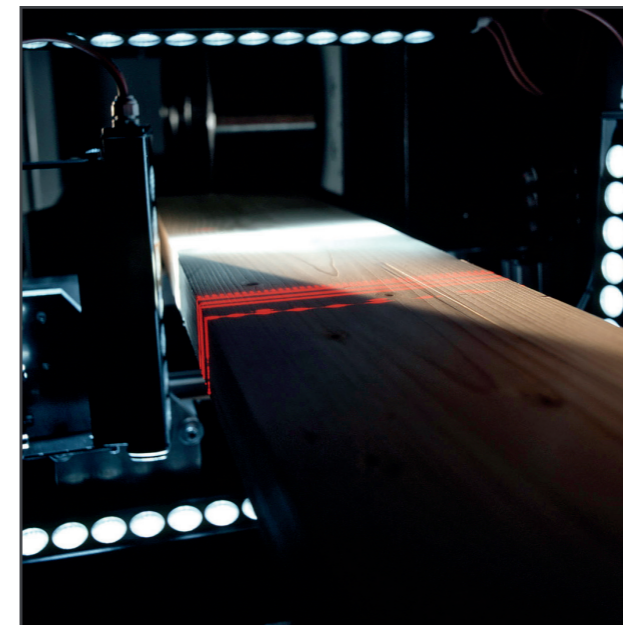
Microtec is System TM's scanner partner and a technology leader within the scanning industry. Microtec scanners are highly reliable and accurate in wood defect detection, and ensure automated, streamlined and optimized production.

To identify the characteristics of lumber, a Multi-Sensor scanning technology recognizes knots, cracks, pitch pockets, holes, stains, waness and other board defects, as well as their location. With exceptional precision, and high speed, the sensors scan the boards for best lumber utilization.

Combined with today's scanning technology and optimizing software, a System TM product or system solution ensures best production optimization at high capacity.



► The Microtec Multi-Sensor Scanner Goldeneye



► The Multi-Sensor scanning technology scans workpieces for best wood utilization.



# System TM service

## Optimal performance thanks to a strong service and support team

System TM's service is a key strategic business unit. Our service department constantly develops its service to meet customer wishes and to provide exceptional service and support.

System TM's service and support team ensures high uptime, productivity, and utilization. Systematic maintenance minimizes production downtime, and ensures smooth operation with minimum risk of unexpected machine break-downs.

System TM's service and support team consists of highly educated, trained, and experienced service engineers and technicians. With more than 40 years of experience in designing, building, integrating and maintaining automated wood material handling systems, System TM is a highly qualified provider of service and support.

## This includes:

- ▶ Service and maintenance contracts
- ▶ A customized spare part kit for each customer to ensure a successful start
- ▶ Modification, upgrading and extension of existing machines, controls and software
- ▶ Relocation, renovation, installation and start-up of machine installations
- ▶ Production and system analysis and optimization
- ▶ Staff/operator education on how to handle and maintain machines
- ▶ Advisory and consultancy services
- ▶ Spare parts and enhancements
- ▶ Warranty
- ▶ Helpdesk and online telephone support - 24 hours worldwide



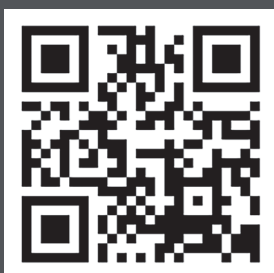




System TM A/S  
Skovdalsvej 35, P.O. Box 249  
DK-8300 Odder, Denmark

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Phone: + (45) 86 54 33 55  
Fax: + (45) 86 54 32 19  
E-mail: [tm@systemtm.com](mailto:tm@systemtm.com)  
[www.systemtm.com](http://www.systemtm.com)



**Optimization of staff and wood resources**