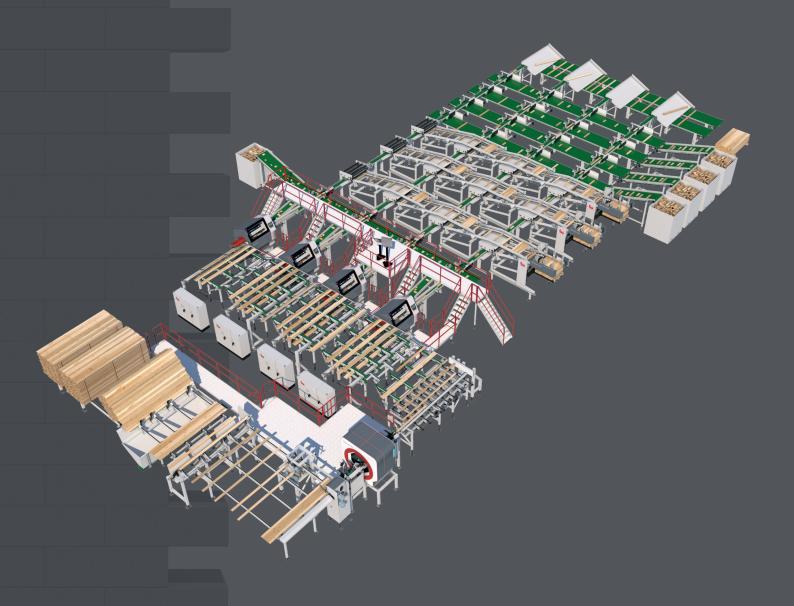


Opti-Solutions Customized system solutions



Optimization of staff and wood resources

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Customized System Solutions

Total Supplier

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- Window Manufacturer
- Kitchen Cabinet Manufacturer

Additional Products

System TM Service

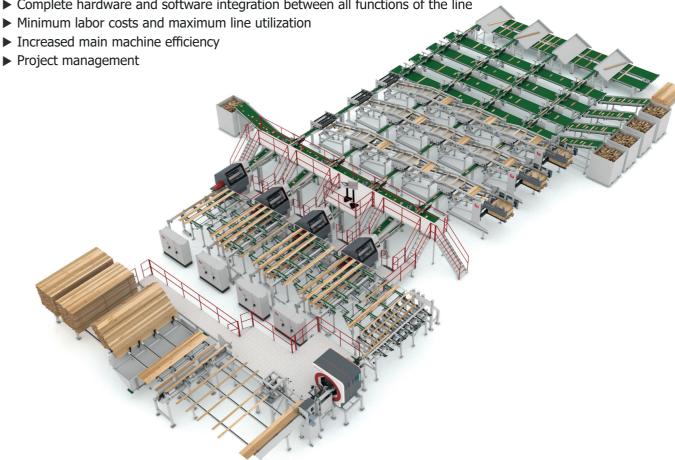
Customized system solutions

System TM is the leading global supplier of customized system solutions to the solid wood industry with more than 40 years' experience and more than 300 running lines worldwide.

We are experts in combining different main machines with material handling, to provide customers highly integrated and fully optimized lines in terms of capacity, yield and staff resources. The success of our business is based on our understanding of customer needs. We combine the latest technology with our broad technical expertise and knowledge to design the best solution that meets customer specific needs.

Opti-Solutions are characterized by:

- ► System TM as your total supplier
- ▶ Custom-built and manufactured according to capacities, processes and layout
- ▶ 100% workpiece control throughout the line
- ▶ Complete hardware and software integration between all functions of the line



Make a wise move

- Let an Opti-Solution increase your production capacity and reduce your labor costs!

Total Supplier

Why choose System TM as your total supplier

As your total supplier, you will benefit from the broad experience of our entire team. System TM takes full charge of the whole project process, and is your only supplier whether you invest in a single system or an entire system solution.

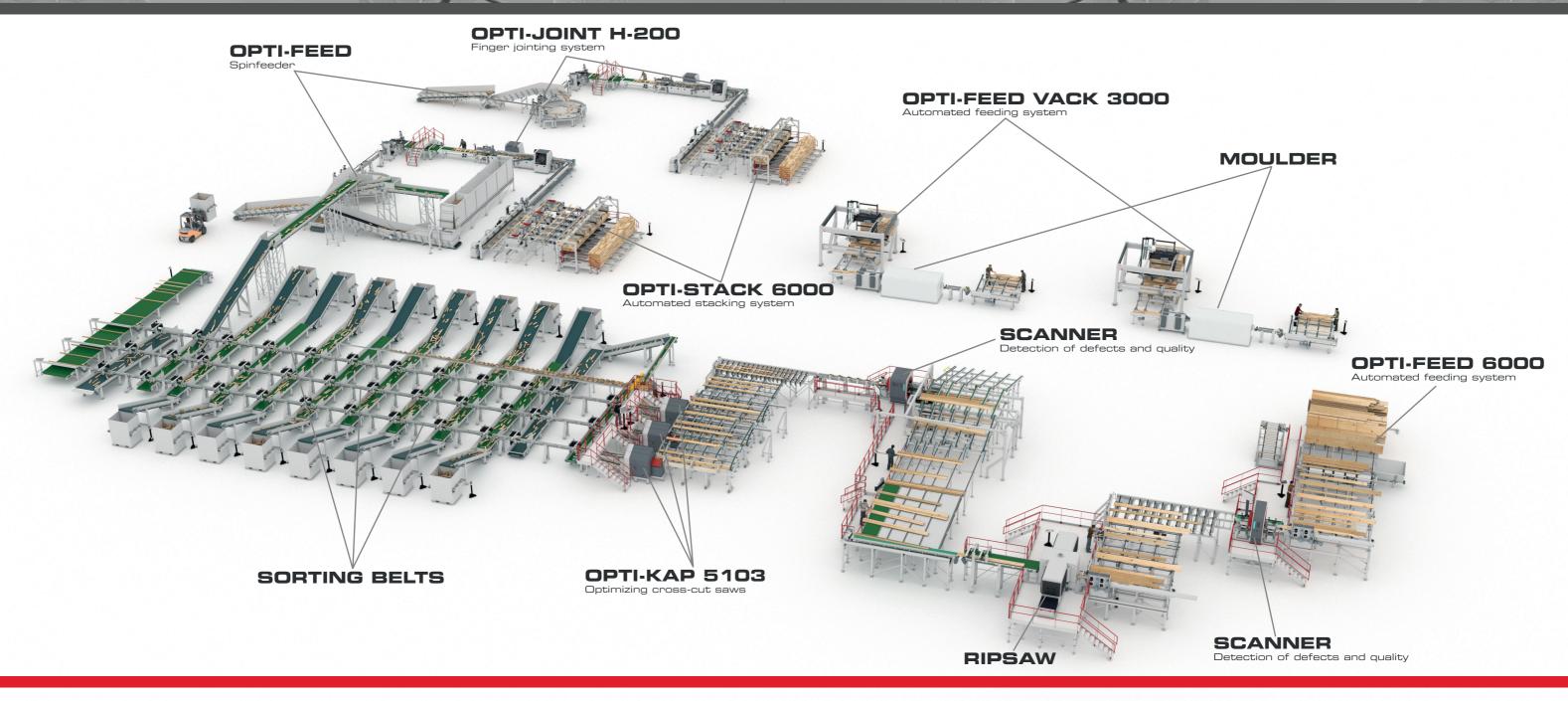
System TM's areas of expertise include everything from line design, installation, commissioning and staff training to service Material Handling Opti-Stack and maintenance - everything to make your production as efficient as possible. Using our technical expertise and experience, Automated stacking systems (System TM) we can advise you on all technical aspects and offer the best support in the industry. Opti-Joint Finger jointing systems (System TM) Opti-Kap Optimizing cross-cut saws (System TM) Scanner Detection of defects and quality (MiCROTEC) Moulder (Subsupplier) The project process Throughout the entire project process, our specialized team is highly dedicated to each phase of the project. As a result, you will come across System TM's skills and competencies every step of the way, guaranteeing 100% customer satisfaction. **Bandsaw** (Subsupplier) The project process consists of: ▶ Sales process ▶ Project management - Line design - Manufacturing Opti-Feed - In-house test Automated feeding systems (System TM) - Installation - Commissioning

▶ Service and maintenance



Door Manufacturer





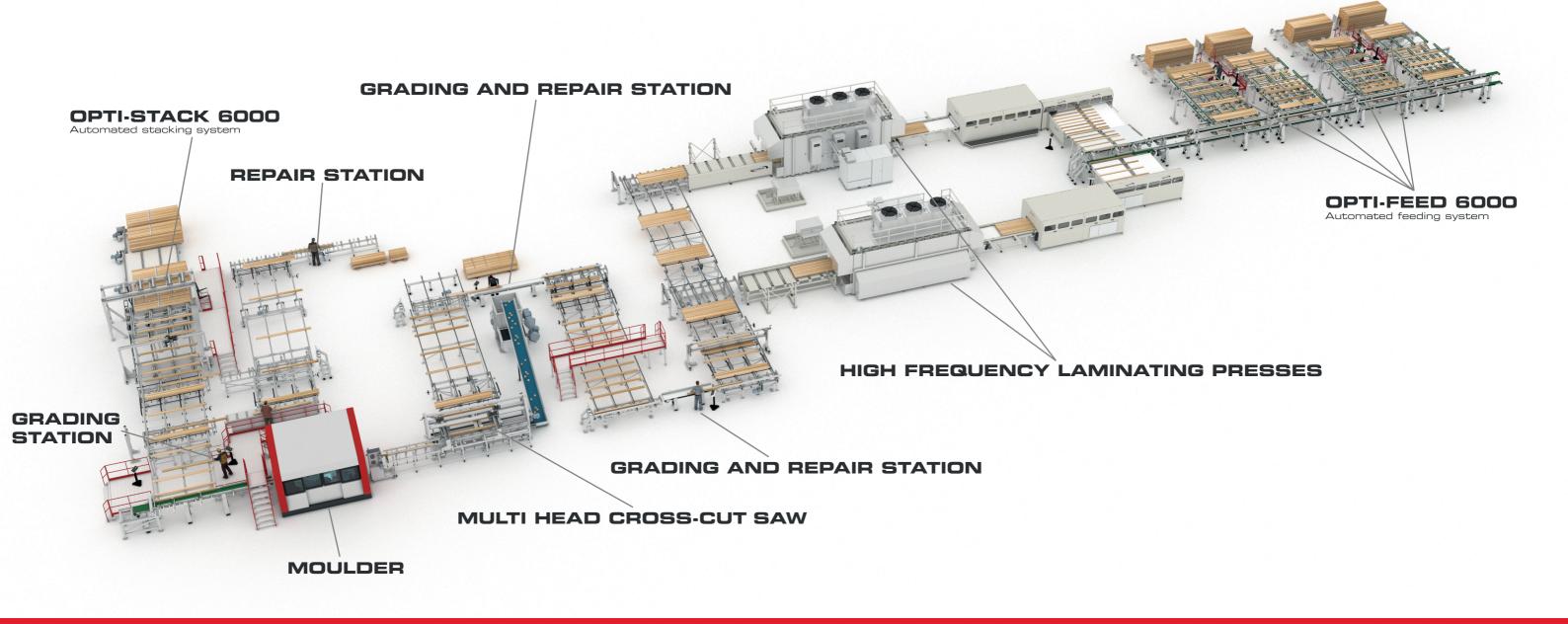
This Opti-Solution is an optimizing cross-cut line that starts with an Opti-Feed 6000 automatic feeding system, followed by a MiCROTEC rip scanner and a ripsaw.

Workpieces are then scanned by a MiCROTEC Goldeneye 502 scanner and processed by three optimizing Opti-Kap 5103 cross-cut saws, in which workpieces are cross-cut into finger-jointing components according to scanning results and best wood utilization.

Next, workpieces are sorted into different qualities and lengths, and are either stored in boxes or transported straight to two automated finger jointing machines, Opti-Joint H-200. Finally, workpieces are processed by two moulders that turn finger-jointed components into final products.

Production:	Doors
Wood species:	Softwood
Number of operators:	* * * * * * * * * * *
Country:	USA

Building Components Manufacturer



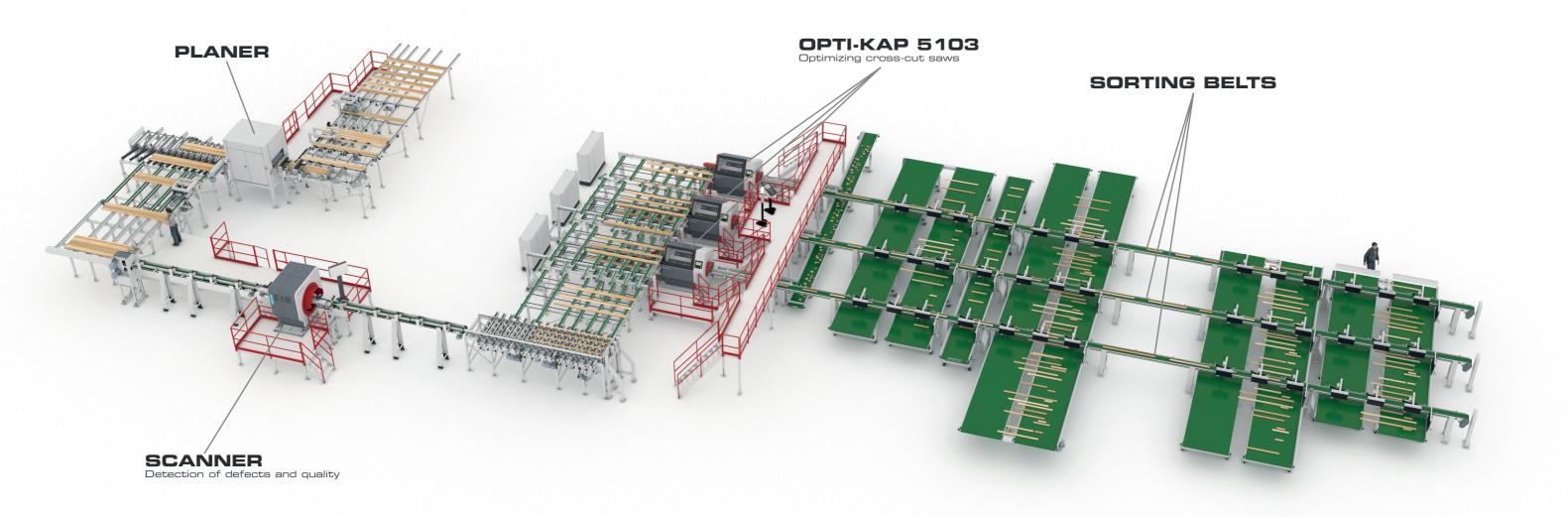
This Opti-Solution is a material handling system featuring four Opti-Feed 6000 feeding systems that feed four different qualities into two high frequency laminating presses.

After laminating, beams are separated inside a buffer system and automatically transported to two grading and repair stations. If necessary, beams can be manually repaired by two operators. After the grading and repair stations, the beams are processed by a multi head cross-cut saw MK2, where the ends are trimmed before the moulding process.

After the moulder, the beams are once again quality checked and repaired if needed. Then, they are labelled and transported to an automated stacking machine, Opti-Stack 6000.

Production:	Building components
Wood species:	Softwood
Number of operators:	* * * * * *
Country:	Romania

Flooring Manufacturer

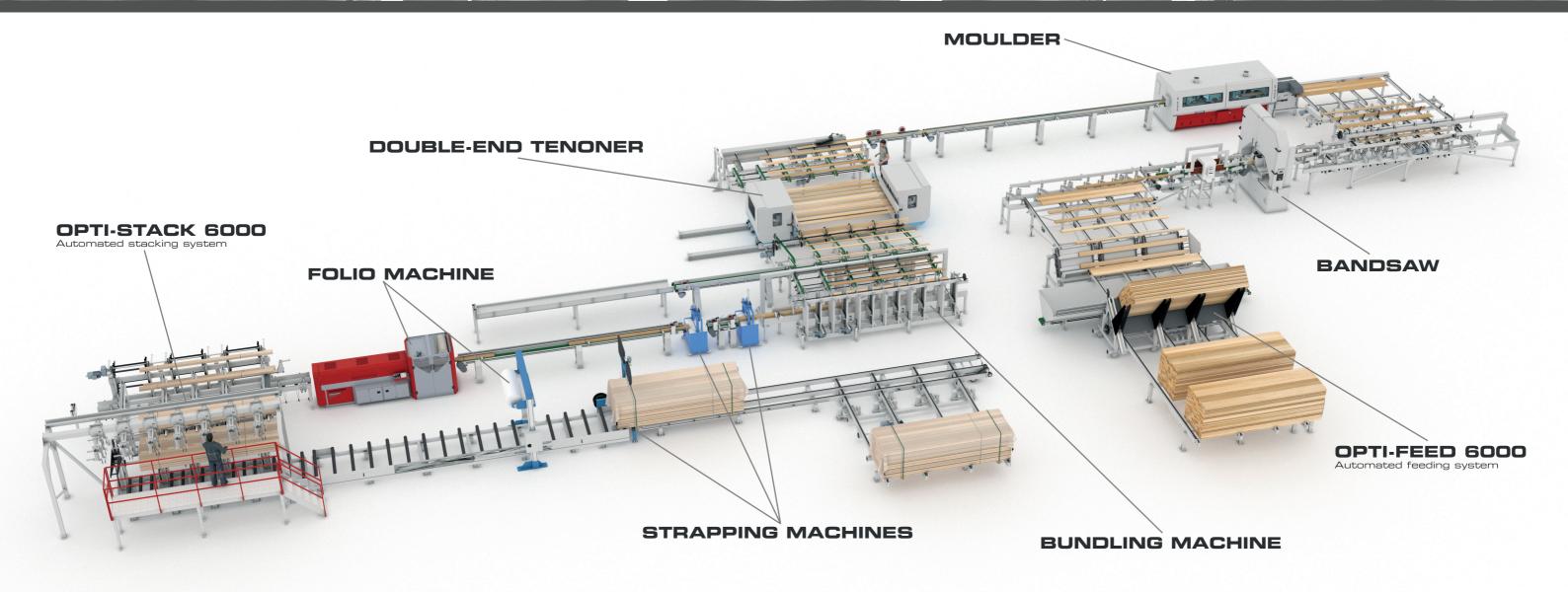


This Opti-Solution is an optimizing cross-cut line featuring an Opti-Feed 6000 feeding system that feeds batches of workpieces to a planer. After the planer, workpieces are automatically transported to a Microtec Goldeneye 502 scanner including X-ray for the detection of defects and quality.

By means of a queue control system, workpieces are then transported to three optimizing Opti-Kap 5103 cross-cut saws that cut workpieces into flooring components. These cross-cut components are then sorted according to correct lengths, qualities and widths.

Production:	Flooring
Wood species:	Hardwood
Number of operators:	† †
Country:	USA

Moulding & Millwork Manufacturer

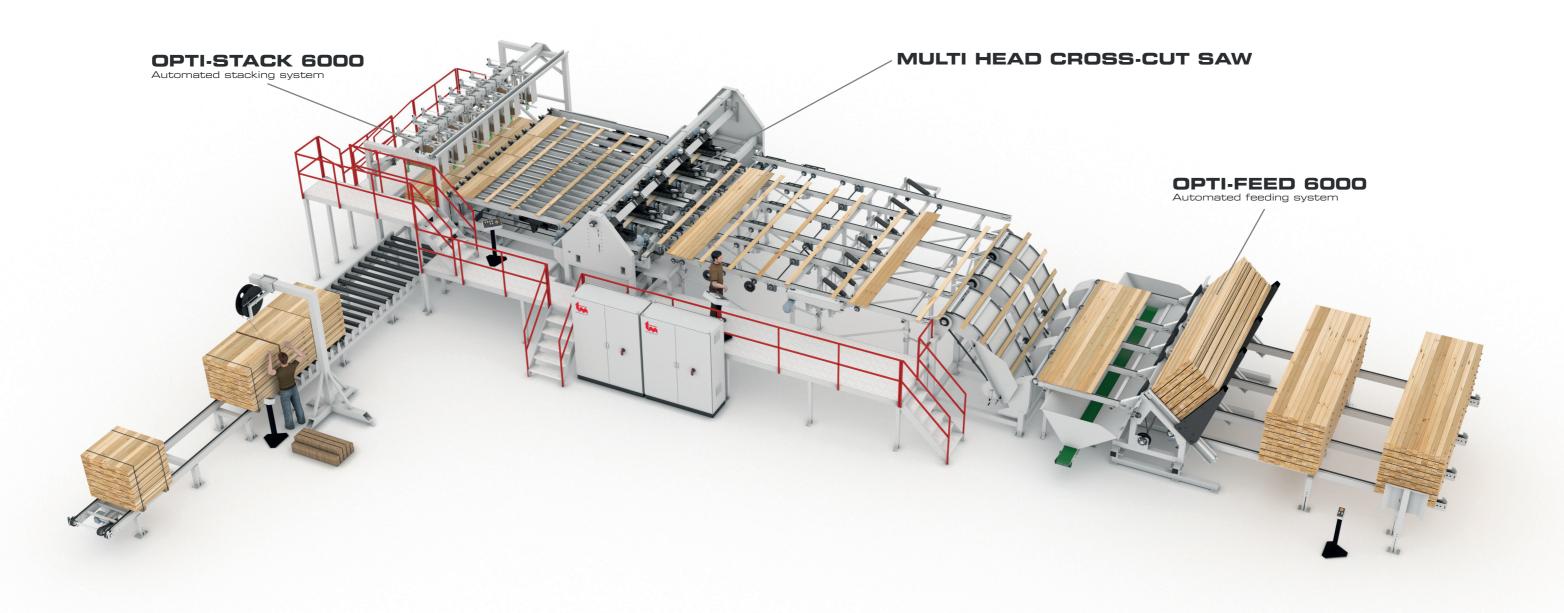


This Opti-Solution is a material handling system featuring an Opti-Feed 6000 automatic infeed system that automatically feeds workpieces into a bandsaw. The bandsaw splits workpieces into two or three pieces, after which workpieces are separated into individual pieces and orientated in the correct order before entering a moulder.

After the moulding process, workpieces are transported to a double-end tenoner for end profiling, and then automatically bundled at a bundling station. Bundled workpieces are immediately strapped or folioed, and then stacked into large packs by an automatic stacking machine, Opti-Stack 6000. After stacking, full packs are finally folioed and strapped.

Production:	Moulding & millwork
Wood species:	Softwood
Number of operators:	n n
Country:	France

Pallet Manufacturer



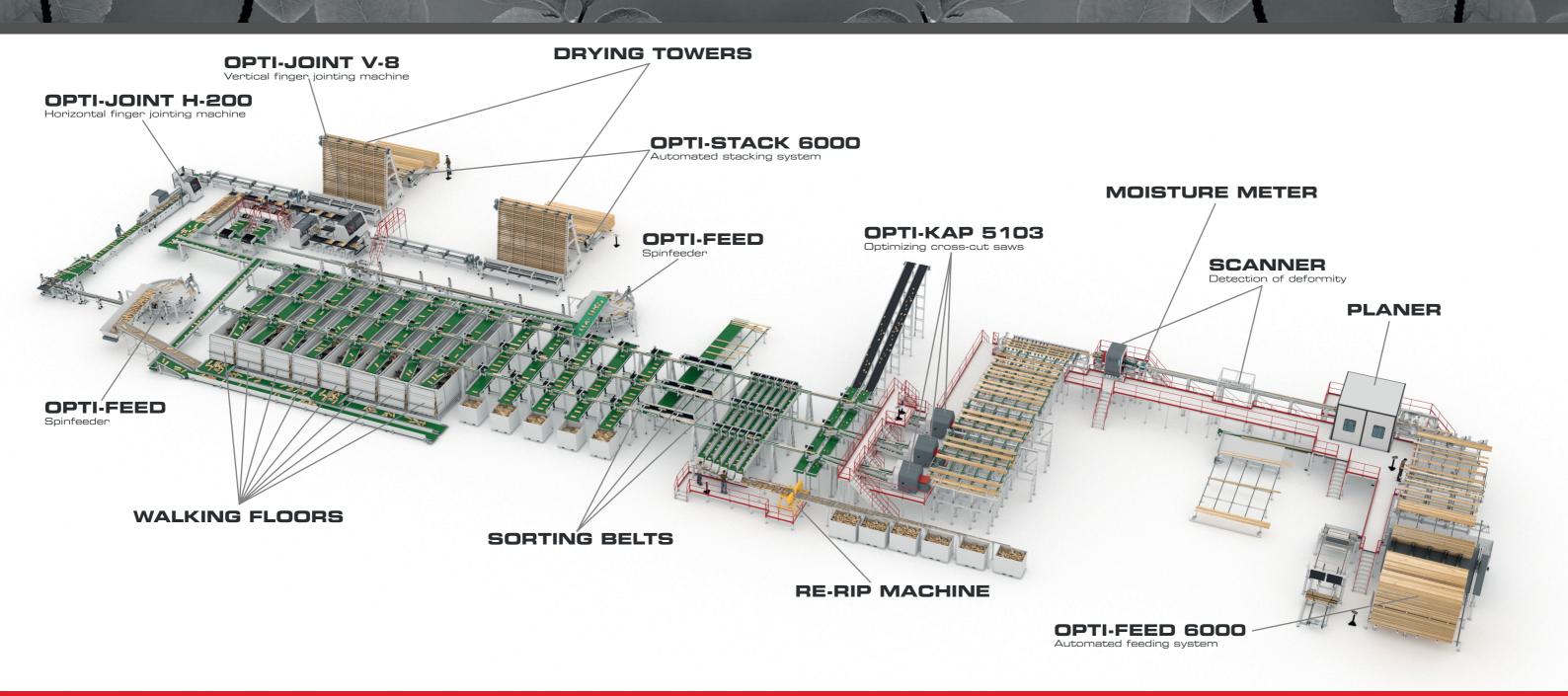
This Opti-Solution is a multi head cross-cut line featuring an Opti-Feed 6000 automatic infeed system that automatically feeds workpieces onto a feeding chain conveyor.

The feeding chain conveyor creates layers of workpieces, and feeds them into a multi head cross-cut saw MK5, for multiple cross-cutting. The cross-cut workpieces are then transported to an Opti-Stack 6000 stacking machine, which can also position stabilizing sticks inside packs if needed.

After stacking, packs are automatically separated and transported to a strapping station.

Production:	Pallet
Wood species:	Softwood
Number of operators:	† †
Country:	Ireland

Moulding & Millwork Manufacturer



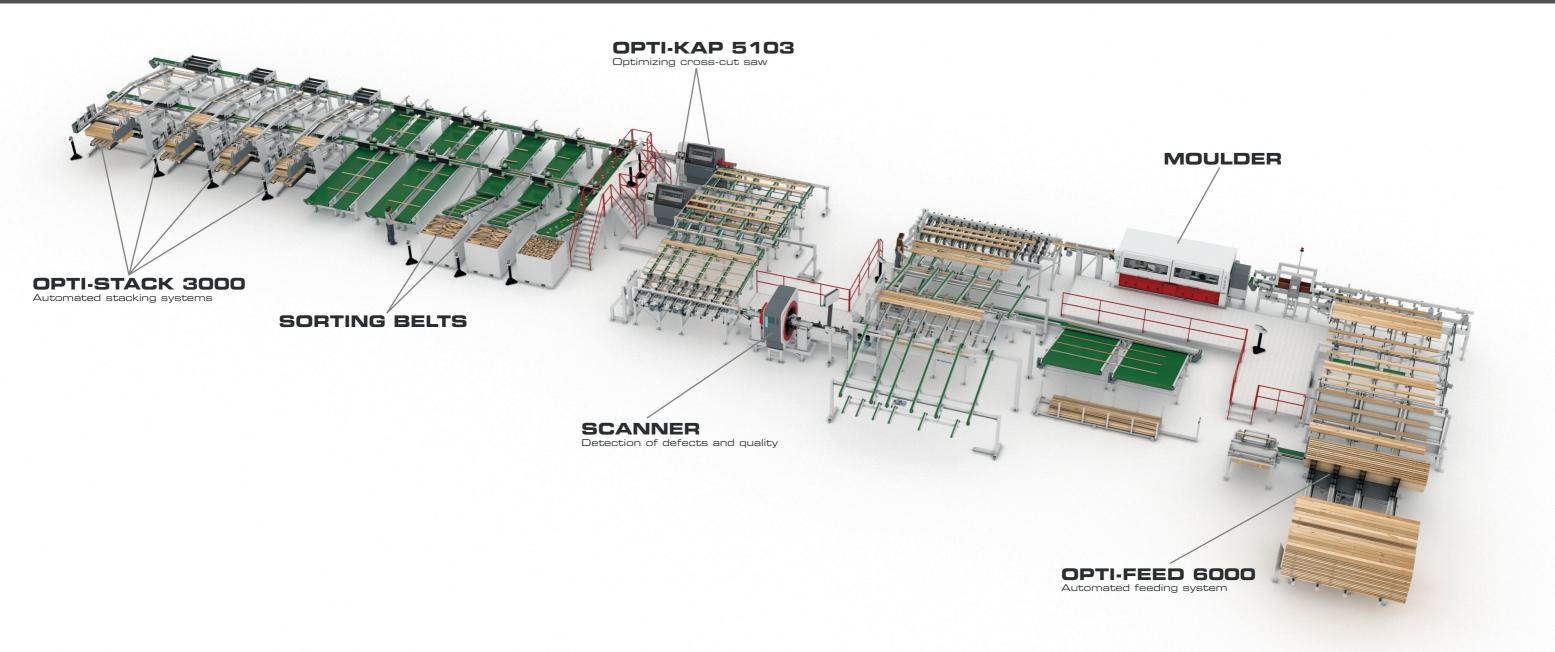
This Opti-Solution is an optimizing cross-cut line that starts with an Opti-Feed 6000 automatic feeding system, followed by a planer, a MiCROTEC Curvescan scanner, and a moisture meter.

Workpieces are then scanned by a MiCROTEC Goldeneye 502 scanner and processed by three optimizing Opti-Kap 5103 cross-cut saws, in which workpieces are cross-cut according to scanning results and best wood utilization.

Workpieces exit onto sorting belt conveyors and are sorted into various qualities and lengths. Depending on their various lengths and qualities, workpieces are either stored in boxes or transported to two automated finger jointing machines, Opti-Joint H-200 or Opti-Joint V-8.

Production:	Moulding & millwork
Wood species:	Softwood
Number of operators:	† † † †
Country:	New Zealand

Furniture Manufacturer



This Opti-Solution is an optimizing cross-cut line featuring an Opti-Feed 6000 automatic feeding system. This automatic infeed system feeds raw material into a moulding machine, in which workpieces are split into lamellas. After the moulder, lamellas are automatically separated into individual pieces and transported to a Microtec Goldeneye 501 scanner that detecs defects and qualities.

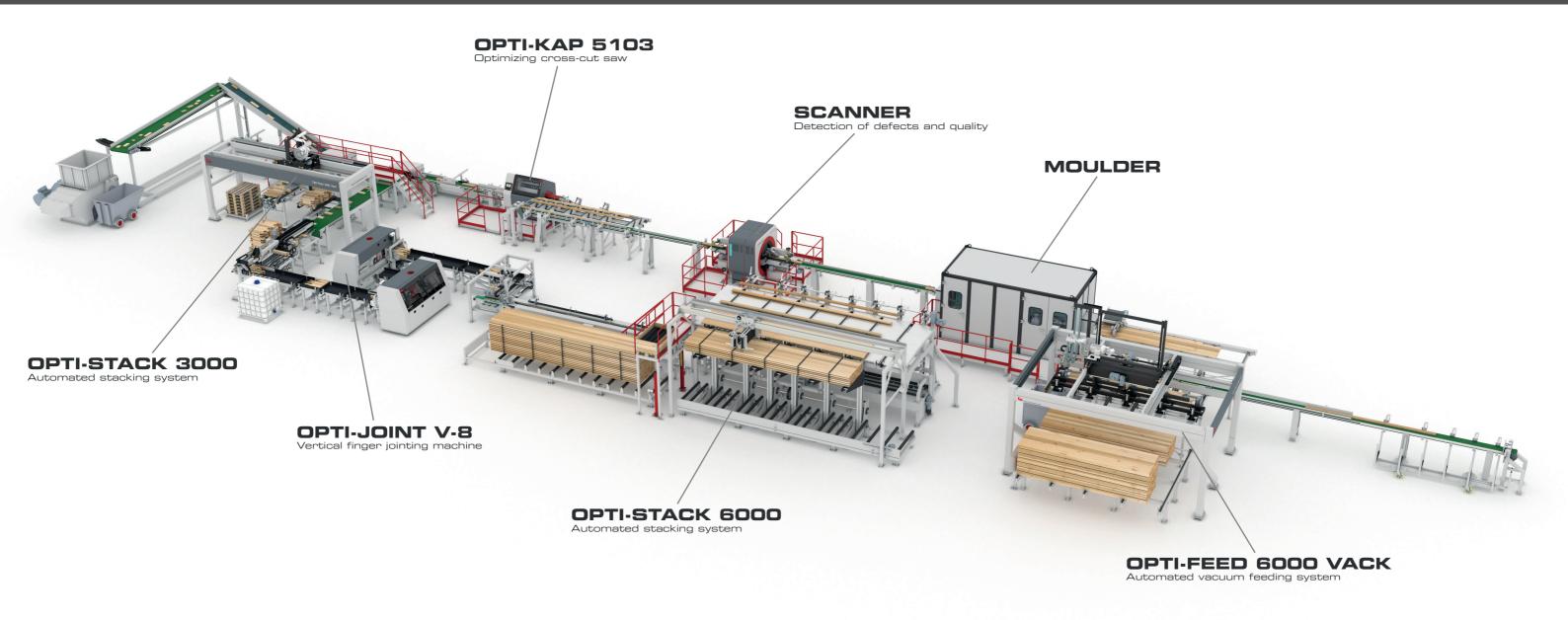
By means of a queue control system, workpieces are then transported to two optimizing Opti-Kap 5103 cross-cut saws that cut workpieces into furniture components.

After cross-cutting, components are either sorted for finger joint components or fixed lengths, stacked manually or automatically by four Opti-Stack 3000 stacking machines.

Production:	Furniture
Wood species:	Softwood
Number of operators:	† †
Country:	Poland

Window Manufacturer





This Opti-Solution is an optimizing cross-cut line that starts with an Opti-Feed 6000 Vack automatic feeding system, followed by a moulder.

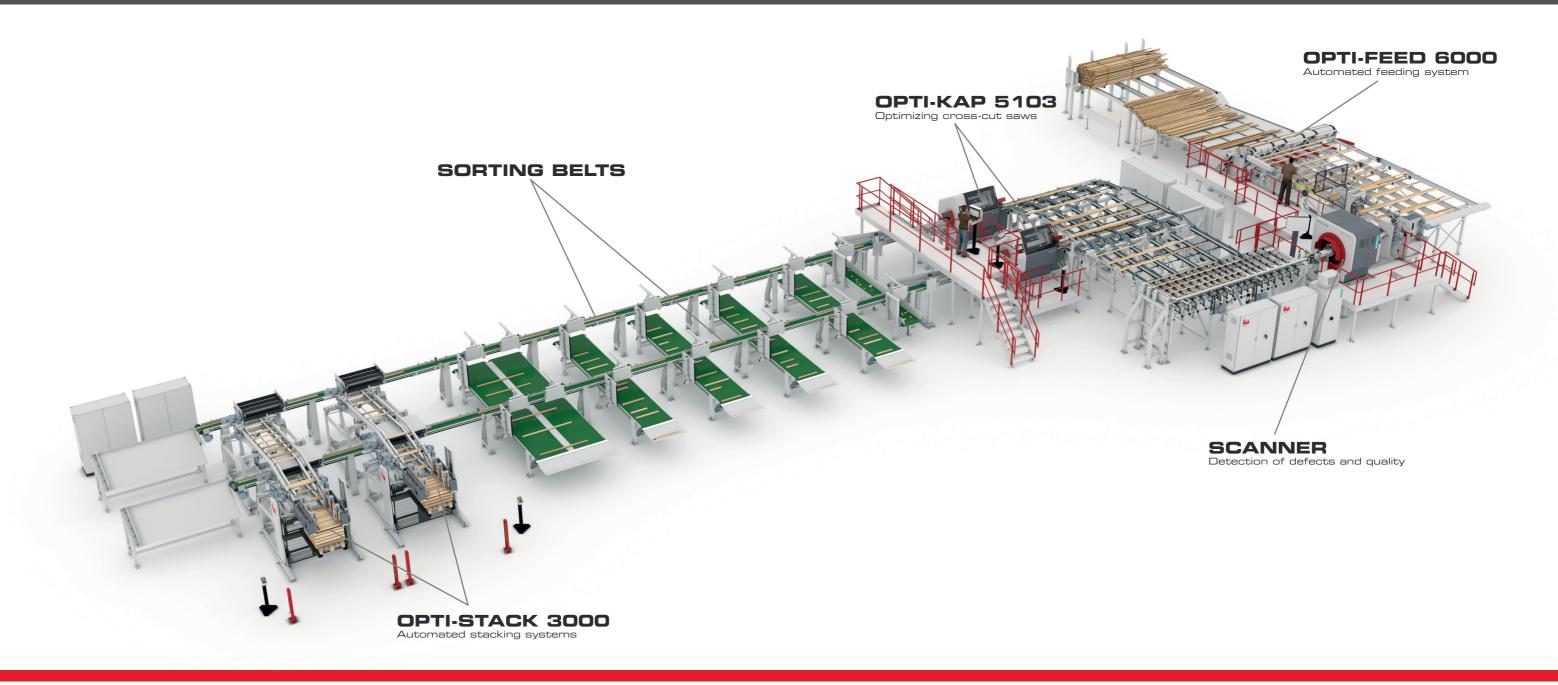
Workpieces are then scanned by a MiCROTEC Goldeneye 302 scanner and processed by an optimizing Opti-Kap 5103 cross-cut saw, in which workpieces are cross-cut into finger-jointing components, automatically fed into a finger jointing machine, Opti-Joint V-8, and stacked by an Opti-Stack 6000 stacking machine.

A bypass option allows the simultaneous handling of multiple finger-jointing qualities, in which some workpieces are stacked and later on reintroduced to the line's finger-jointer, the Opti-Joint V-8.

Production:	Windows
Wood species:	Softwood
Number of operators:	† †
Country:	Denmark Denmark



Kitchen Cabinet Manufacturer



This Opti-Solution is an optimizing cross-cut line that starts with an Opti-Feed 6000 automatic feeding system.

Workpieces are then scanned by a MiCROTEC Goldeneye 502 scanner and processed by two optimizing Opti-Kap 5103 cross-cut saws, in which workpieces are cross-cut according to scanning results and best wood utilization.

Next, workpieces can either be stacked manually at manual sorting stations or automatically by two automated Opti-Stack 3000 stacking machines. Automatic stacking is intended for fixed lengths, and manual stacking is intended for random and finger-joint lengths.

Production:	Kitchen cabinets
Wood species:	Hardwood
Number of operators:	ήnή
Country:	USA



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.



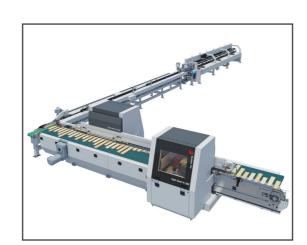
Opti-Feed
Automated feeding systems



Opti-Stack
Automated stacking systems



Opti-Kap
Optimizing cross-cut saws



Opti-Joint
Automated finger jointing systems

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, wanes 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 breakdowns.

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





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