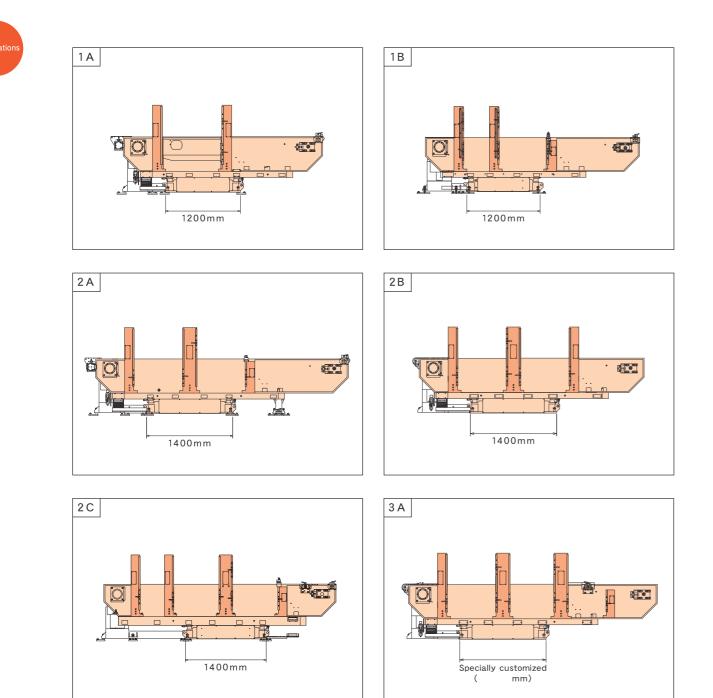
Product introduction



1S: Size of bed: 1200mm / Configuration of pillars: Specially customized 2S: Size of bed: 1400mm / Configuration of pillars: Specially customized 3S: Size of bed: Specially customized / Configuration of pillars: Specially customized 4S: Size of bed: Specially customized / Configuration of pillars: Specially customized

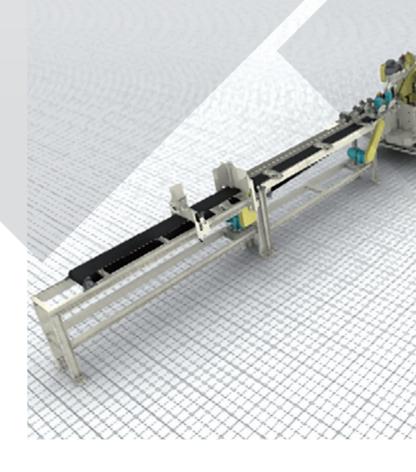


YASUDA CORPORATION

413 Kamishinkiri, Ichinomiya-cho, Toyokawa City, Aichi 441-1231, JAPAN TEL:+81-533-93-3500 FAX:+81-533-93-6277 E-mail: info@yasuda-corporation.com

IST Series Double End Tenoner

- Choice of Many of Models & Mechanisms
- Many Kinds of Various Caterpillar Chains
- Beveling and Slope Processing by Inclined Spindles
- Excellent Durability
- Body Cover(Optional)





98% Market Share in the **Flooring Field** in Japan

Feature

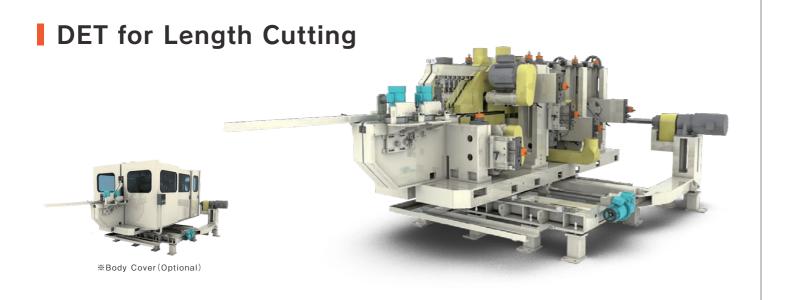
Double End Tenoner IST Series

This machine processes tenon on both sides of materials with feeding materials on the caterpillar chain. It also processes various profiles, such as sizing, beveling, shiplapping with high accuracy and efficiency.

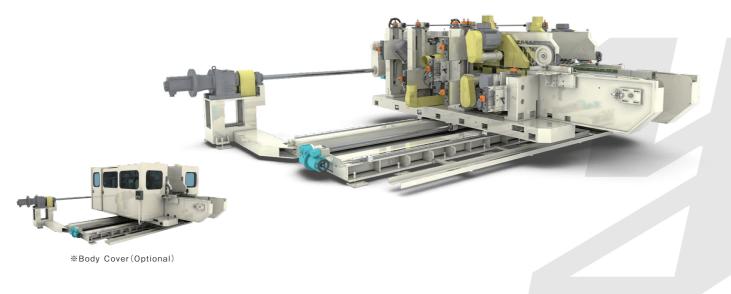
Moreover, our DET has excellent productivity and durability. Continuous operation for 24 hours is possible. Many customers use our DET for over 30 years with proper maintenance. Durability is one of our DET's strong points.

Our DET has a **98% market share** in the flooring field in Japan.

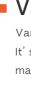
As to specifications, our products are made to order. Specifications would be determined by needs.



DET for Cross Cutting

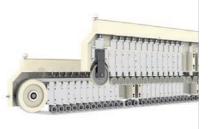




















Various Main Spindles

Various spindles specialized for hogging, molding and grooving. It's possible to achieve high accuracy in cutting by positioning the materials & caterpillar chain closest to the cutting surface.

Caterpillar Chain

There are four different kinds of caterpillar chains, 75mm, 35mm, 30mm, 25mm. You can choose the width appropriate to materials' width. This is unique to our company not available from our competitors. It achieves to process with high accuracy.

*The 25mm-width caterpillar chains are specially customized parts (negotiable).

Hold Down Unit

Air Cushion Style keeps the maximum pressing and pushing allowance without deviation. You can choose from roller or pressure belt which depends on materials. This is an example below.

- Roller Type It's often used by DET for length cutting.
- Belt Type It's often used by DET for cross cutting.

.....

Inclined Spindles

Direct drive spindles can change angles. In addition to beveling, it processes many different angles. You can change angles easily with an inclined scale.

Main Spindle Motors

You can choose a high frequency motor of direct drive type or belt drive type. As to a high frequency motor of direct drive type, you can easily change revolution speed by an inverter. (An inverter is an option) The belt drive type's speed is set by the pulley ratio.

Dog Feed

As to cross cutting, it will be dog feeding on the long side basis. Each material is fed with two dogs on both sides of the caterpillar chain, so that the machine enables to be right angle processing with high accuracy.



IST Series Auto Return Tenoner

- Array of Various Main Spindles
- Reduces Significantly the Setup Time
- Digital Touch Panel
- L/R Columns Open & Close with High Speed
- Ability to Process Length & Cross Cutting by One Machine & One Employee

Feature Space-Saving, Energy-Saving



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413 Kamishinkiri, Ichinomiya-cho, Toyokawa City, Aichi 441-1231, JAPAN TEL : +81-533-93-3500 FAX : +81-533-93-6277 <u>E-mail : info@yasuda-corporation.com</u>

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Your Nearest Agent

Product

Functions

Auto Return Tenoner IST Series

This machine enables processing length and cross cutting by one machine & produces small-volume production in great varieties. After processing & discharging materials, caterpillar chain reverses and materials come back to the operator who can work independently (cutting tools retract automatically). Both columns open & close at 20m/min at high speed. The design is simple, making a drive shaft unnecessary on the upper discharging side.







Digital Touch Panel

The screen shows a drawing of the product, so you can input working dimensions with ease on the touch panel.

Also you can operate by the touch panel columns' positioning, spindles' control, power supply for motors and so on. Trouble-shooting is easily accomplished as any problem is displayed on the touch panel.

Hold-Down Unit

Air cylinders keep materials pressing consistency. They prevent materials from deviating, rebounding, over-running. The air cylinders support processing with high accuracy. There are pressure sensors on L/R hold down units. When air pressure

There are pressure sensors on L/R hold down units. When air pressure malfunctions, the machine stops immediately.



Main Spindles Array

You can choose spindles array depend on profiling. Spindles array is determined by needs. Our products are made to order. We will supply you the machine which best meets your demands.



Feed Drive Two servomotors, one installed on each L/R column and individually energized, working under synchronizing control

Without any typical driving shaft, a pair of two servomotors, one installed on the outer side of each column, work together under the synchronizing control to feed the caterpillar chains on each track.

Although the phase difference between two caterpillar chains on L/R tracks may arise from a long-term operation, the operator can correct the phase difference just by a numerical input on the touch panel.

Note: If the operation time of the caterpillar chains exceed the limit of usage, the overhaul of the caterpillar chains is necessary.





IST Series Double End Tenoner for Narrow Workpieces

- 30mm- and 35mm-Width Caterpillar Chains Made by Yasuda.
- High-Precision Machining on Narrow Caterpillar Chain.
- Variety of Spindle Configuration Suitable for Desired Processing Shape.
- Customization of Machine Specifications Available with a Variety of Options.

Feature Minimum Workpiece Width of Accurate Hogging:75mm



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Product

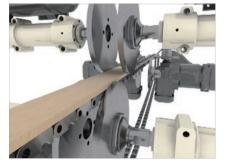
Double End Tenoner for Narrow Workpieces / IST Series

By using the 30mm- or 35mm-width caterpillar chain set manufactured by Yasuda, Yasuda's double-end tenoner can process the narrow workpieces with the minimum width of 75mm. Same as the normal Yasuda's double-end tenoners, a variety of options are available for this type of tenoners such as customization of spindle configuration, rapid column positioning and automatic setup system resulting in the reduction of the machine setup time. For many years, customers in extensive production fields choose Yasuda's double-end tenoners for narrow workpieces with the narrow caterpillar chains.



Functions





Adapter Flange

Unlike the holding flanges that make a few millimeters protrusion from cutting tool surface, introducing the adapter flanges makes it possible to set the horizontal spindle head closer to the caterpillar chain and thus to process the narrow workpieces.

XAdditional set of holes for the adapter flange installation is needed on the cutting tools.

Various Spindle Configuration

A combination of the plural spindles enables tenoners to process the workpieces (such as cutting, molding, and grooving).

The high-precision processing becomes possible by setting the cutting tools the closest to the outer sides of the hold-down unit and caterpillar chain.





Caterpillar Chain

The caterpillar chains with two different widths, that is, 30 and 35 mm, are available, and you can choose one based on the minimum width of processing.

A variety of caterpillar chains exclusively available from Yasuda is the strong point of Yasuda's tenoners and realize the accurate processing.

Hold-Down Unit

Air-cushioned type hold-down unit provides a stable pressure and holding allowance on each workpiece.

Two types are available, that is, roller type and belt type, and you can choose the one depending on the works. An example is below. Roller Type

Often used by double end tenoner for length cutting (side tenoner). • Belt Type

Often used by double end tenoner for cross cutting (end tenoner).





ISM Series High Speed Gluing Line

Your Nearest Agent

- Suitable for Multi-Product Production
- Stable Heating & Pressing System
- Ability to Set Preheating Before Working
- Ability to Process Materials Right After Gluing
- Automatic Positioning System for the Height of Coater Rollers of the Adhesives

Feature

Gluing Laminated Panels in a Short Time

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413 Kamishinkiri, Ichinomiya-cho, Toyokawa City, Aichi 441-1231, JAPAN TEL : +81-533-93-3500 FAX : +81-533-93-6277 E-mail : info@yasuda-corporation.com

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High Speed Gluing Line ISM Series

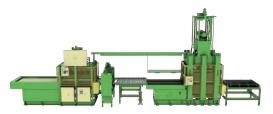
The machine enables gluing laminated face panels & cores in approx 40 sec.

- Heat cores by the preheat device.
- Glue adhesives by the roll coaters.

• Press laminated face panels & cores by the pressing device.

The machine enables feeding many kinds of materials so that it can adapt to multi-production product.

This machine is used for the manufacturing of tables, doors, closets, partitions, ceilings, flooring and so on.









Digital Touch Panel

Touch panel is equipped with an automatic positioning system to adjust the height of coater rollers of the adhesives.

Hydraulic Cylinders

The preheat device & pressing functions are controlled by hydraulic cylinders for consistency.

Roll Coaters

The feeder equipment applies adhesives automatically. (Optional)

Temperature Control

It is easy to check & digitally control the temperature of the heating plates in the preheat device.

Model		ISM Series
Working Dimension	Width	70~1250mm
	Length	500~2450mm
	Thickness	Core 8 \sim 25mm/Face Panel 2 \sim 6mm
Compressing Force	Preheating Device for Core	30~254kN(3~26 ton)
	Pressing Device	294~2450kN(30~250 ton)
Cycle Time		Approx 40 sec

%The above specifications are an example. They would be determined by customization. %Cycle Time depends on materials, adhesives and so on. %Cycle time can be shortened by pressing an array of panels concurrently. (Optional)





ISG Series Gang Rip Saw

- Ability to Choose Feeding Type from the Slat or Rollers
- Straight Line Processing with High Accuracy by Caterpillar Chain(for the Slat Type)
- Ability to Cut Maximum Width to 1250mm
- Ability to Choose Various Models & Mechanisms Body Cover (Optional)

Feature

Cuts Panels into Small Pieces or Grooving



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Gang Rip Saw ISG Series

This machine cuts panels into small pieces or processes its grooving.

In case of feeding on the slat, it's equipped with caterpillar chains at both ends. The machine enables straight cutting with high accuracy due to caterpillar chain and chain guide.

The saw may be ordered with spindles specified in an up or down position from the pass line. We can design a machine depending on your specifications.

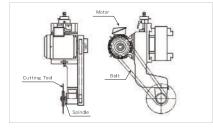
See an example of specifications below. You can choose feeding type from the slat or rollers. As an option, it's possible to be equipped with ATC(Auto Tool Changer). It will change cutting tools in a short time. Also the machine can be equipped with a brush for clearing chips as an option.





Type of Spindles

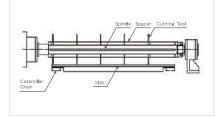
This is the unit with cutting tools equipped with multiple spindles. The spindles revolve by belt; the number of revolutions is set by the pulley ratio. Individual width positions can be freely set for multiproduct production.



This is the unit with cutting tools equipped with a single spindle and fixed by the spacers.



single spindle and fixed by the spacers. It's designed for materials which process with many cutting tools and a narrow pitch.



(For the Slat Feeding)

Model		ISG-202,203,204/SF-US
Working Dimension	Width	Max 600/950/1250 mm
	Thickness	$6\sim 25$ mm
Spindle Rotation		3,000rpm
Spindle Motor		$37 kW \times 4P$
Spindle Lifting Motor		0.4 kW \times 4P
Feed Rate		13 \sim 24m/min
Feeding Motor		3.7kW×4P
Hold Down Hoisting Motor		0.4 kW \times 4P

% The above specifications are an example. They would be determined by customization.





KYN Series Veneer Trimming Saw

- Powerful Clamp by Hydraulic Cylinders
- Equipped with Automatic Positioning Device
- Ability to Straighten Warped Materials
- Digital Touch Panel
- Powerful Clump

Feature Process Four Sides in a Cycle



Granted Patent (No.5013752)

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413 Kamishinkiri, Ichinomiya-cho, Toyokawa City, Aichi 441-1231, JAPAN TEL : +81-533-93-3500 FAX : +81-533-93-6277 <u>E-mail : info@yasuda-corporation.com</u> Your Nearest Agent

Product

Veneer Trimming Saw KYN-950

Slice veneer for flooring requires dimensions, straight lines and right angles of high accuracy. Our Veneer Trimming Saw meets your demand for high performance. The machine clamps some slice veneers powerfully, and processes four sides. This machine enables processing with high accuracy, operating easily.









The control board is equipped with a digital touch panel with a simple interface. The machine will set the cutting tools' positions automatically afterinputting working dimensions.

After setting the materials, it starts processing at the push of one button.

Powerful Clamp

The machine clamps materials by hydraulic cylinders. Even warped materials can be easily straighten.

Main Spindles Drive

The machine cuts four sides in a cycle with high accuracy. You can select cutting orders, such as from width to length or length to width. The spindles' motors are controlled by the inverter. After processing, cutting tools stop immediately, enhancing operator safety.

.....

Discharging Chips

This machine is equipped with a conveyer belt on the bottom of the machine which discharges chips smoothly.

Body Cover

The body cover prevents chips from scattering.

XYou can watch a film about Veneer Trimming Saw on our web site.

Model		KYN-950
Working Dimension	Width	$50 \sim 100$ mm
	Length	$200 \sim 950$ mm
	Thickness	$50\sim 60$ mm
Spindles	Width	$5.5kW \times 2P$ 2units
	Length	5.5kW \times 2P 2units
Spindle Traveling Rate		Approx 20m/min(60Hz), Approx 16m/min(50Hz)
Spindle Traveling Motor		$0.75kW \times 4P$ 4 units
Required Air Volume		0.5MPa 100 l /min (ANR)
Cycle Time		Approx 22 sec(60Hz), Approx 26 sec(50Hz)
Power Supply		3 Phases AC200V 60/50Hz

% The above specifications are an example. They would be determined by customization.



Click processing shape figure

Double End Tenoner Line for Processing the PVC/SPC/WPC Flooring

POINT

Long-term-proven Yasuda's tenoners for processing the CLICK system for domestic and overseas clients.

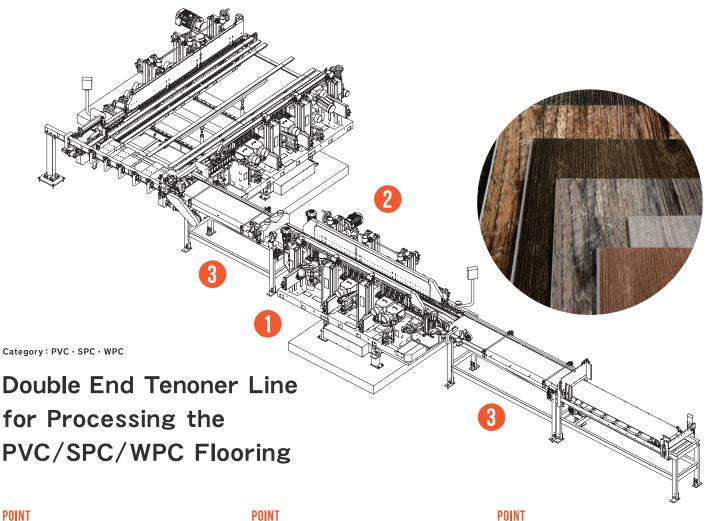
POINT 2

Machine specifications available not only for processing the CLICK system but also for just sizing cut and bevering.

POINT 3

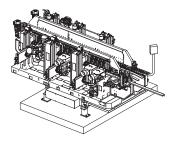
Making a high processing accuracy possible with Yasuda's factory-made caterpillar chains exclusively available from Yasuda. (made in Japan, of course)

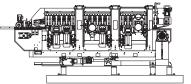
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POINT

Many clients have chosen Yasuda's machines processing the CLICK system. Yasuda can offer various spindle configuration suitable for your desired machining profiles.

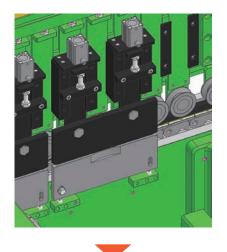




POINT

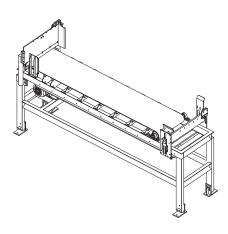


In order to secure a processing accuracy, the auxiliary hold-down and supporting units are installed for each spindle.





Not only tenoners! Yasuda also design and manufacture the induction and various intermediate conveyors in the tenoner lines.



Let us know your detailed requirement! Yasuda can provide your best machines for your production quantity and workpieces.

http://www.yasuda-corporation.com