

WOOD INDUSTRY

700T Gantry Brochure

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JOULIN
vacuum handling

version 20.9

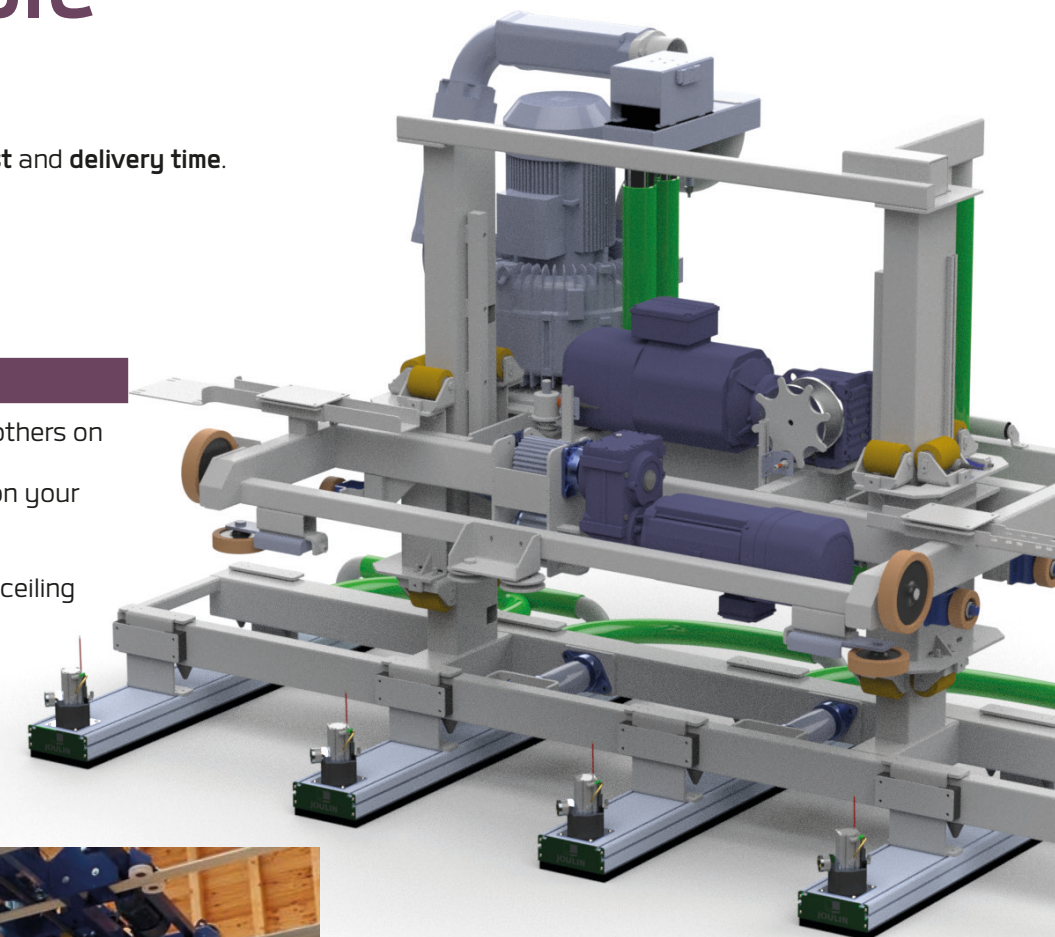


Fast & Reliable

Standardized design to reduce cost and delivery time.

Infinite Options

- 2 standard motor configurations; others on request
- Adjustable framework depending on your layout
- Mobile Framework
- Telescopic columns for low roof or ceiling
- Radio control
- ...



700T Gantry Robot can be used in 80% of the Wood Industry



- ✓ Simple, strong design
- ✓ **High speed** stacker or destacker
- ✓ **Quick** supply of parts and service
- ✓ Flexible **handling** for **all dimensions**
- ✓ Pick or Release on **multiple positions**

- ✓ Manufactured in **series** to **reduce cost and delivery time**
- ✓ Manufactured using **high quality, internationally known brand components**
- ✓ Universal Gantry to fit the **majority of needs**
- ✓ Destacking or Stacking **layers up to 700kg**
- ✓ Largest manufacturer of gantry systems in the wood industry
- ✓ New grippers **30% more efficient and faster** (ExtruGrip)
- ✓ Handles **off-center boards/layers**



Applications

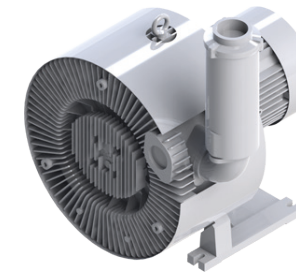
- Sticking or desticking before or after kilns
- Joinery machine infeed and outfeed
- End of line stacking
- Band saw outfeed
- Several lines can be fed / stacked with the same gantry robot:
 - Molder / planer,
 - cross cut saw,
 - rip saw infeed, etc



700T in detail

Manufacturing facilities

With offices and manufacturing in France and the USA, we are able to design and manufacture to your specific needs.



VACUUM GENERATOR

A wide range of efficient vacuum blowers, up to 37kW



TRANSMISSION

Timing belt technology for high acceleration and speed:

- Timing belt with fixed traversing motor on the framework.
- Timing belt with traversing motor on the carriage of the machine.



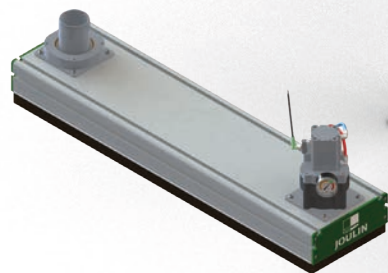
LIFTING COLUMN

Twin synchronized columns for strength and rigidity
Telescopic option for low roof clearance



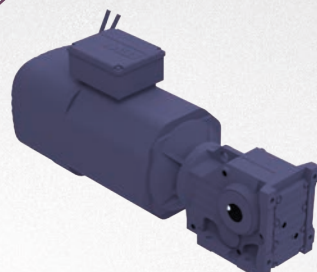
FRAMEWORK

Wide or Narrow legs as needed for your equipment layout



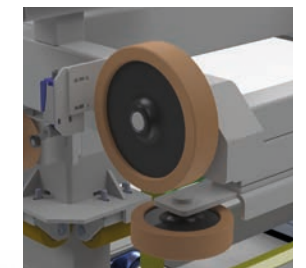
GRIPPERS

A complete range of grippers
ExtruGrip grippers, in aluminum extrusion, are the best to handle all kind of products.
No filter required in the gripper (less maintenance).



MOVEMENTS

Gearmotor and Servo Controls for Speed and Accuracy of Movements



WHEELS

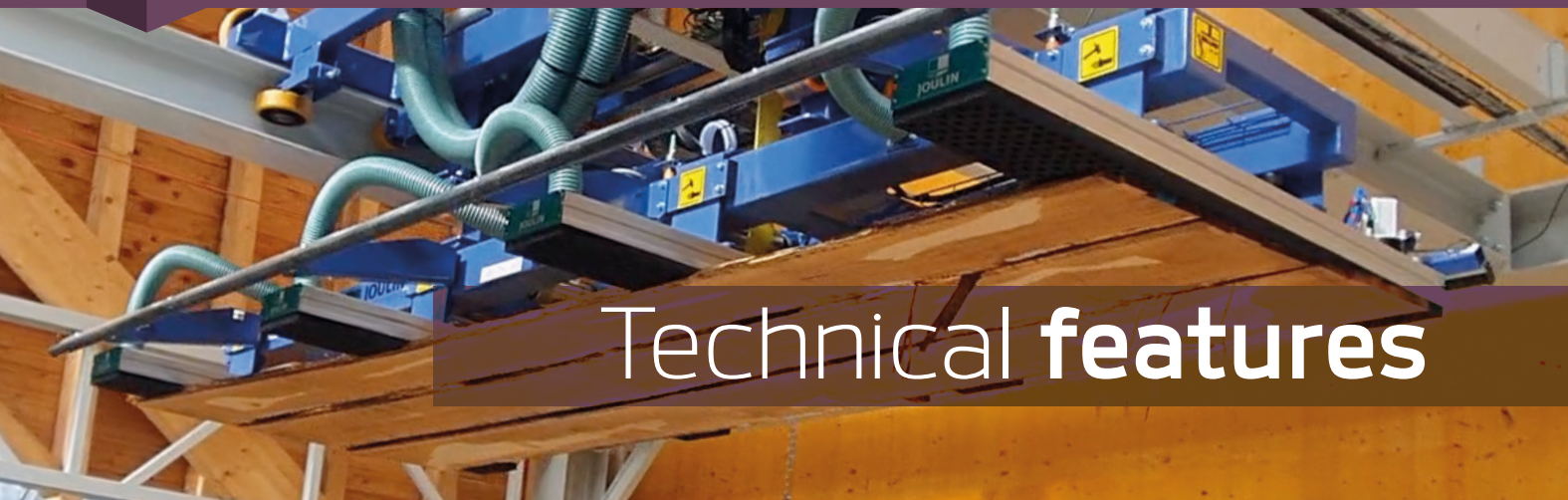
Polyurethane
High wear resistance
High dynamic load capacity



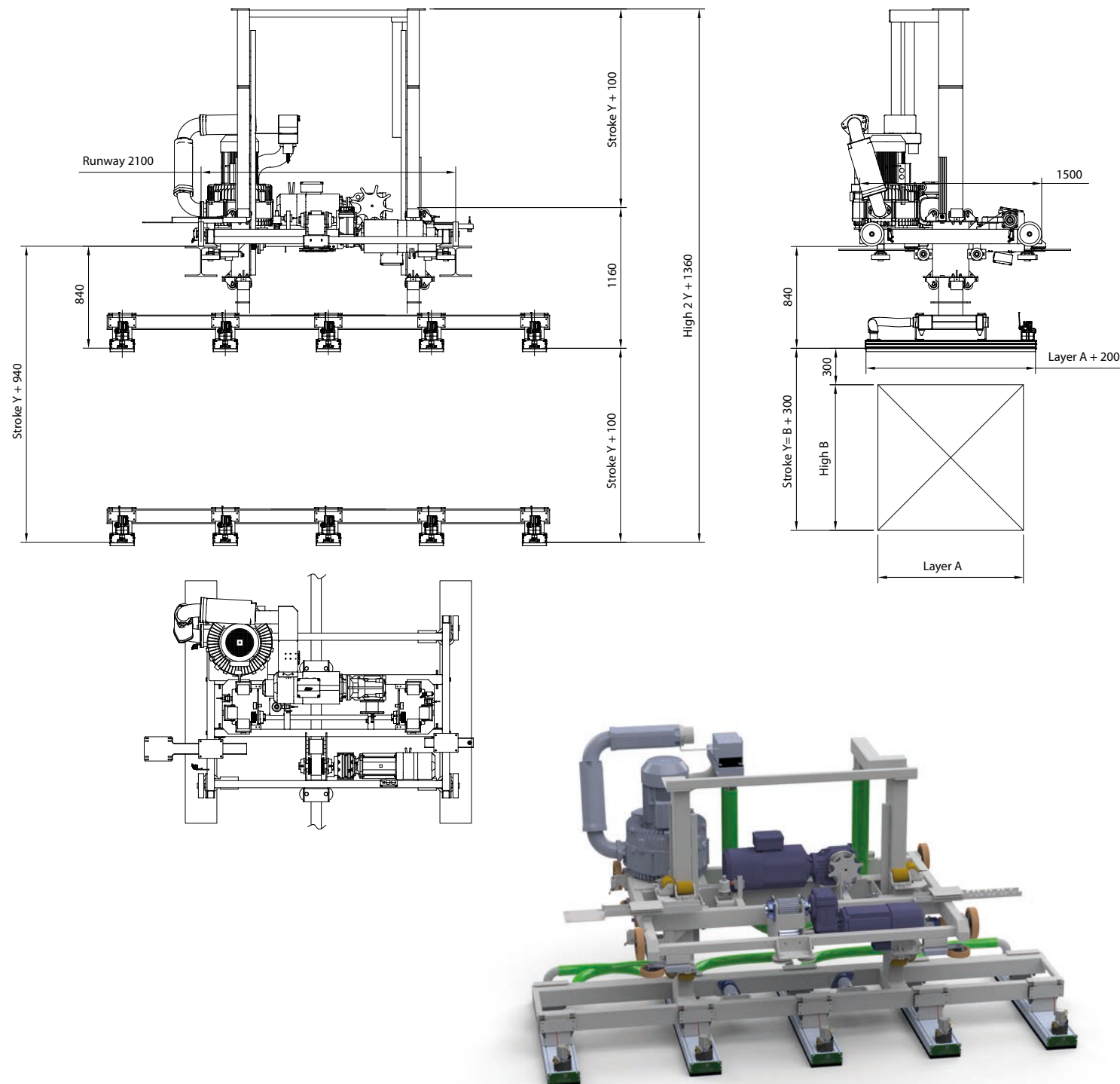
LIFTING BELT

Made with high-strength materials
High lifting capacities





Technical features



Standard Features	700T-4	700T-5	700T-6
Board Length	2000 to 6000 mm		
Board Width	minimum 50mm		
Board Thickness	5 to 100 mm		
Pack Width	standard 1200mm		
Pack Height	standard 1200mm		
Weight of board layer	200 Kg	350 Kg	500 Kg
Vacuum Grippers	4	5	6
Blower Power	7,5 to 11 kW	11 to 16,5kW	16,5 to 23kW
Lifting Stroke	300 to 2000 mm		
Lifting Motor	5,5 Kw	7,5 Kw	9,2 Kw
Lifting Speed	0,6 to 1 m/s		
Traversing Stroke	1500 to 10000 mm		
Traversing Motor	3 Kw	4 Kw	5,5 Kw
Traversing Speed	1 to 2 m/s		
Cycle Rate	up to 6 cycles/min		

For specifics requirements, possibility to have customized configuration - More information page 8

60 years of experience !

Proven lumber grippers with gantry systems that can be used in most projects.
60 years of **Joulin experience** with all the **latest technologies**.

With over 60 years experience, JOULIN offers solutions to **fit your stacking and destacking needs**.
Custom solutions can be proposed after studying your requirements.

Configuration	Basic	Mid-Range	Premium
Standard Equipments			
Lifting/traversing motors & blower	✓	✓	✓
Lifting column & grippers	✓	✓	✓
Encoder for Traversing Motor	✓	✓	✓
Sensors mounted and plugged on wiring modules	✓	✓	✓
Framework	-	✓	✓
Cable Drag Chain for lift and traverse mvt	-	✓	✓
Vertical Stroke Optimizer	-	-	✓
Electrical control Cabinet	-	-	✓
PLC / Programing	-	-	✓
Frequency Inverter for Lifting	-	-	✓
Frequency Inverter for Traversing	-	-	✓
Touch Screen	-	-	✓
Options			
Pack more than 1200mm Wide	✓	✓	✓
Pack more than 1200mm High	✓	✓	✓
Encoder for Lifting Motor	✓	✓	✓
Telescopic Column (for low roof ceiling)	✓	✓	✓
Servomotor for lifting and traversing motors	✓	✓	✓
Remote blower and traversing motor	✓	✓	✓
Timing belt for lifting movement	✓	✓	✓
Rotating grippers	✓	✓	✓
Radio Remote Control	-	-	✓
Modem Connection	-	-	✓

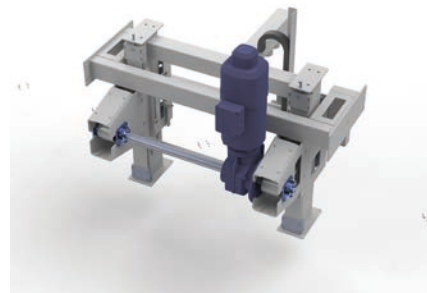


Options

Calculate your speeds / rates!



Software is now available on our website allowing you to custom design and confirm a system according to your loads and movements.



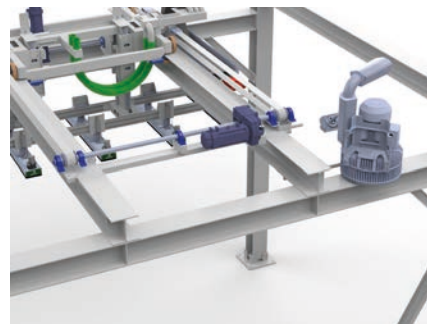
LIFTING TIMING BELT

Better positioning accuracy
Higher speed and acceleration



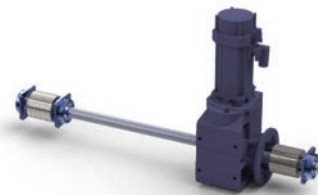
TELESCOPIC COLUMNS

Space saving
for low roof / ceiling



REMOTE TRAVERSING MOTOR / BLOWER

Higher speed and acceleration



SERVOMOTOR

High speed and acceleration



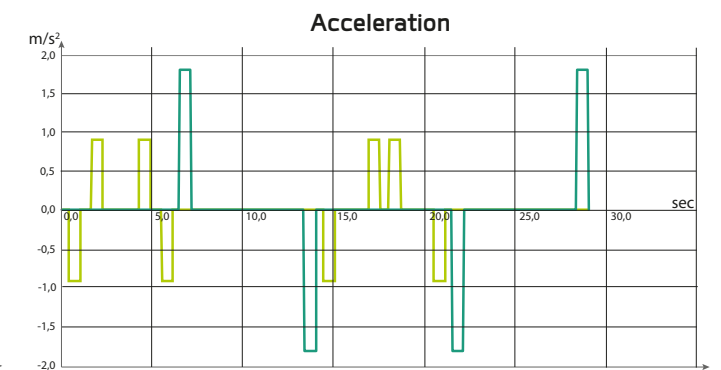
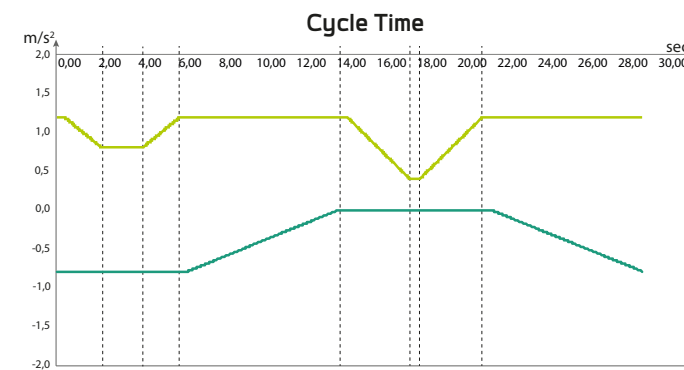
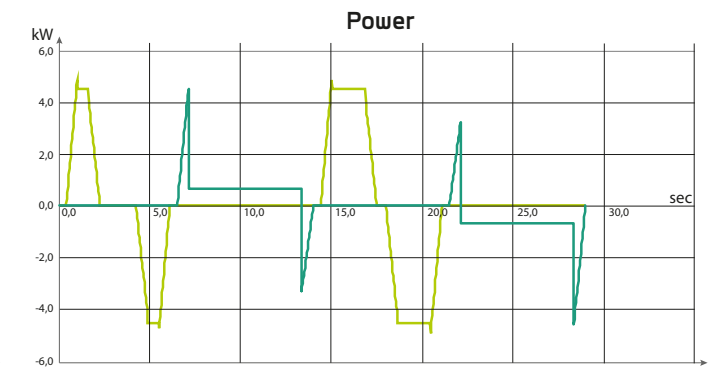
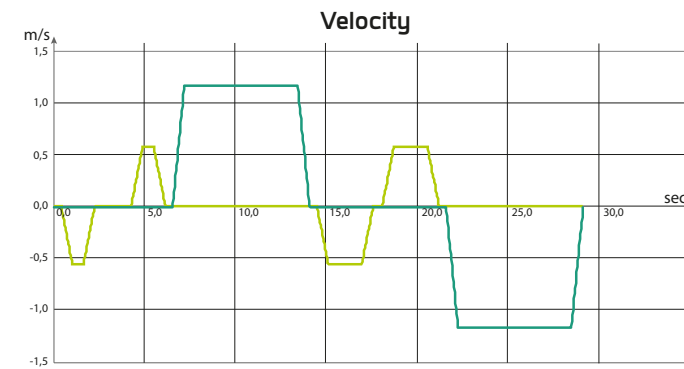
GRIPPER ROTATION

Flexibility for picking
a wide range of products

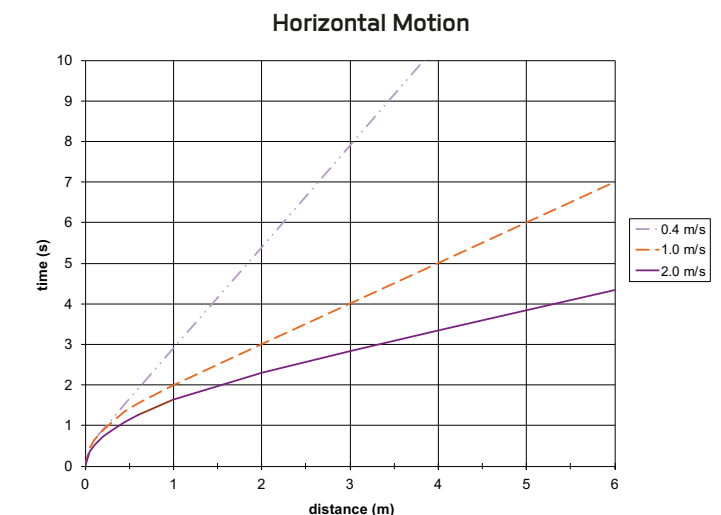
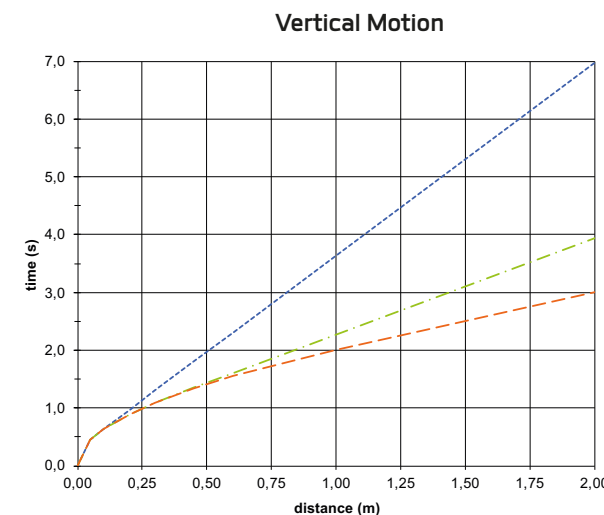


FRAME ROTATION

Flexibility for picking
a wide range of products



Simply fill your data and our software will help you to determine your cycle rates

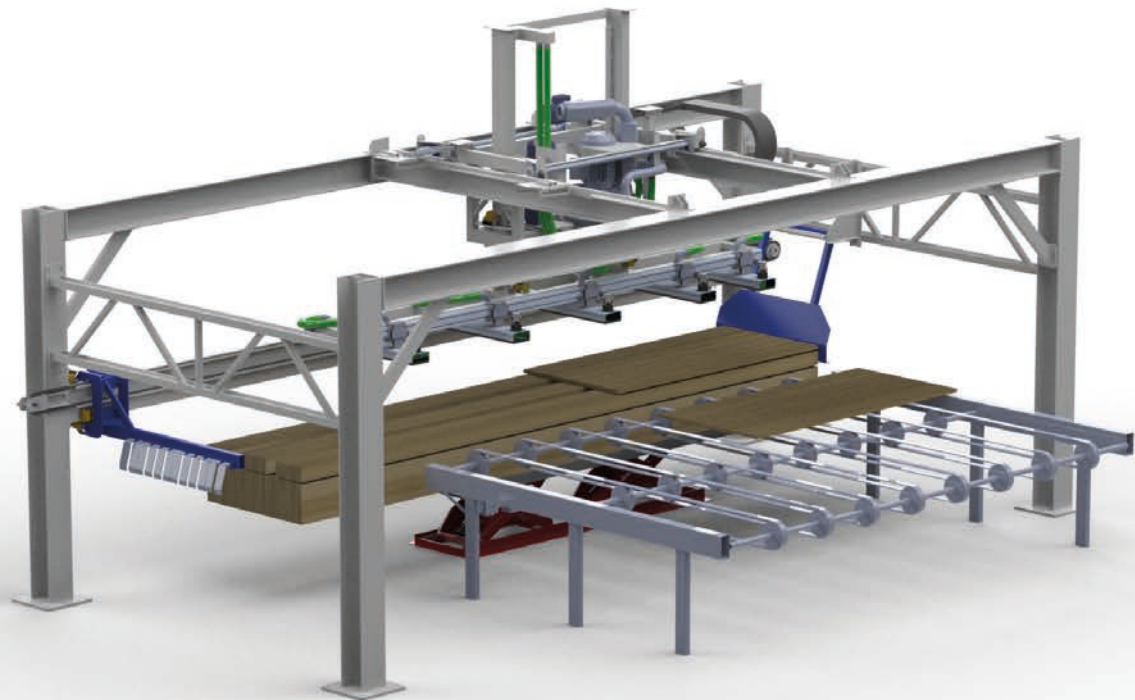




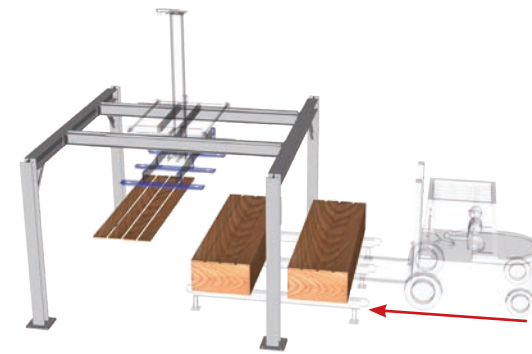
Examples of installations

Manufactured in US & France

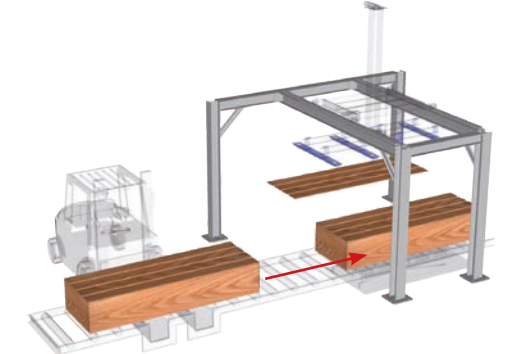
Proven and used by the most well-known companies / wood machinery manufacturers worldwide



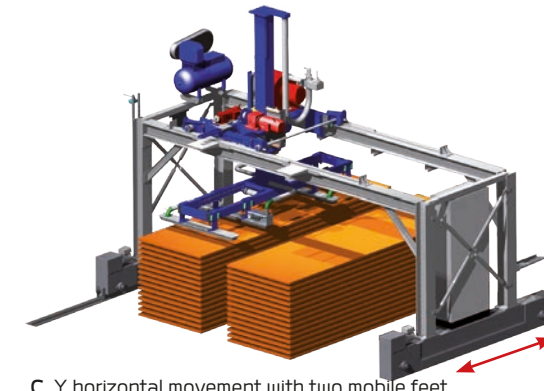
MECHANICAL OPTIONS



A. Wide legs for front infeed by width.

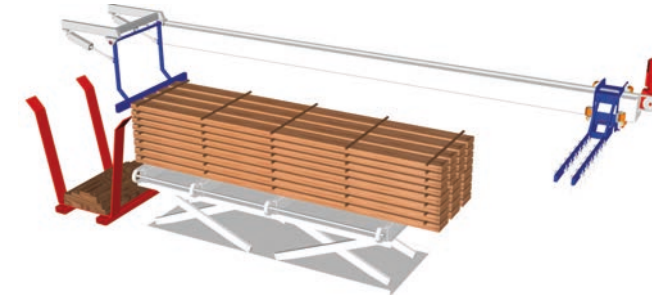


B. Narrow leg for lateral infeed by length.



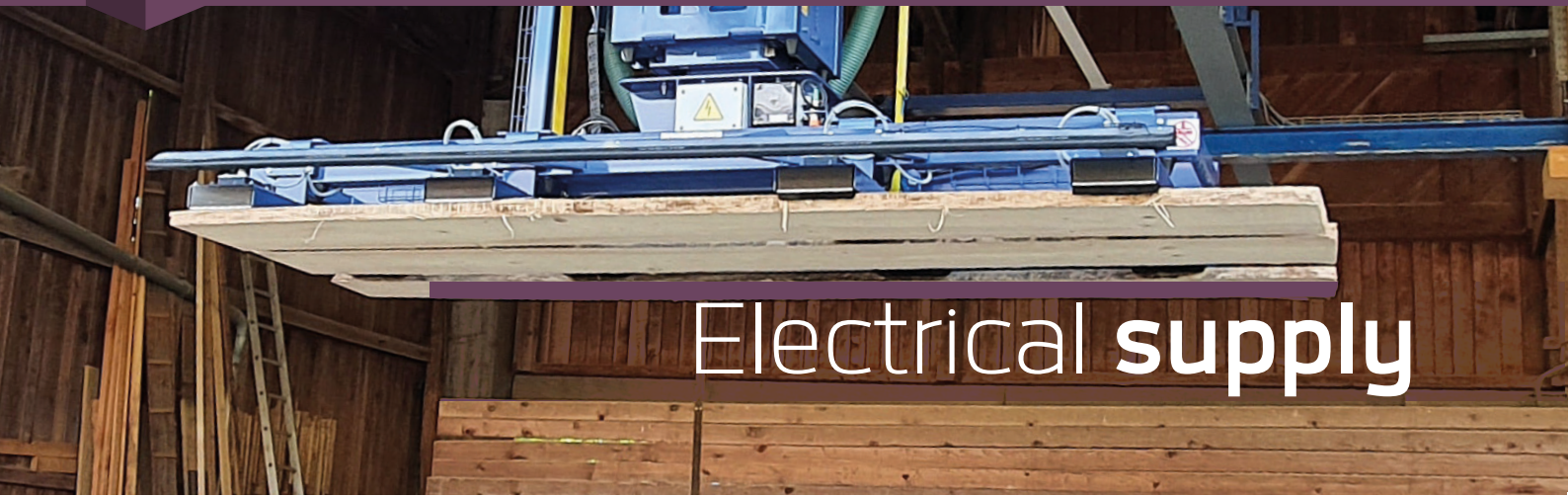
C. Y horizontal movement with two mobile feet

REMOVE STICKS



A. The lifting table keeps the pack at a set height. The brush sweeps the sticks into a rack.





Electrical supply

State of the art controls with custom programs and interactive touch screen panels.
Many configurations and options to fit your application up to the complete turnkey gantry robot installed by our technicians.



Example of Control Box with options



TOSIBOX

Intelligent Remote Access and Networking Device



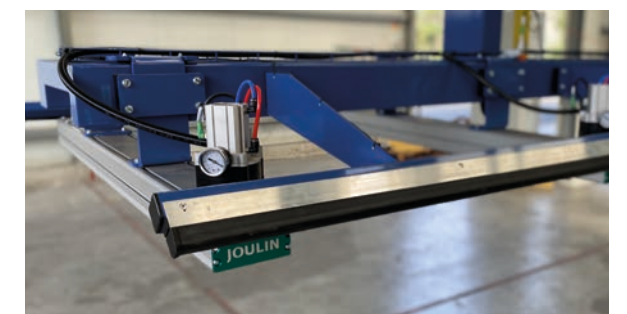
RADIO

An ergonomic device allowing the remote control of your gantry robot



TOUCHSCREEN

Helps in optimizing and adjusting the speed, acceleration, position and additional parameters of the system



SAFETY BARS

Protects operators from shearing and pinching edges

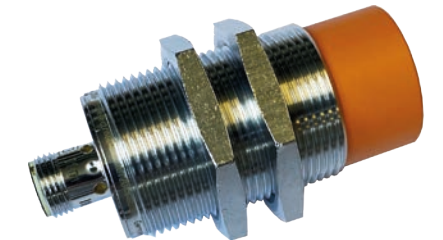
Known brand components

High quality internationally known brand components are our watchword. All are CE and UL certified.



M12 FIELDBUS MODULE

High degree of reliability
 in rough environmental conditions
 Meet maximum electromechanical requirements



PNP/NPN SWITCH

Robust and highly reliable
 Ideal for use in demanding environmental conditions

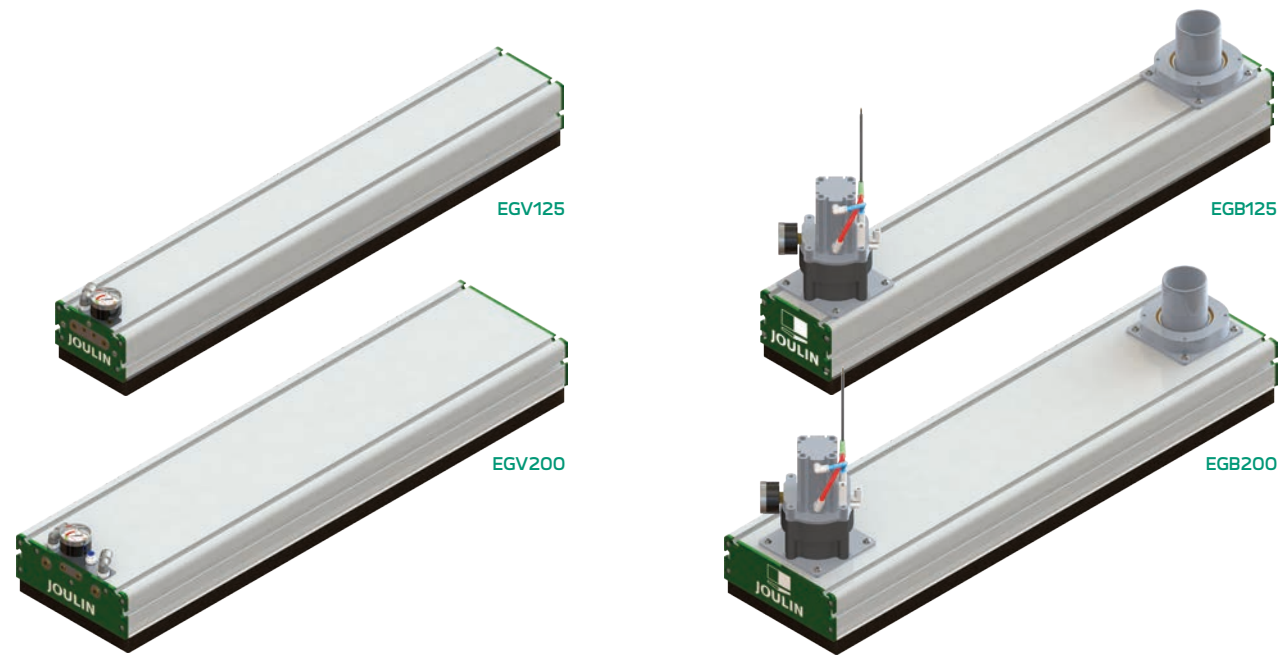


SAFETY STRING SWITCH

Allows to start / pause the cycle at anytime
 by simply pulling the string

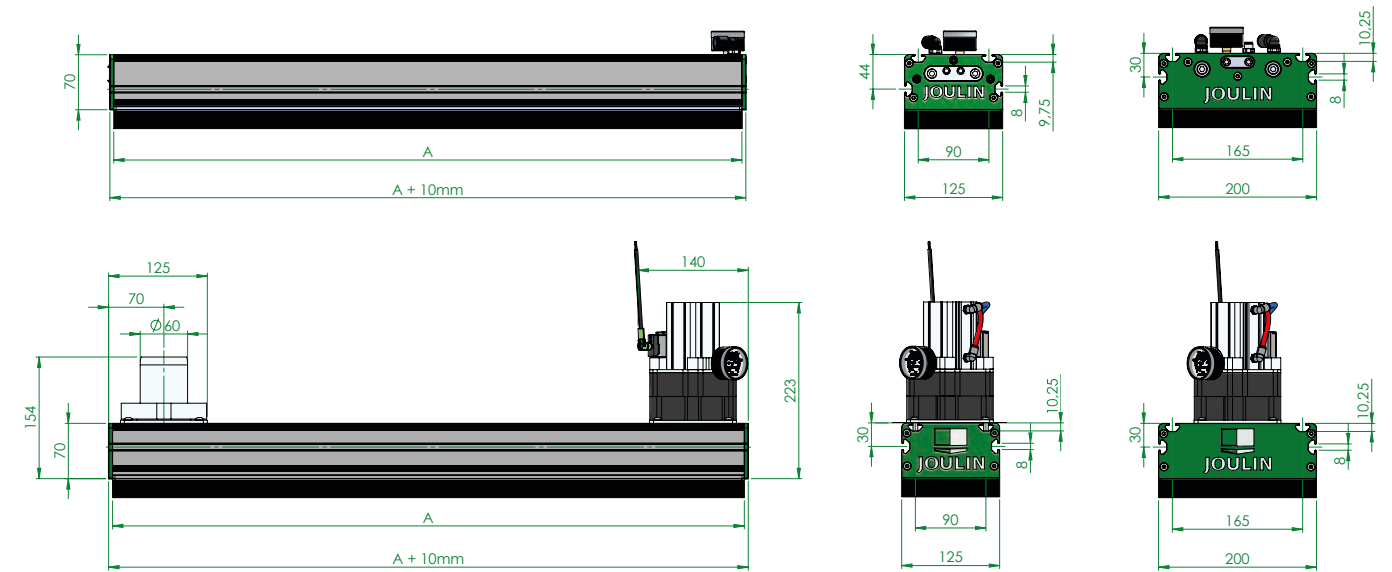


The foam grippers



EXTRU GRIP FOAM VACUUM GRIPPER

INTEGRATING DATA



Length of the foam A (mm)	125mm				200mm			
	EGV Weight (kg)	EGB Weight (kg)	Air Consumption (NI/sec) - EGV		EGV Weight (kg)	EGB Weight (kg)	Air Consumption (NI/sec) - EGV	
			4P15	4P30			8P17.5	8P35
250	2,7	-	3,5	1,75	4,4	-	5,25	3,5
400	3,9	4,3	3,5	1,75	5,9	6,1	7	3,5
600	5,4	5,8	5,25	3,5	8,1	8,3	8,75	5,25
800	6,9	7,3	7	3,5	10,4	10,6	12,25	7
1200	9,9	10,3	8,75	5,25	15,9	14,7	17,5	8,75
1400	11,4	11,8	14	7	17,7	16,9	21	10,5

CONCEPT

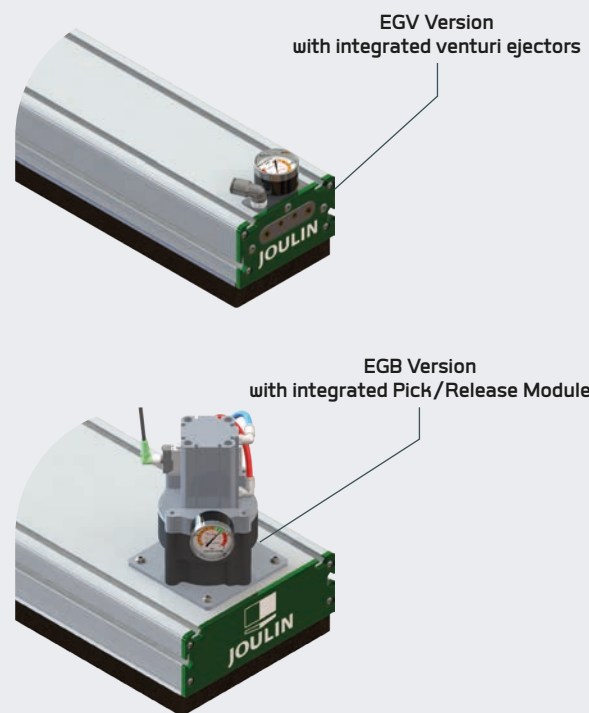
- All Joulin's technology in an aluminum profile
- External vacuum source or internal with venturi ejectors
- Different foam patterns to fit your application
- Easily adaptable on existing equipment
- 30% more efficient and fast than existing grippers

BENEFITS

- Integrated pick/release module on EGB version
- Modular for picking layers of products
- Adaptable in length up to 3000mm
- Maximum rigidity
- Possibility of partial picking or releasing of products
- Simplified adjustment of options in profile grooves

EASY TO CUSTOMIZE

- 2 available technologies: check valves or calibrated holes
- Easy to install by utilizing the grooves
- Lower weight compared to Lumber Gripper (LG)



LABELLING

EGV -VG -125x800 -4P30 -3STX2

Range of the gripper
EGV
Integrated ejectors

EGB
External vacuum

Technology
- PG
Port Gripper
- VG
Valve Gripper

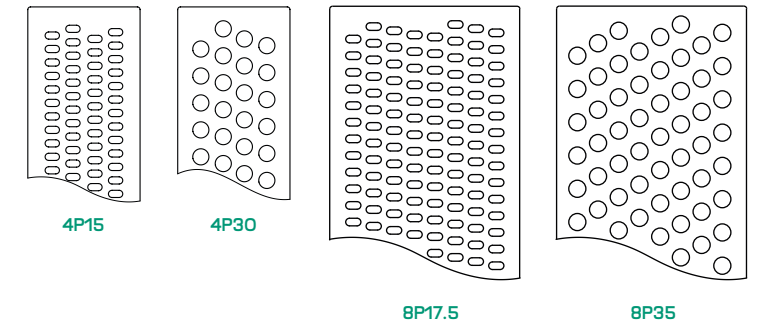
Standards dimensions
- 125 ou 200x250
- 125 ou 200x400
- 125 ou 200x600
- 125 ou 200x800
- 125 ou 200x1200
- 125 ou 200x1400

Custom
- 125 ou 200x...

Pitch
- 4P15
15mm
- 4P30
30mm
- 8P17.5
17.5mm
- 8P35
35mm

Integrated vacuum source (EGV only)
- 2ST
2 stages
- 3ST
3 stages

FOAM DENSITY





More gantry robots

A Standard range

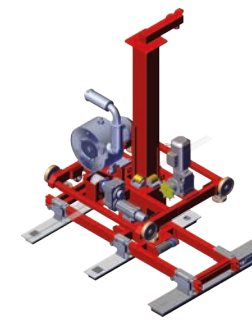
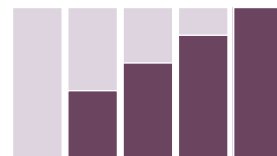
For more than 60 years JOULIN has supplied the wood industries with vacuum lifters.

Our range of standard gantry robots equipped with check valve technology allows you to **pick all products**, partial layers, complete layers, random lengths and widths **without adjustment** using the same grippers.

All the models can be supplied complete turnkey or with different degrees of completion **integrated in your new or existing line**.

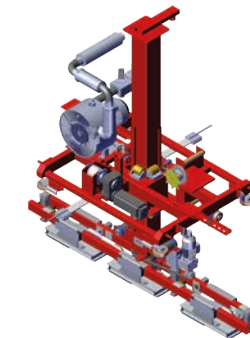
JOULIN offers **5 levels** of equipment from the single gripper to the complete turnkey gantry robot to fit all your needs.

- 1- GRIPPERS
- 2- GRIPPERS AND FRAME
- 3- GANTRY ROBOT
- 4- GANTRY ROBOT + FRAMEWORK
- 5- GANTRY ROBOT WITH CONTROL BOX + FRAMEWORK



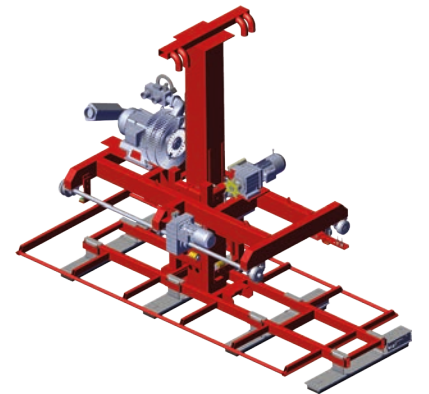
200

Maximum capacity 200 kg
Up to 10 cycles per minute



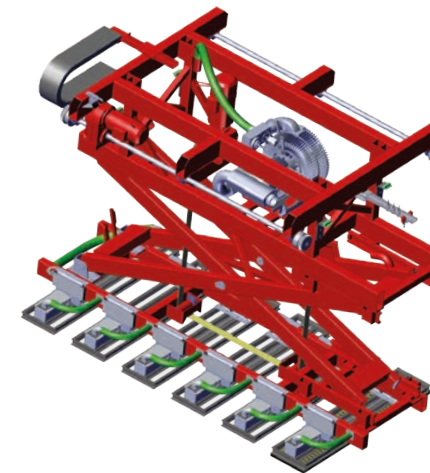
500

Maximum capacity 500 kg
Up to 7 cycles per minute



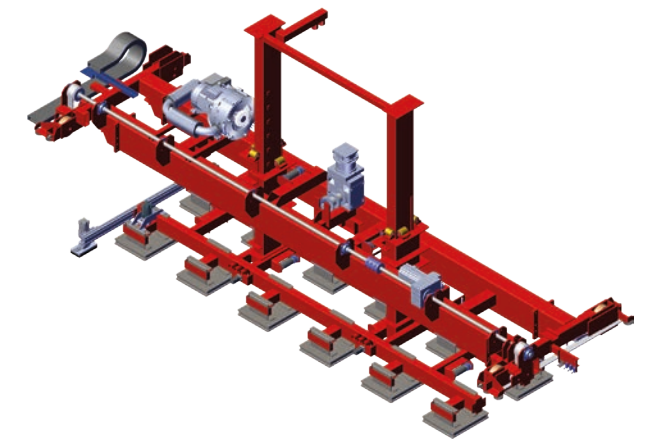
1000

Maximum capacity 1000 kg
Up to 5 cycles per minute



1000 CS

Maximum capacity 1000 kg
Up to 4,5 cycles per minute



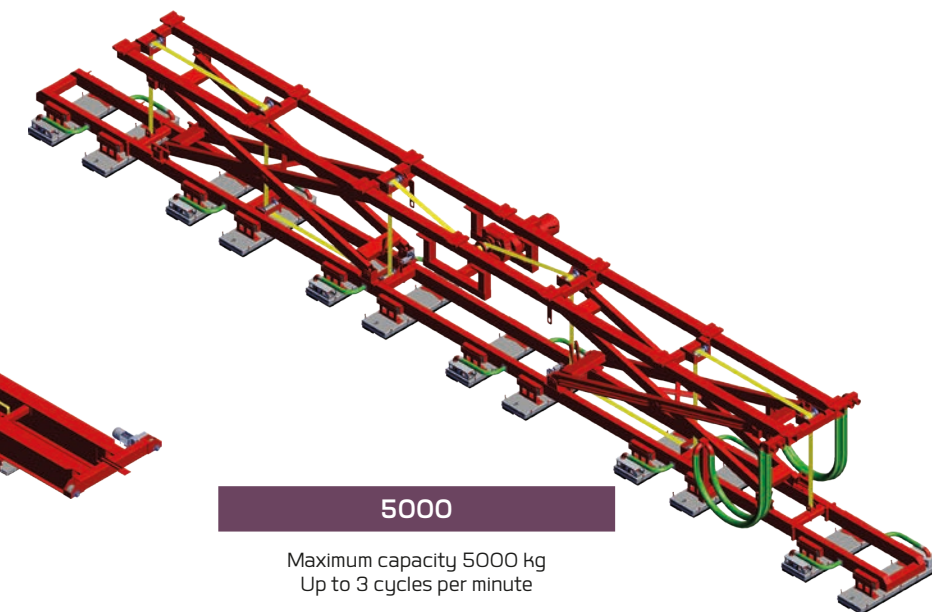
2000

Maximum capacity 2000 kg
Up to 4,5 cycles per minute



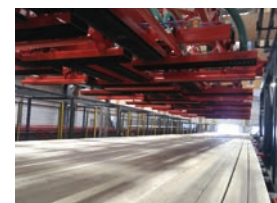
3000

Maximum capacity 3000 kg
Up to 3,5 cycles per minute



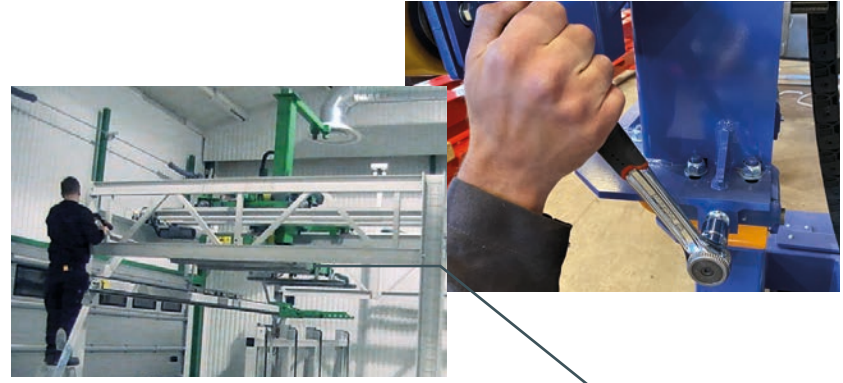
5000

Maximum capacity 5000 kg
Up to 3 cycles per minute





Why use our solutions?



STANDARD AND CUSTOM

Economical standard range
Multiple options
Customization



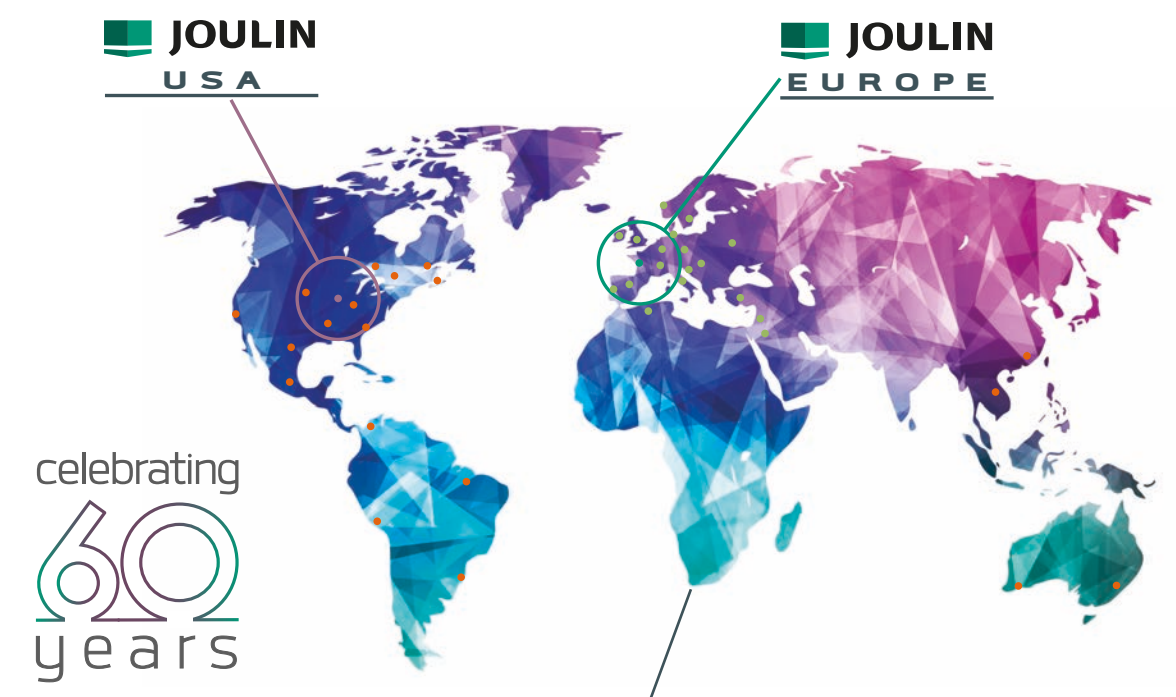
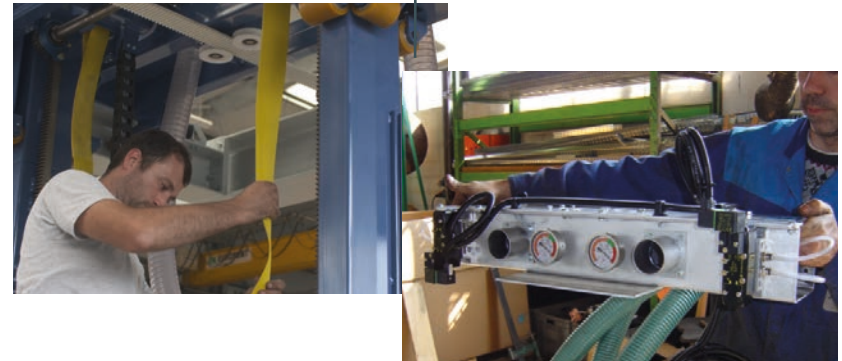
RELIABLE PARTNER

Dedicated consulting engineer
Study and production 100% in-house
Commercial reactivity and after-sales service



CONSULTING AND SERVICES

Family owned
Guaranteed performance
Customer satisfaction

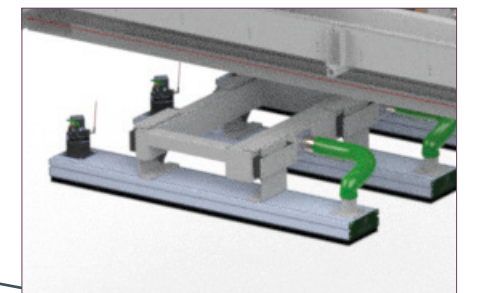


PROXIMITY

Manufacturing and design facilities in France and the USA
Supplied on 5 continents

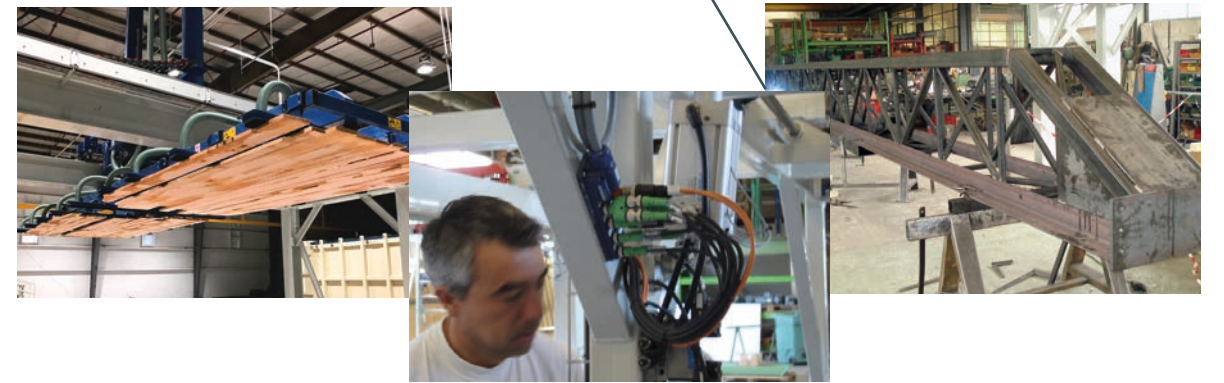
TECHNOLOGY

Inventor of the Foam Gripper
Patented
Grippers not sensitive to dust; **50% energy saving** compared to competitors



EXPERIENCE

More than **60 years of experience**
Worldwide references





version 20.9

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JOULIN
vacuum handling

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