

COLOR STEEL MACHINE

S04 / AUTOMATIC STACKING SYSTEM

Automatic Gantry Flipping & Stacking Machine

For polyurethane (PU) sandwich,
corrugated wall and cleanroom panels

**Vacuum pickup. Controlled turnover.
Repeatable stacks.**

Handle panels up to 15 m long and 50-200 mm thick,
with a maximum total load of 450 kg.

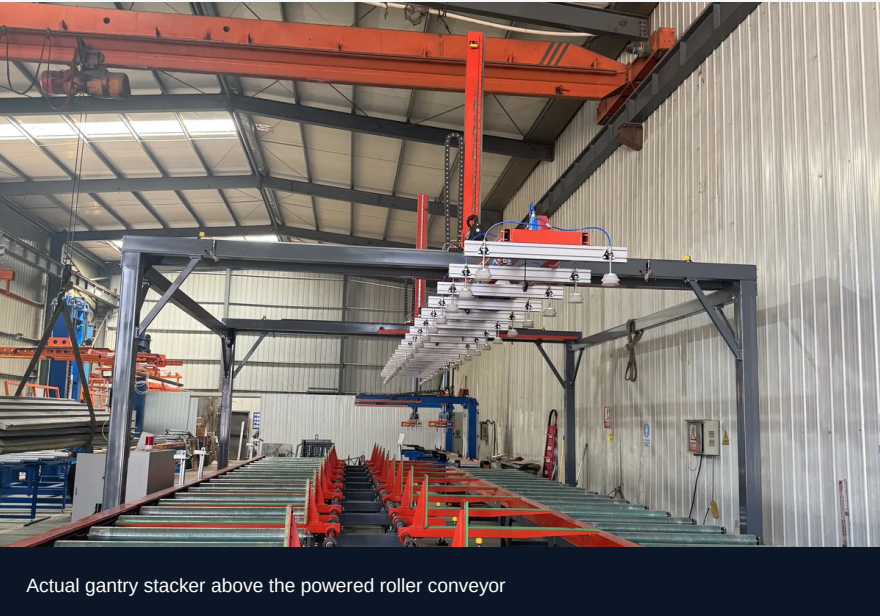


ACTUAL MACHINE PHOTO

Manufacturer-supplied equipment image

APPLICATION

Handling long finished panels without manual turnover.



Actual gantry stacker above the powered roller conveyor

DESIGNED FOR

Panel types

- Polyurethane (PU) sandwich panels
- Corrugated long-span / wall panels
- Cleanroom and other sandwich panels

SYSTEM ROLE

A gantry vacuum-cup stacker suited to PU sandwich panel lines. It picks up the panel, turns it when required, and places it into a controlled stack. Supported panel thickness: 50-200 mm.

CONFIGURATION BOUNDARY

Vacuum tooling and final motion logic must be confirmed against the panel profile, surface, protective film, weight and approved contact areas.

DOCUMENTED CAPACITY

4-15 m Panel length	24 Vacuum cups	450 kg Total load	20-30 s Cycle time / panel
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SYSTEM VALUE

Overhead layout

The gantry spans the conveyor and stacking area for long-panel handling.

Coordinated sequence

Receiving, lifting, turnover and placement are combined in one controlled cycle.

Project configured

Tooling and motion recipes are matched to the selected panel and line interface.

DOCUMENTED CONFIGURATION

Technical specifications.

PARAMETER	DOCUMENTED VALUE
Compatible products	PU sandwich, corrugated wall and cleanroom panels
Panel length	4,000-15,000 mm
Stack height	0-2,000 mm
Pickup width options	950 / 960 / 1,050 / 1,200 mm
Maximum total load	450 kg
Vacuum cups	24
Supported panel thickness	50-200 mm (5-20 cm)
Cycle time (CT)	20-30 seconds per panel
Servo axes	4
Power supply	380 V / 50 Hz
Compressed air	0.5-0.8 MPa
Approximate machine size	12,000 x 5,600 x 4,500 mm
Ambient temperature	-20 to 40 deg C
Recommended altitude	Below 2,000 m

Engineering confirmation required

Source: supplied manufacturer Word document, with PU application and 50-200 mm panel thickness updated by the manufacturer on 3 October 2026. Final cycle time, tooling, stack pattern and interfaces depend on the panel and line layout.

LINE INTEGRATION

From discharge to a completed stack.

01

Receive

Panel exits the production line and reaches the programmed pickup position.

02

Pick

The gantry lowers the vacuum frame and confirms a secure lift.

03

Turn or transfer

The system turns the panel when required by the selected stacking recipe.

04

Place and repeat

The panel is positioned on the stack and the sequence repeats until the target count is reached.

INFORMATION FOR A CONFIGURATION PROPOSAL

Prepare these project inputs.

- 1 Panel drawing, profile, surface and protective film
- 2 Length, width, thickness and maximum panel weight
- 3 Line speed, discharge height and control interface
- 4 Required stack orientation, count and bundle-removal method
- 5 Available footprint, access and compressed-air conditions

Discuss your panel and stacking plan.

Send the panel data and production-line layout for a configuration review.

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