

The solution has been developed for the production of prefabricated exterior wall panels intended for house manufacturers. The system consists of three main components: one rail-mounted nailing bridge and two worktables.

Nailing Bridge

The nailing bridge is designed for automated panel nailing using four nail guns interconnected with the corresponding opposite side. The system includes four nailing units which automatically perform nailing operations according to predefined nailing patterns at the respective worktables.

The **nailing portal** is mounted on a floor-installed rail system bolted to the concrete floor, allowing the bridge-type nailing system to move between the two worktables as required.

The system is equipped with photocells for positioning and safety control.

Function

- The rail-mounted frame is positioned in a neutral loading position between the two worktables.
- The nailing operation is initiated from either of the two worktables.
- The selected nailing pattern is executed automatically.
- The nailing portal is activated to carry out the nailing process in accordance with the chosen pattern.

Worktables

The worktables are designed with support grooves for positioning timber studs. These grooves are adjustable via sliding mechanisms, enabling adaptation to different panel types and configurations.

Function

- The outer edges of the table are adjusted towards the panel using a manual control.
- The selected battens are manually positioned to provide support for accurate panel placement.
- The operator positions the components to be assembled into the appropriate grooves and against the battens.
- The bridge-mounted nailing system is activated to perform nailing according to the selected pattern.