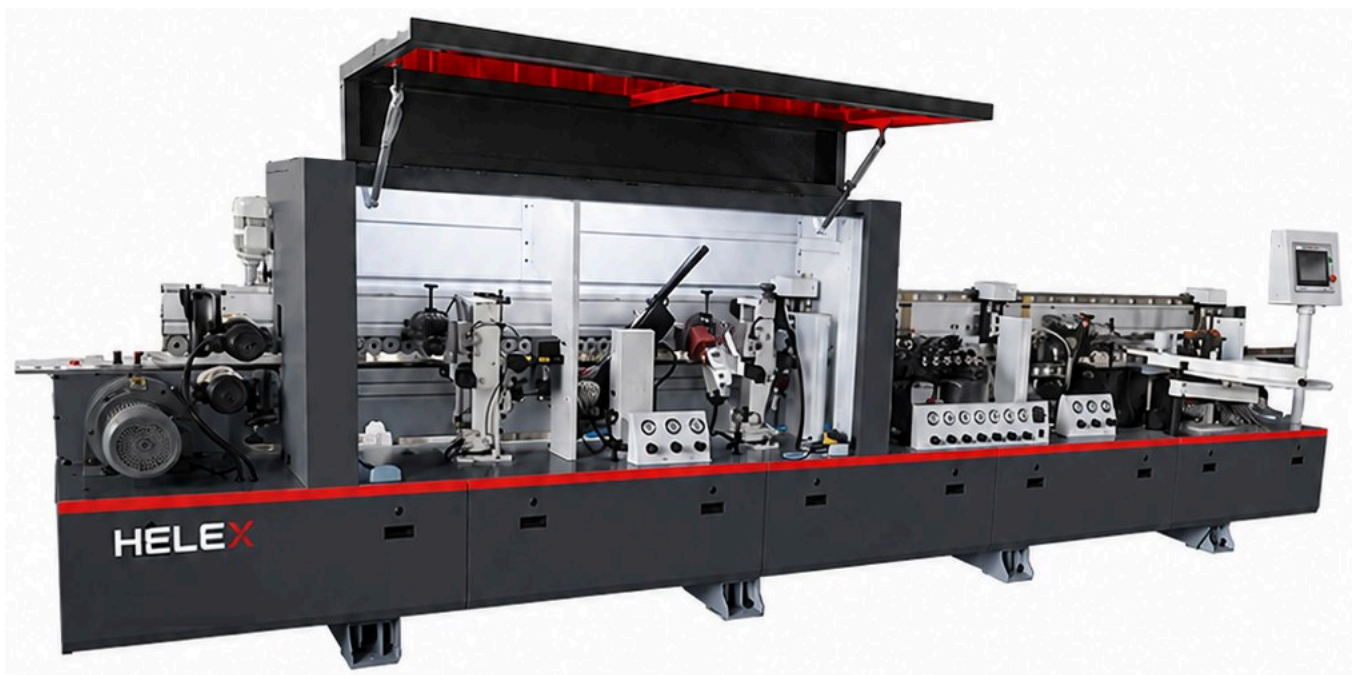


EDGE BANDING SERIES

L-Type Edge Banding Machine

Fifteen working stations in one pass — double milling, release agent, heated glue pot, servo tape feed, four-wheel servo pressing, three forming presses, adaptive trimming, scraping and polishing. For straight and L-type edges on panels 10 to 60 mm thick.

MODEL HE 60 EL



WORKING SECTION WITH THE HOOD RAISED — MILLING, GLUING, PRESSING AND FINISHING GROUPS IN SEQUENCE

/ Application & Use

The HE 60 EL is built for door and panel production where the edge is not a simple flat strip. Its trimming and scraping groups work adaptively on both straight and L-type banding, with fillet precision trimming in either mode, so profiled door edges leave the machine finished and require no manual rework.

Intended work: T-type doors, parent-child doors, hidden doors and background wall panels, plus conventional straight-edge panels for carcass furniture. The panel is milled on both faces of the edge, sprayed with release agent, glued, banded with servo-synchronised tape feed, pressed by four servo wheels and three forming presses, then fine trimmed, end cut, scraped, cleaned and polished in a single pass at 6 to 13 m/min.

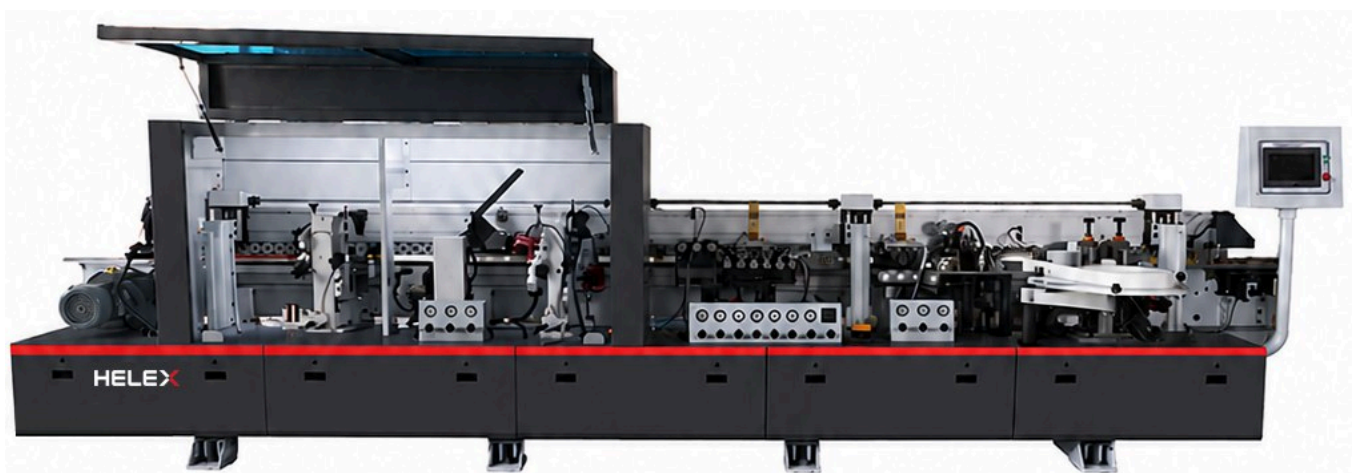
/ Key Features

- Straight and L-type edge banding, both with fillet precision trimming
- Two 5.5 kW inverter milling motors, counter-rotating to prevent chipping at the leading and trailing edges
- Heated glue pot with temperature control module and heat-hold; convertible for pre-glued tape
- Servo belt tape feed synchronised with the conveying speed
- Four-wheel servo pressing plus three forming presses, the first heated and all vertically floating
- Release agent spraying before banding, cleaning agent spraying before polishing
- Motorised pressure beam lift operated from the touch screen
- Mechanical anti-impact protection on the pressing, trimming and scraping modules
- Aluminium pressure beam and guide rail, straightness 0.20 mm / 1000 mm
- Total installed power 26.4 kW at 380 V / 50 Hz

/ Raw Materials

- T-type, parent-child and hidden door panels
- Background and feature wall panels
- Melamine-faced chipboard, MDF and HDF
- Plywood, blockboard and solid wood panels
- Edge material: PVC, ABS, melamine and veneer tape, 0.6 – 0.8 mm
- Panel thickness 10 – 60 mm

Minimum panel 450 x 120 mm (T-type board length 450 mm, board width 120 mm). Compressed air 0.6 MPa. Four extraction ports, 100 mm, designed air velocity 32 m/s.



FRONT VIEW — 6500 MM OVERALL LENGTH, FIVE ACCESS PANELS, OPERATOR TOUCH SCREEN AT THE OUTFEED END

/ Machine Body Structure

The side plates are bent several times into a C-profile and combined with internal partitions to form a cage-type body, which together with the machine feet gives a rigid structure. Main plates are laser cut, assembled and welded, then fully derusted, powder coated and oven cured, with a durable orange-peel finish. The pressure beam and guide rail are extruded aluminium profiles with electrophoretic treatment and a straightness of 0.20 mm per 1000 mm.

/ Working Sequence — Stations 1 to 8

- 1 Feeding fence**
Adjustable position fence with position indication; sets the feeding position and with it the side milling depth.
- 2 Milling 1 and 2 — 2 x 5.5 kW**
Inverter-driven milling motors, tools 155 x 30 x 35 mm. Milling 1 runs forward and milling 2 in reverse to prevent chipping at the front and rear edges; vertical height set manually.
- 3 Milling air blowing**
Blows off residual powder and chips from the milled surface before the edge is applied.
- 4 Release agent spraying**
Sprays the upper and lower faces of the board so glue cannot adhere to the panel surfaces during banding.
- 5 Glue application — 0.75 kW**
Inverter motor with glue application roller and pot, heated by the temperature control module with adjustable heat-hold; can be converted to a pre-glued tape pot on request.
- 6 Servo belt feeding**
Servo motor conveys the edge band, keeping tape feed and panel conveying speed synchronised.
- 7 Four-wheel servo pressing**
Four servo-driven pressing wheels, configured for straight edge banding.
- 8 Forming pressing 1 / 2 / 3**
Press 1 works to the set position, synchronised with the board head, and is heated to hold the softening temperature before forming. All three presses float vertically to follow the profile; the rear press uses rubber wheels to keep pressure on the vertical face.



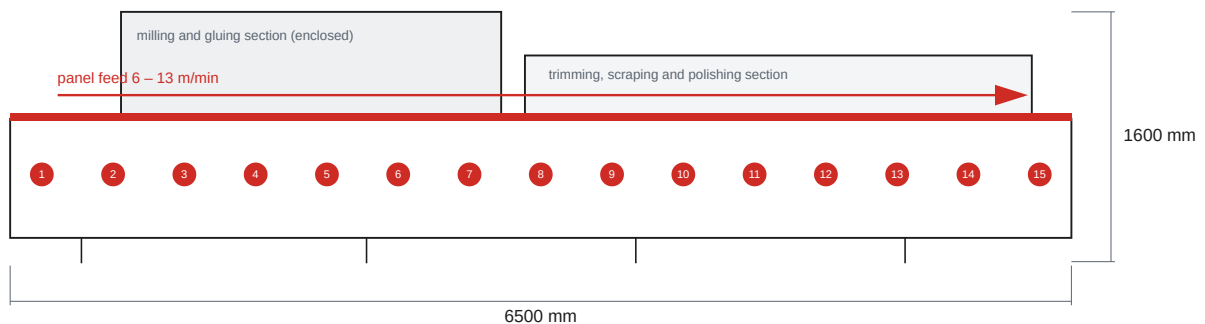
OPERATOR TOUCH SCREEN — STATION SELECTION, TEMPERATURES, FEED SPEED AND PRESSURE BEAM LIFT

/ Working Sequence — Stations 9 to 15

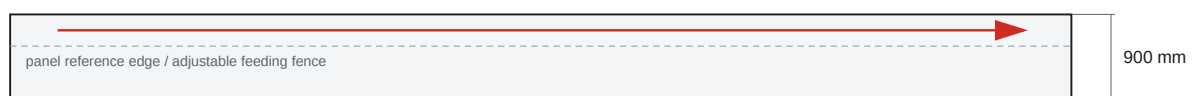
- 9 Fine trimming — 0.75 kW**
Inverter motor with purpose-built stoppers for adaptive precision trimming of L-type and straight banding; fillet trimming in both modes, with anti-impact protection against operating or program errors.
- 10 End cutting — 2 x 0.75 kW**
Two independent high-frequency motors cut the excess tape at the front and rear ends of the panel, each with its own profiling device for precise positioning.
- 11 Scraping**
Purpose-built stoppers give adaptive scraping on both L-type and straight banding; the module also carries anti-impact protection.
- 12 Post-cleaning spraying**
Sprays cleaning agent on the upper and lower faces to dissolve glue residue before polishing.
- 13 Polishing — 2 x 0.37 kW**
Cloth wheels clean and polish the banded edge, removing the remaining glue from the panel surface.
- 14 Transmission — 4.0 kW**
Inverter motor driving a 20A single-row chain with 62 x 80 chain blocks and 60 rubber pressure wheels on the upper pressure beam.
- 15 Pressure beam lift — 0.37 kW**
Motorised lift of the pressure beam, set directly from the touch screen when panel thickness changes.

Every drive on the working groups is inverter or servo controlled, so feed speed, milling speed and pressing positions are set from the control system rather than by mechanical adjustment.

FRONT ELEVATION



PLAN VIEW



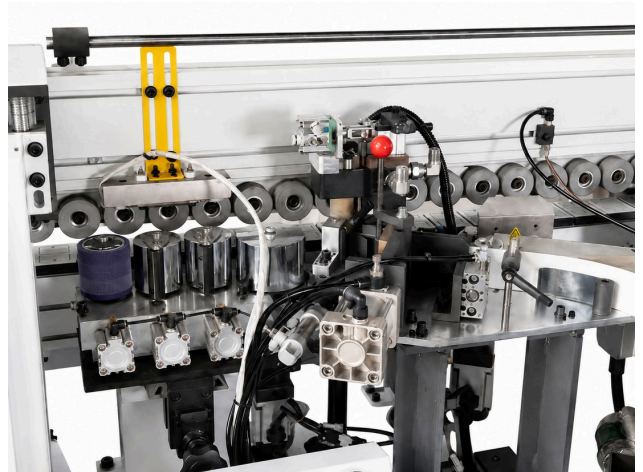
Panel 10 – 60 mm thick, minimum 450 x 120 mm · edge material 0.6 – 0.8 mm · straight and L-type banding
4 extraction ports, 100 mm · air 0.6 MPa · total power 26.4 kW at 380 V / 50 Hz

LAYOUT DIAGRAM — OVERALL DIMENSIONS AND STATION SEQUENCE 1 TO 15; VALUES IN MM, INDICATIVE FOR INSTALLATION PLANNING

/ Machine Details



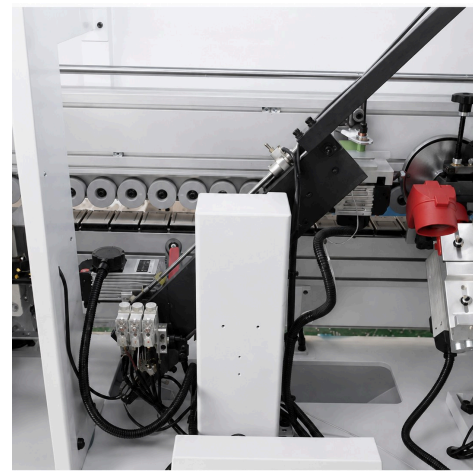
GLUE APPLICATION AND TAPE PRESSING ZONE, WITH THE CHAIN FEED AND PRESSURE WHEELS ABOVE



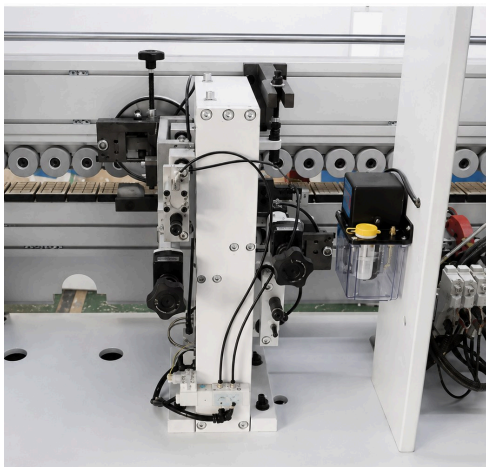
FOUR-WHEEL SERVO PRESSING AND FORMING PRESSES WITH PNEUMATIC ACTUATORS



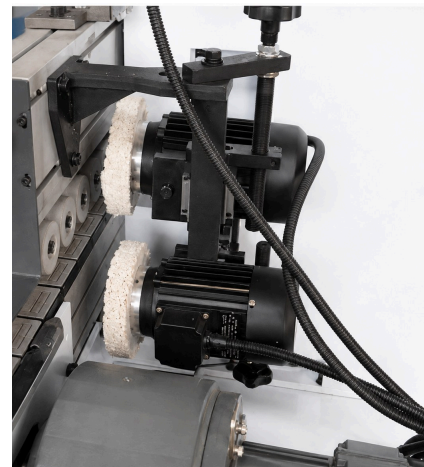
FINE TRIMMING UNIT WITH ADAPTIVE STOPPER AND EXTRACTION HOOD



SPRAYING UNIT AND PNEUMATIC VALVE BLOCK BETWEEN THE WORKING GROUPS



SCRAPING GROUP WITH CENTRAL LUBRICATION RESERVOIR



POLISHING UNIT — TWO 0.37 KW MOTORS WITH CLOTH WHEELS

/ Technical Data

MODEL	HE 60 EL
Type	L-type and straight edge banding machine, EVA glue
Edge band thickness	0.6 – 0.8 mm
Board thickness	10 – 60 mm
Minimum board width	120 mm
Minimum length of T-type board	450 mm
Feeding speed	6 – 13 m/min
Machine dimensions (L x W x H)	6500 x 900 x 1600 mm
Total power	26.4 kW
Input voltage / frequency	380 V / 50 Hz
Output frequency	50 – 200 Hz
Air pressure	0.6 MPa
Dust collection ports	4
Dust collection port diameter	100 mm x 2
Dust collection air velocity	32 m/s
Milling motors	2 x 5.5 kW, inverter
Glue application motor	0.75 kW, inverter
Fine trimming motor	0.75 kW, inverter
End cutting motors	2 x 0.75 kW, inverter
Polishing motors	2 x 0.37 kW
Transmission motor	4.0 kW, inverter
Pressure beam lift motor	0.37 kW
Milling tools	155 x 30 x 35 mm
Guide rail straightness	0.20 mm / 1000 mm
Feed chain	20A single row, 62 x 80 chain blocks, 60 rubber pressure wheels

/ Electrical Configuration

- Inverter and programmable controller from one supplier, matched to the machine
- Colour touch screen operator interface
- Temperature control module for the glue pot and forming press
- Servo drives for tape feed and four-wheel pressing
- AC contactors: Schneider, France
- Intermediate relays: Omron
- Sensors: Autonics, South Korea
- Pneumatic components: Airtac

SUPPLIER

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