EDGE BANDING MACHINES

Compact Automatic Edge Banding Machine

Casadei Industria E450

Compact automatic edge banding machine with lower EVA glue pot, chain feed, pre-milling, automatic end trimming and 3-position flush trimming, for panels 8–45 mm thick and edges 0.4–3 mm thick.

MODEL E450

7 m/min	8–45 mm	0.4–3 mm	5.45 kW
FEED SPEED	PANEL THICKNESS	EDGE THICKNESS	INSTALLED POWER



/ Application & Use

The Casadei Industria E450 is a compact automatic edge banding machine for straight panels of particleboard, MDF, plywood and solid wood, 8–45 mm thick, for kitchen, bedroom and office furniture, intended for joinery workshops and small furniture factories with limited space. It applies ABS, PVC, melamine and veneer edges 0.4–3 mm thick from coil, at a feed speed of 7 m/min; solid wood strips up to 5 mm thick are fed manually. The panels are fed on a steel chain with rubber pads and a lubrication system.

Pre-milling uses two 0.75 kW high-frequency motors with diamond cutters Ø 60 x 54 mm at 12000 rpm; the infeed guide has micrometric adjustment of 0–2 mm with a numerical indicator. The lower EVA glue pot, Teflon-coated and holding 1 kg, has 6 heating elements totalling about 1.49 kW and heats up in about 14–16 min (4–6 min from stand-by). The edge is fed in sync with the panel, cut from the coil by a pneumatic shear with horizontal oscillating movement and pressed onto the panel by two floating pressure rollers.

Automatic end trimming with two 80 mm tools works at the front and rear with copiers and chip collection; VR1 / VS1 devices for end finishing are available as options. Flush trimming works in 3 positions with two 0.22 kW high-frequency motors and a combined radius / chamfer profile of 2 mm. The machine is controlled from a 4-inch touch panel (7-inch optional), and two free positions allow optional units to be added later.

/ Key Features

- Panels 8–45 mm; edges 0.4–3 mm from coil
- Solid wood strips up to 5 mm, manual feed
- Feed speed 7 m/min on a steel chain with rubber pads
- Pre-milling 2 x 0.75 kW, diamond cutters Ø 60 x 54 mm
- Lower EVA glue pot, 1 kg, 6 heating elements
- 3-position flush trimming, radius / chamfer 2 mm
- Compact footprint: overall length 2850 mm
- Installed power 5.45 kW, 400 V / 3 phases
- 2 free positions for optional units

/ Standard Equipment

- 4-inch touch panel (7-inch optional); PLC with encoder, diagnostics and statistics
- Steel chain feed with rubber pads and lubrication system
- Pressure beam with two rows of rubber rollers, height adjustment by handwheel with metric indicator
- Infeed guide with micrometric adjustment 0–2 mm, knob and numerical indicator
- Synchronised edge feed; pneumatic coil shear with oscillating movement
- Two floating pressure rollers: aluminium (Ø 80 mm) and rubber-coated
- Automatic front / rear end trimming with copiers and chip collection, 2 tools of 80 mm
- Z4 cutters 75 mm with disposable Widia knives; vertical disc copier
- Tool positioning with numerical indicators
- Extensible front support for large panels; CE conformity

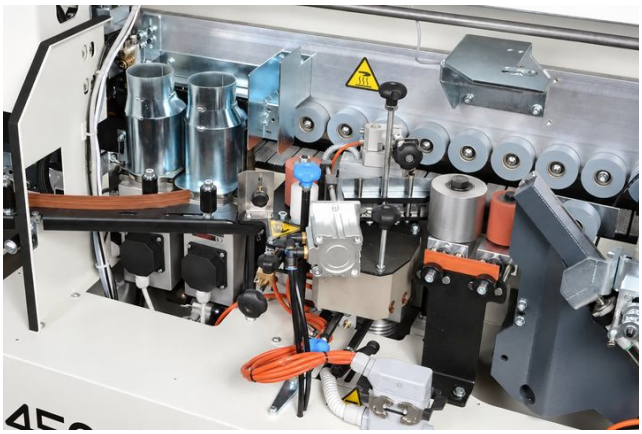
/ Machine Details



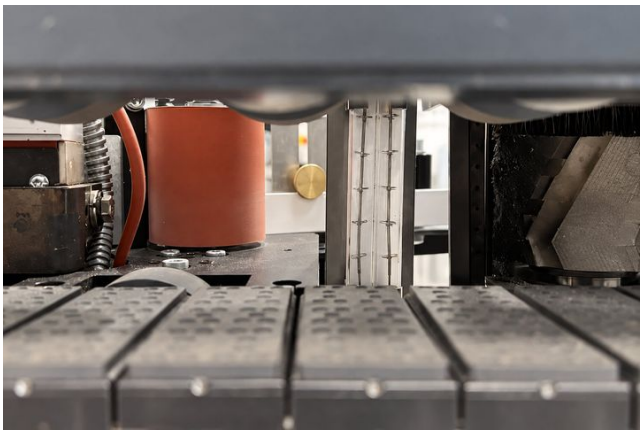
INFEED GUIDE WITH MICROMETRIC ADJUSTMENT AND NUMERICAL INDICATOR



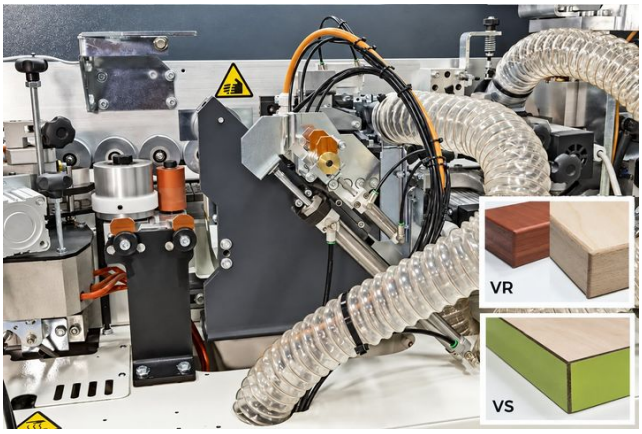
PRE-MILLING WITH DIAMOND CUTTERS AND TWO HIGH-FREQUENCY MOTORS



EVA GLUING UNIT, EDGE FEED AND PRESSURE ROLLERS



GLUE ROLLER AND FEED CHAINS



END TRIMMING; EXAMPLES OF END FINISHING WITH THE OPTIONAL VR / VS DEVICES

/ Technical Data

Model	E450
Panel thickness	8–45 mm
Edgebanding thickness	0.4–3 mm (coil); solid wood strips max. 5 mm, manual feed, depending on wood hardness
Minimum panel dimensions	length min. 210 mm (edged side; also with the optional VR1 / VS1 device: h 18 and h 45); width min. 95 mm
Compatible edgebanding materials	ABS, PVC, melamine, veneer (coil); solid wood strips
Feed speed	7 m/min
Pre-milling	2 x 0.75 kW HF motors; diamond cutters Ø 60 x 54 mm, 12000 rpm; removal max. 2 mm (depending on material); infeed guide with micrometric adjustment 0–2 mm, knob and numerical indicator
Gluing system	lower EVA glue pot, Teflon-coated, 1 kg; 6 heating elements (4 in the glue pot, 1 in the turret, 1 in the roller), approx. 1.49 kW; heat-up approx. 14–16 min (4–6 min from stand-by); quick and complete cleaning
Edgebanding feed	coil diameter max. 800 mm; synchronised with the panel; pneumatic coil shear with horizontal oscillating movement
Edgebanding pressure zone	2 floating pressure rollers: first aluminium (Ø 80 mm), second rubber-coated
End trimming	automatic, front / rear, straight cut, with copiers and chip collection, independently selected from the PLC; 2 tools of 80 mm; motor 0.22 kW, 11000 rpm; optional: VR1 / VS1 devices for end finishing
Longitudinal trimming (rough / fine)	3-position flush trimming, 2 x 0.22 kW HF motors, 12000 rpm; Z4 cutters 75 mm with disposable Widia knives; combined radius / chamfer profile 2 mm; vertical disc copier
Top pressure system	pressure beam with two rows of rubber rollers on bearings; height adjustment by handwheel with metric indicator
Control system	4-inch touch panel with graphic interface for programming and diagnostics (7-inch: optional); PLC with encoder: automatic temperature control with stand-by, diagnostic messages, statistics (operating hours, edge metres)
Total installed power	5.45 kW
Electrical supply	400 V / 3 phases; rated / max. current 7.87 / 15.12 A; recommended fuse 16 A
Compressed air requirements	320 Nl/min at 7–8 bar (peak 400 Nl/min)
Dust extraction: connections and requirements	main: Ø 120 mm, min. 820 m³/h, 20 m/s; pre-milling: 2 x Ø 80 mm, min. 730 m³/h, 20 m/s; glue fumes: Ø 60 mm
Overall dimensions (L × W × H)	2850 x 1080 x 1400 mm; width 1380 mm with extended front support

Data refer to the standard E450 configuration. The machine weight, the scraping and spraying units, the supplied configuration and included options are defined in the quotation. Technical data may be updated without prior notice. Images are illustrative.

SUPPLIER

PROMACH LTD, Str. Kolednitsa 2, et. 1, 7002 Ruse, Bulgaria — VAT BG208556296

CONTACT

www.promach-machinery.com | contact@promach-machinery.com | BG +359 87 6832151 | RO +40 755 023 024