

#### **PROFILINE KDF 650**

BRANDT SINGLE-SIDED EDGE BANDING MACHINE MODEL: HIGHFLEX 1650

Single-sided edge banding machine for processing of straight workpiece edges and for gluing and reworking of various edge materials in longitudinal and transverse passes.

OVERVIEW OF THE UNIT EQUIPMENT: JOINING MILLING UNIT 2 X 2.2 KW 200 HZ BONDING UNIT A12

CUTTING UNIT BEVEL/STRAIGHT 2 X 0.35 KW PNEUMATIC ADJUSTMENT CAPS BEVEL/STRAIGHT PNEUMATIC 2-POINT ADJUSTMENT CAPS PRE-MILLING UNIT 2 X 0.55 KW 0 DEGREES PNEUMATIC 2-POINT ADJUSTMENT MULTIFUNCTIONAL FORM MILLING UNIT 2 X 0.4 KW PROFILE PULLING BLADE WITH QUICK-CHANGE HEADS PNEUMATIC ADJUSTMENT OF PULL BLADE GLUE JOINT PULLING BLADE BLACKING UNIT

### 1. BASIC MACHINE:

- Continuous machine stand for setting up the processing units
- Fixed stop side on the right
- Paint gray RDS 240 80 05
- Motorized inlet ruler adjustable
- Inlet lock pneumatically controlled
- Upper pressure:
- Single rollers in 2 rows, arranged staggered
- Motorized height adjustment
- Position display and input centrally via the control
- Workpiece transport device:
- Transport chain with rubber pad, 80 mm wide
- Precision running and guiding surfaces
- Standard equipment with automatic

Central lubrication for the transport chain

- Workpiece support with roller rail, extendable to approx. 600 mm
- Noise protection equipment, with individual extraction

for parts to be joined and collective suction for aggregates as well as chip collection  ${\color{black}}$ 

box for scraper shavings

- Feed  $\mid$  8 18 m/min
- Feed max. with form milling machine | 14 m/min
- Working height | 950 mm
- Pneumatic connection | min. 6 bar
- Total length | 5,760 mm

### 2. WORKPIECE AND EDGE PARAMETERS:

- Workpiece width min:
- For workpiece thickness  $8-22 \text{mm} + 70 \text{ mm}^*$
- For workpiece thickness 23-40mm | 120 mm\*
- For workpiece thickness 41-60mm | 150 mm\*

\*Depending on the workpiece length

# Edge Banding Machine Type Profiline KDF 650 HF 1650 Used machine - year 2011

Machine number: 0-261-20-6095

- Workpiece projection | 38 mm
- Workpiece thickness | 8 60 mm
- Edge height max. = workpiece height | + 6 mm
- Edge material roll | 0.4 3 mm
- Edge cross section max.
- For PVC  $\mid$  135 mm<sup>2</sup>
- For veneer | 100 mm<sup>2</sup>
- Roll diameter max. | 830 mm
- Edge material strips | 0.4 15 mm
   (or 12 mm)
- Edge cross section max.
- For strips | 600 mm<sup>2</sup>

### 3. A G G R E G A T E PIECE

- 3.1 JOINING MILLING UNIT 2 X 2.2 KW 200 HZ
- For attaching in front of the gluing part, spindle adjustment vertically, electro-pneumatic control horizontal, 2 motors (1  $\times$  constant,

1 x counter rotation), max. chip removal / stroke 3 mm

Cover with suction nozzle diameter. 120mm

- Including jointing cutter set in DIA version Diam. 100 x 44 x diam. 30mm, Z=3

#### 3.2 BONDING UNIT A12

Consisting of:

WORKPIECE PREHEATING

QUICKMELT APPLICATION UNIT

- Melting unit and quick-change, small-volume quickmelt application unit
- Processing of PU glue granules with standard application units Interchangeable PU possible
- Glue roller direction of rotation either synchronous or counter-rotation. Glue temperature monitoring using an electronic thermostat ADHESIVE REACTIVATION
- Infrared emitter to maintain the ideal adhesive temperature  ${\tt MAGAZINE}$
- Automatic edge magazine for rolled goods and fixed lengths, including roller plate
- Equipped with reinforced pre-cutting shears
- Standard equipment with edge and workpiece spacing Monitoring using a lock at the machine inlet
- PRESSURE ZONE WITH MOTOR ADJUSTMENT
- Pressure zone with driven, pneumatically operated main pressure roller and 3 free-running pressure rollers
- Equipped with motorized single-axis adjustment the pressure zone to edge thickness
- 3.3 CUTTING UNIT BEVEL/STRAIGHT 2 X 0.35 KW
- For trimming the front and rear edge material overhang with a pulling cut.2 motors, each equipped with a chop saw blade.Swivel range straight to bevel caps 0-15 degrees
- 3.4 PNEUMATIC ADJUSTMENT CAP CHALLENGE/STRAIGHT
- 3.5 PNEUMATIC 2-POINT ADJUSTMENT CAPS
- 3.6 PRE-MILLING UNIT 2 X 0.55 KW 0 DEGREES
- for flush milling in COUNTER RUN





#### 3.7 PNEUMATIC 2-POINT ADJUSTMENT

#### 3.8 MULTIFUNCTIONAL FORM MILLING UNIT 2 X 0.4 KW

For processing the edge projections on the workpiece surface

and bottom edge as well as for corner copying of the front and back edges.

- Servo-controlled movement sequence with soft touch function
- 2 motors each 0.4 kW, 200 Hz, 12000 1/min with tool holder HSK 25
- constant speed of the milling motors for a perfect finish
- Compact milling head with integrated chip extraction
- Quick change head set for manual profile changing
- Longitudinal milling or corner copying, freely selectable via the machine  $\operatorname{control}$
- Servo-motor adjustment to different edge thicknesses
- Feed 14 m/min
- Workpiece length min. 160 mm
- Workpiece thickness 12 60 mm
- Edge thickness max. 3 mm
- A separate interchangeable head is required for each profile (option VKNR 4838)
- Shape milling of veneer and solid edges is only possible to a limited extent (preliminary tests)

#### 3.9 PROFILE PULLING BLADE WITH QUICK-CHANGE HEADS

- Scanning from above, below and to the side. For the Chamfering or rounding pre-milled PVC edges
- Max. edge thickness 3 mm height adjustment upper device with the upper pressure
- 2 quick-change heads for easy radius changes, with 2 WPL profile knives

#### 3.10 PNEUMATIC ADJUSTMENT OF PULL BLADE

- For electro-pneumatic axial movement of the scraper unit

## 3.11 GLUE JOINT PULLING BLADE

- To remove adhesive residue in the area of the glue joint
- Scanning from above and below.

Height adjustment with the top pressure

- Equipped with 2 WPL reversible knives
- including suction

### 3.12 BLACKING UNIT 2 MOTORS

- For gripping the edges at the top and bottom
- 2 motors 0.18 kW each, individually suspended, tilt and height adjustable
- Height adjustment of the upper motor with the upper pressure
- 2 molton discs diam. 150x20mm

## 4.0 ELECTRONIC CONTROL POWER CONTROL PC 20+

 ${\tt BRANDT}$  control system with color graphic user interface for simple and comfortable operation and programming.

#### Technical details:

- Pivoting control panel at the machine inlet
- Durable short-stroke membrane keyboard
- 12 inch color graphic flat screen
- Industrial PC with compact flash disk as mass storage
- Unit function keys with LED status display
- Support for user guidance through color pictograms
- Commission-related operational data collection, for the exact determination of production data through the direct allocation of commission and order. Retrieve the data with the included



Brandt browser software via network (Ethernet) to an existing PC

- Online language switching between various foreign languages
- Presentation of the essential machine target and actual states
- Status messages in plain text
- Easy selection and correction of route points
- Simple option for axle adjustment (at corresponding unit version)
- Context-related help function, detailed information about Operation and function of the machine directly on the control
- Inspection and maintenance interval display
- Saving editing programs
- Production according to machining programs
- Data backup of processing programs
- Fans for electronic controllers.

Module built into the control panel for ventilation of the electronic control

 Modem for remote service and remote maintenance of the machine via public Telephone network. There is an on-site analogue telephone connection for this

of the machine required.

Outside the warranty period, the remote service is used. and maintenance services at our applicable remote service billing rates

## 5.0 ELECTRICAL EQUIPMENT

- Operating voltage 400 volts 3Ph 50Hz
- Control cabinet installed according to Euronorm EN 60204
- Electronic frequency converter with engine braking function
- Surge protection for machines with electronics
- Country-specific operating voltage adjustment via transformer (optional)
- Electrical equipment with modular control system for Increased operator comfort
- Electronic stabilization of the internal 24 V control voltage
- Permissible ambient temperature min. +15 degrees/max. +35 degrees Celsius, for the electrical and mechanical functionality of the machine
- If the mains voltage fluctuates greater than +/- 10%, a device must be installed at the place of use

Voltage stabilizer must be installed

### 6.0 SAFETY AND PROTECTION DEVICES

- CE mark according to EC Machinery Directive 98/37/EU member countries
- Wood dust tested, TRK value max.  $2\text{mg/m}^3$  if the on-site requirements are adhered to

The extraction performance to be provided according to the installation plan

- The prerequisite for our warranty/product liability is this Full compliance with those supplied with the machine
  - Original operating instructions including safety regulations.

#### 7.0 HOMAG GROUP QUALITY PACKAGE

- TÜV certificate according to DIN EN ISO 9001:2000

## 8.0 DOCUMENTATION

- Documentation on CD-ROM
- Operating and maintenance instructions also in printed form

G.0001 Number: 4876 1 x right

TOOL SET R = 2 MM Note: r = 1mm



G.0004 Number: 0047 1 x right EXTENSION OF INLET RULER BY 300 MM

G.0007 Number: 0057 1 x right
PU TOP PRESSURE ROLLERS INSTEAD OF RUBBER ROLLERS
Instead of the standard fluted one

Rubber top pressure rollers become smooth PU top pressure rollers

built up. Use in particular sensitive workpiece surfaces.

G.0013 Number: 2215 1 x right RELEASE AGENT SPRAY UNIT WORKPIECE

- Separating agent information at the top and bottom, for easy glue residue distance on the machined workpiece
- Manual adjustment when the workpiece projection changes
- Without release agent, must be provided by the customer

#### VKNR 4150

MILLING UNIT 2 X 0.55 KW COUNTER ROTATION

- For milling the upper and lower edge material projection, vertically and horizontally groping. Height adjustment of the upper Aggregate with the upper pressure

- Functionality selectable from the control panel:
- 2 working positions: flush and radius/chamfer milling
- All actuating axes with digital counters for quick adjustment
- 2 motors each 0.55 kW, 200 Hz, 12,000 rpm.
- Equipped with DFC combination cutters for chamfer, radius and flush milling.

Edge thickness max. 12 mm  $\,$ 

Edge thickness max. 8 mm (Ambition 1400)

Edge thickness max. 12 mm (Ambition 1600-1800)

N.0101 Number: 4211 1 x right

PROGRAM - ADJUSTMENT OF SIDE ROLLERS

Includes the motorized axis adjustment of the side feeler rollers of milling units. Allows continuous adjustment of the

Side feeler rollers for edge thicknesses via the machine control.

N.0103 Number: 4213 1x on the right PROGRAM - ADJUSTMENT TO EDGE THICKNESS

Includes the motorized, stepless axis adjustment of the milling units.

N.0104 Number: 4901 2 x right MULTIPLE ROLLER FINE MILLING

- for use with acute-angled workpieces,
  - or for workpieces with pot hinge holes on one side.
- Can be used on the fine milling units with the VKNR 4120, 4150, 4155
- Price per processing motor above or below.

This position is used for the complete unit

Required 2x (e.g. acute-angled workpieces)

N.0301 Number: 5798 3 x right

SPECIAL PROBE FOR PROFILE PULLING BLADE

 for use with acute-angled workpieces or workpieces with pot hinge holes on one side.

A notice:

 $2 \times \text{radius } r = 1 \text{ mm top/bottom}$ 

 $1 \times \text{radius } r = 2 \text{ mm above}$ 



N.04 Number: 2220 1 x right CLEANING AGENT SPRAY UNIT WORKPIECE

- Spray device for cleaning agents on the upper and lower edges of the workpiece.
- To remove release agent and adhesive residues.
- Use in combination with a buffing unit is recommended.
- Without cleaning agents, must be provided by the customer

E.01 Number: 8321 1 x right INTERFACE LIGMATECH ZHR05

-Electrical and mechanical preparation of an edge banding machine For mounting the Ligmatech workpiece return ZHR 05.

D.01 Service: 8321 1 time

DOCUMENTARY AND CONTROL TEXT: GERMAN

Scope of delivery:

1. Operating instructions, consisting of commissioning instructions, Operating and maintenance instructions

on DIN A4 paper and CD-ROM

2. Screen operating texts for machine operators,

for the PC 20+ control

3. Spare part names on CD-ROM

Delivery time: With machine delivery