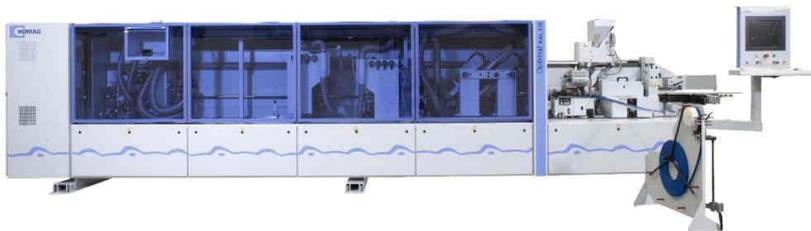


Offer

G.00 PROFI KAL330/7/A3/L

HOMAG ONE SIDE EDGEBANDING MACHINE



Single-sided edgebanding machine for machining straight edges of workpieces and for gluing and finishing various edge materials in longitudinal and transverse feeding.

1. BASIC MACHINE:

- Continuous machine column, to be fixed machining units
- Fixed stop left side
- Grey lacquer RDS 240 80 05
- Adjustable inlet ruler
- Pneumatically controlled inlet locking device
- Top pressure:
 - Composite V-belt drive

- Electronic height adjustment
- Digital position indicator
- A device for transporting the workpiece:
 - Transport chain with rubber pad, width 80 mm
 - Hardened, precision surfaces running and guiding
 - Magnetically braked conveyor chain
- Workpiece support with roller rail, Extendable for about 800 mm
- Noise protection for connecting and aggregate parts with individual extraction

- Feed | 18
m/min (optional feed) | 18-25/18-32 m/min
- Working height | 950 mm
- Pneumatic connection | 6 bar

- Ground conditions must be in accordance with the plan foundations

2. WORKPIECE AND EDGE PARAMETERS:

- Workpiece width
- min: 60 mm*
 - For workpiece thickness of 12-22 mm
 - |
 - For workpiece thickness of 23-60 mm 100 mm*
 - |
 - *Depending on length workpiece
- Convexity of the object | 30 mm
processed
- Workpiece thickness | 12 - 60 mm
subject
- Roll of edge material | 0,3 - 3 mm
 - Edge cross-section max:
 - For PVC | 135 mm²
 - For veneer | 100 mm²
 - Max. roller | 830 mm
diameter

- The machine operator is responsible for using the appropriate materials (boards, adhesives, edge tapes, cleaners, varnishes, etc.).

3. A G R E G A T I O N

3.1 FREE SPACE FOR THE MILLING MACHINE:

- Free space for milling machine installation (up to milling of workpieces before gluing)

3.2 ADHESIVE UNIT A3 BASIC:

Consisting of:

QUICKMELT GLUE APPLICATION DEVICE

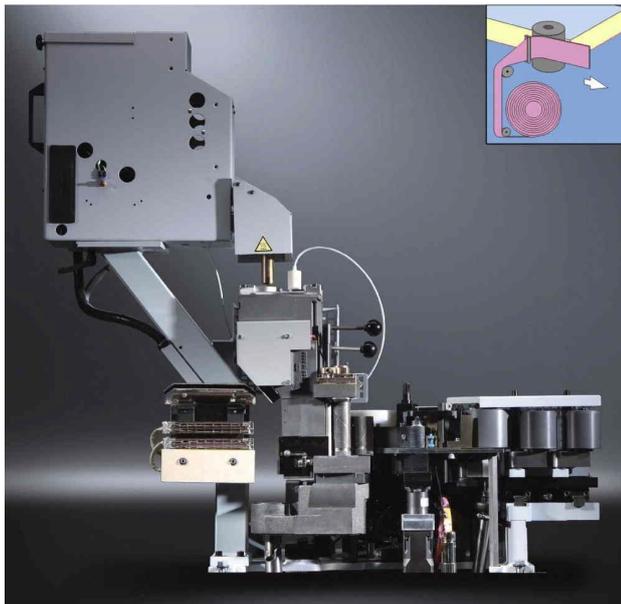
- Electronic temperature control with LED display
- Automatic reduction of glue temperature during downtime (freely selectable time)
- Melting capacity up to a maximum of 12 kg/h
- Glue roller drive at feed stop
- Lifting the glue container at the feed stop
- Container with glue attaching the actuated element

MAGAZINE 1 ROLL

- 1 Edge feed
- Roller separator
- Edge control with feed stop
- Edge sequence control for pre-selecting edge channels in any order. If an edge channel is empty, then the next selected channel is controlled (in case of multiple storage).

PRINTING ZONE K

- 1 driven preparatory roller with a diameter of 90 mm
- 2 pressure rollers with a diameter of 70 mm



3.3 FREE SPACE FOR PROCESSING UNITS:

- For other machining units see list of options

4. powerControl PC22:

Modern control system based on Windows PC

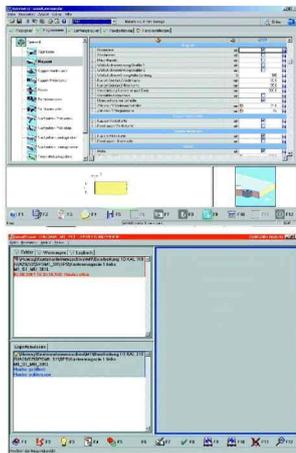
Equipment:

- PLC control in accordance with international standard IEC 61131
- Integrated line control for non-contact control of machining units
- Modern industrial computer with Windows XP operating system and Intel processor.
- Flat 17-inch TFT screen
- PC keyboard and mouse
- 1 fixed hard drive
- 1 hard drive for data backup
- 1:1 Backup (cloning)
- USB connector
- Manual switch for configuration mode
- Digital fieldbus system for input/output and decentralized units
- ETHERNET network connection via additional card and network software (optional)
- Protection against viruses



Software:

- Operation via Windows standard menu
- WoodCommander software package with
 - Convenient, graphically supported creation and saving of machine programs using the keyboard and mouse
 - Managing tool data through tool macros
- Operator guidance system (BDL) to display necessary manual adjustments on the machine during changeover
- Plain text error message
- WoodScout diagnostic system (optional)
- Schuler MDE Basic for machine data collection



Remote diagnostics via modem:

- Billing according to a separate remote service contract
- Telephone line (analog) to be installed on site

5. ELECTRICAL APPLIANCES:

- Operating voltage 400 V, 50/60 Hz.
- Installed control cabinet
- Mounted in accordance with European standard EN 60204
- Electronic frequency converter with motor braking function
- Adaptation of the operating voltage for a particular country using a transformer (optional)
- Residual current circuit breaker allowed only in combination with

with all-current sensitive/selective circuit breaker

If the performance of this device is insufficient, we recommend using an on-site residual current monitor.

- Recommended ambient temperature:
+ 10 to + 40 °C

6. SAFETY AND SECURITY DEVICES:

- EC conformity (CE) in accordance with the currently applicable Machinery Directive for single machine operation
- In case of operation of interconnected machines (factory cells/systems), an additional EC conformity assessment is required (on site). Implementation by the user (customer) on its own or optionally by the supplier VK-No. 8945
- Wood dust tested TRK value max. 2 mg/m³ depending on the extraction capacity to be provided by the customer according to the extraction plan.
- As a condition of our warranty/product liability, you must fully comply with the original instruction manual supplied with the machine, including safety regulations.

7. HOMAG QUALITY PACKAGE:

- TÜV certified in accordance with DIN EN ISO 9001:2000
- The machine is commissioned and delivered according to the program overview specific to the order.
- Energy saving function:
 - When the machine is not running, the control voltage is turned off for the set time.
 - The function can be turned on and off
 - Modern decentralized control system with passive cooling
 - Modern energy-saving light fixtures were used to illuminate the machine cabin.

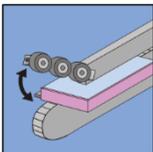
G.0007Number: 08931x left
INSTALLATION FOR BOOMERANG ZHR05.

- Feed lock and mechanical cutting position adjustment

G.0010Number: 08431x
leftThickness of tool 8 MM
KAL200/300/KFL500

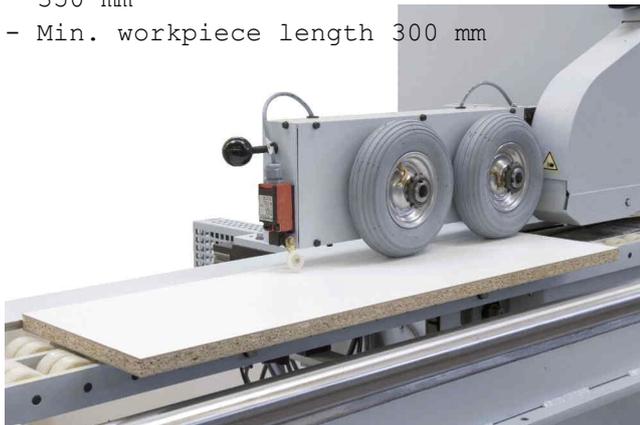
- Prepare the base machine to process workpieces with a thickness of min. 8 mm instead of 12 mm
- Only longitudinal machining possible without corner copying and without profile scraper
- Only for details without overhanging top layer
- For fine milling or Flextrim milling, the following applies: Workpiece thickness with $R \leq 2 \text{ mm}$ \varnothing min 8 mm
 Workpiece thickness with $R \leq 3 \text{ mm}$ \varnothing min 10 mm
 Workpiece thickness with $R > 3 \text{ mm}$ \varnothing min 13 mm
- Applicable to MF20/21 multimill: Workpiece thickness with 20° chamfer; and edge thickness 0.4 mm; min 8 mm
 Thickness of workpiece for rays min 13 mm

G.0013Nr: 00211 x
LEFT PULLING DEVICE 2 ROLLS

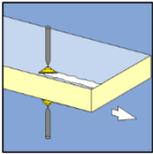


- With inclined driven rollers and intermediate transport at the inlet with a length of 350 mm

- Min. workpiece length 300 mm



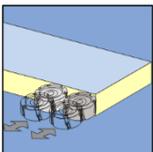
G.0016Nr: 29291x left
DISTRIBUTION MECHANISM REGISTERED TOP/BOTTOM



- To reduce surface contamination
- Application of release agent with spray nozzles in front of the format section from above and below
- Separately controlled jets
- Repaired overhang
- Without separating agent, must be provided by customer

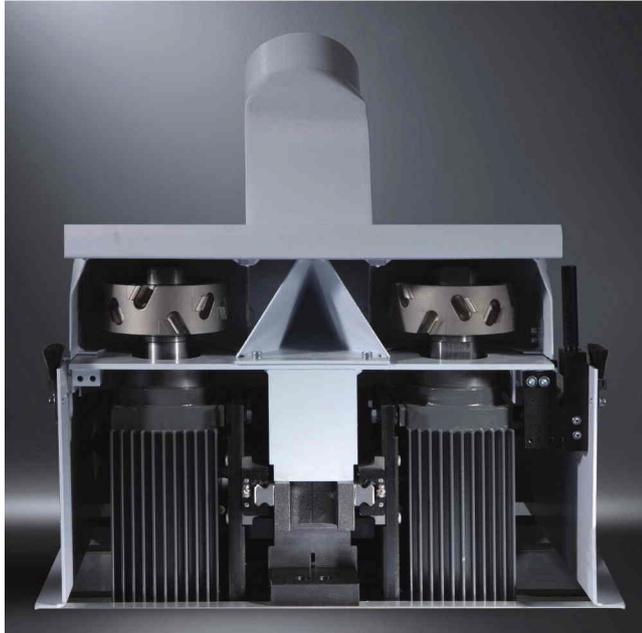


F.01 Number: 13341x left
FÜGEFRÄSAGGREGAT KAL300/S2



To jointly mill the edges of the workpiece before gluing.

- 2 motors, each 3 kW, 150 Hz, 9000 1/min
- Motor shaft diameter 30x68 mm, KN
- Electro-pneumatic control of both motors for wafer milling
- Workpiece blow-off device
- 2 I-DIA jointing cutter heads
 D=125x43x30 mm, KN, Z=2x3 with integrated chip detection function
- Workpiece thickness max. 40 mm



F.0101Nr: 15091x left

INSTALLATION INSTRUCTIONS.

- To manually adjust the extension of a component in the range 30 - 70 mm

V.01

Number: 20041 x left

LASERTEC ACTIVATING UNIT 3 KW

- The adhesive part is designed so that it can be processed with both EVA/PU and laserTec adhesive.
- Transition from laserTec to PU/EVA user manual
- Designed for straight edges of details, without soft forming

Consisting of:

L A S E R A G G R E G A T

- Melting the laser activation layer on the edge material
- Oscillating laser beam
- Automatic adjustment to the thickness of the workpiece

- Wavelength of laser

radiation 980 nm ■

- Laser certification protection class 1 (machine can be operated without additional protective measures)
- The laser corresponds to laser protection class 4 and is converted by protective devices to laser protection class 1
- The operator is not allowed to perform any service work on the laser.

B_e_a_r_b_e_i_t_u_n_g_s_p_a_r_a_m_e_t_e_r

- Workpiece thickness; max. 40 mm
- Feed speed depending on the edge material ;
max 30 m/min and thickness
of workpiece
|.
- Roller edge thickness; max. 3 mm
- Thickness
edge of tape; max.
3 mm (only in combination with tape
magazine)
with glue part A6/A12/A20)
- Edge material with the required laser
activation layer
- VK-No 6281 flexible edge sequence control is
required to manage edge parameters
- The edge parameters for laser adjustment
must be specified by the edge manufacturer.
- The adhesive part is generally built up at
an 18-degree angle, which reduces the edge
thickness to a maximum of 6 mm when using
EVA/PU adhesive (in combination with
adhesive part A6/A12/A20).
- For double-sided machines, the minimum
width of the workpiece is increased by 20
mm (laser protection).

B

- Large pressure roller: 150 mm diameter, straight
- For A3 bonded part, the diameter is 150
mm, instead of 90 mm, hence the min.
edge length
+ 40 mm
- Pressure Rollers: 4 straight pressure rollers

B

- The operator must be trained to use the
laser



V.04Number: 24501 x left

BASIC GLUING PART A3, ASSEMBLY OF EXTENSIONS

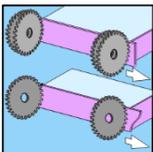
Additional options for the basic adhesive part can only be sold in conjunction with the expansion kit.

The expansion module includes:

- Manual magazine height adjustment via spindle +/- 5 mm
- Magazine 2 rolls
- 2 edge feeders
- Manual or automatic edge change
- Control of residual edge length at 2400 mm

N.01

Quantity: 30481x left KAPPAGGREGATHL84 FASE/GERADE 0.22 KW



For blanking the edge protrusions on the front and back edges

- cross fence standing
- 2 motors, each 0.22 kW, 200 Hz., 12000 1/min.
- Pneumatic conversion from chamfering to straight sockets

- including electronic frequency converter with motor braking function and noise protection extension
 - 2 HM crosscut saws with HSK25, diameter 120 mm

 - Workpiece output. 30 mm
 - Gerademax edge thickness. 3 mm
 - Fasemax. 3mm edge thickness
 - 30 degree phase
 - Workpiece thickness max. 60 mm
 - Protruding edge at the top, above the surface of the workpiece max. 4 mm
 - Edge width 65 mm
 - Feed rate:
 - Up to a workpiece thickness of 40 mm max 25 m/min .
 - Up to a workpiece thickness of 60 mm max 20m/min .
- Distance between workpieces at 20m/min. = 400mm
Workpiece sequence VK/VK= 1000mm

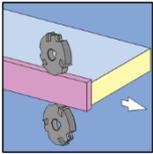


N.0101Number:

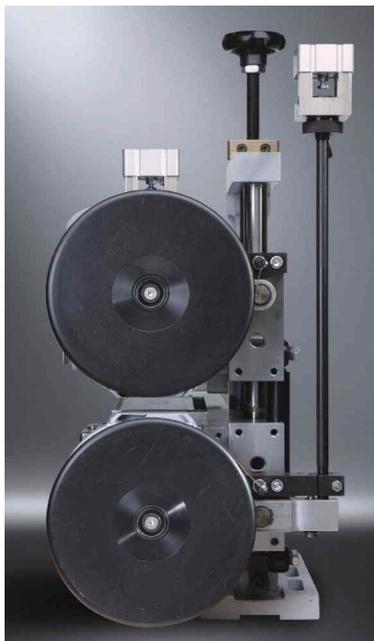
31131x left CAPITORREGULATION PNEUMATIC

- For electropneumatic adjustment of cross-cutting motors in 2 positions

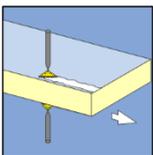
N.04 Number: 32011 x left REGAT PREHEATING BF10 0,55 KW



- 2 motors one above the other, each with 0.55 kW, 200 Hz, 12000 1/min.
- Height adjustment with top clamp
- Working in the opposite direction
- Rotation range +/- 1 degree
- 2 HM cutters 70 x 25 mm, HSK 25, Z=4
 - Including electronic frequency converter with braking function
- engine and protection from outside noise



N.05 Number: 29291x LEFT UP/LEFT DISTRIBUTION MECHANISM

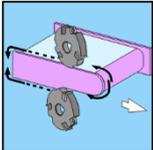


- To reduce surface contamination
- Application of release agent with spray nozzles in front of the format section from above and below
- Separately controlled jets
- Repaired overhang
- Without separating agent, must be provided by customer



N.07Number: 37031x

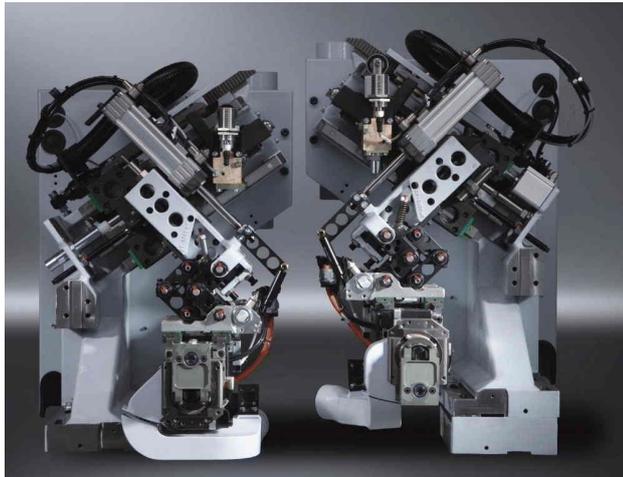
LEFT FK11 MANUAL CONSTRUCTING AGENCY



For machining edge protrusions on the top and bottom edges of the workpiece and for trimming the front and back edges of the workpiece in combination with a trimming unit and a pre-milling unit.

- 2 motors, each 0.4 kW, 200 Hz., 12000 1/min.
- Handle with quick-change device for everyone
- 1 Change of head set, manual change
- No interchangeable head set - no tools
- Selector switch for longitudinal/circular milling
- Including a frequency converter with motor braking function and noise protection.
- Feed speed; max. 20 m/min
- Feed speed of continuous milling without copying; max. 30 m/min
- The length of the workpiece - one side; min. 240 mm
- double-sided ; min. 120 mm (less than 240 mm only in combination VK-No. 3745); manure.
- Workpiece thickness; 12 - 60mm

- Distance between working elements (with PC22) | min. 500 mm
- With detail thicknesses
 - Larger than 22 mm | min machining-Ś
 - Spacing between elements up to | min. 600 mm
- Edge thickness | max.3 mm
- A separate changer head is required for each profile and each edging material (wood or plastic).
- Shape milling for veneers and solid edges is only possible to a limited extent
- Flush milling and chamfering of glued soft forming edges is not possible



N.0701Number: 37181 x left

I-CHANGE HEAD SET MANUALLY ADJUSTABLE / FK

- 2 interchangeable heads for mounting on the FK 11/21 shaping milling unit
- For manual adjustment of various edge thicknesses on chamfer milling machines and/or for manual conversion of chamfer milling machines to radial milling machines.

- max . edge thickness for chamfering with a radial tool:
 - for R 1.5 = 0.6 mm
 - for R 2.0 = 0.8 mm
 - for R 3.0 = 1.0 mm
- Fiber angle of about 15 degrees
- designed for I-tools with extraction integrated with the tool
- No tools

N.0704Number: 37331 x left

I - SET OF CUTTERS WITH RADIUS F. FK R=2 MM

Z=4

- 2 DIA cutters base diameter 62 mm
- Edge thickness max. 2 mm

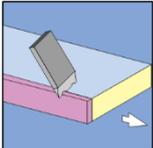
N.0707Number: 37451x left

MONITORING FOR FK-GERAET

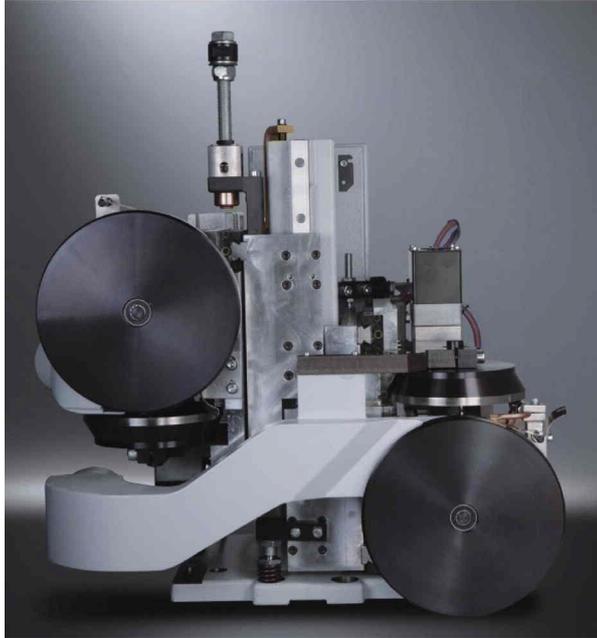
With additional clamping for workpiece length
min. 120 mm for single-sided machines.



N.10Number: 45091x left MN20 MANUAL MULTIROTARY CLAMP



- For up to 5 different profiles
- Scan from top, bottom and side to chamfering or rounding of pre-milled PVC edges
- Electropneumatically controlled blowing nozzles
- For manual chamfer/beam changeover
- Height adjustment with top clamp
- Pneumatic side-to-side shifting out of the work area
- Edge thickness max. 3 mm
- Workpiece thickness min. 13 mm with R=3 mm min. 10 mm with a chamfer of 0.5x45 degrees
- Comes complete with PVC chip suction container, 2 TCT knives for beveling at 20 degrees, R=1.5 / R=2 / R=3 / R=5



N.1001Number: 45381x left
PROFILED KNIGES SET F. MN20/21
CUSTOMER SPECIFICATIONS

6 Profile knives for special profiles
instead of standard knives, e.g. R=1.7
mm Precise radii are
extra paid

designed for R=1mm; R=2mm; chamfer 15 degrees

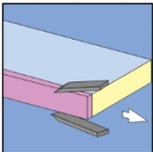
N.13Number: 45061x

LEFT AGGREGATE FA11 UP / DOWN

To finish the longitudinal edge consisting
of:

- GLUE JOINT SCRAPER
 - For removing glue residues
 - Height adjustment with top clamp
 - Carbide blade

- USE OF UP/DOWN DETERGENT
 - Using 2 spray nozzles
 - Without cleaning agent, must be provided by the customer



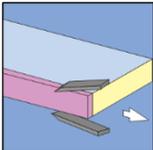
- PURIFICATION UNIT
- Height adjustment with top clamp



N.1301Number:
45221x left

PNEUMATIC REGULATOR FA10/11

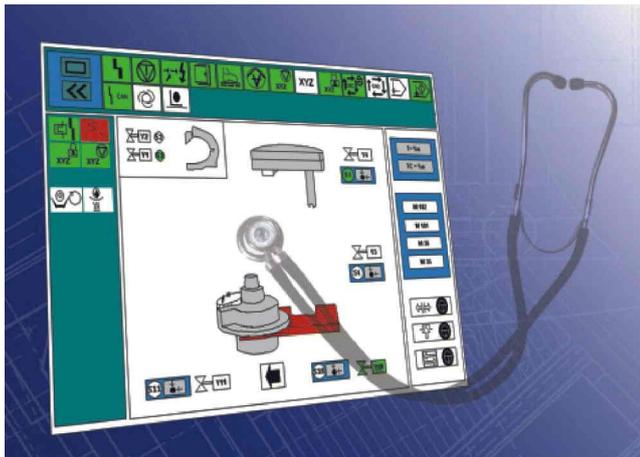
- For electropneumatic lateral movement out of the work area



E.01 Service: 6383 1 time WOODSCOUT DIAGNOZE SYSTEM.

Software package for graphical diagnostics of machine status. The WoodScout system enables systematic troubleshooting and leads to a significant increase in plant availability.

- Graphical diagnosis of PLC at different levels
- Learning system through the option to enter data on causes and remedies in case of failure
- Optimal support for eliminating machine downtime



E.04 Service: 6281 1 time

FLEXIBLE EDGE TRACKING SOFTWARE

- defined assignment of edge material to the corresponding edge channel in the edge stock
- Alphanumeric designation entry edging material through the machine input PC22
- Tracking parts from the machine input for edge storage
- Timely feeding of edging material thanks to automatic recognition of the required edge channel

- to manage laser edge parameters

D.01

Service: 8612 1 time

TRAINING: OPERATION OF CAL. SINGLE MACHINE 4 DAYS



Topics:

- Construction of the machine
- Functions of machining units
- Basic settings
 - Straight / soft edges
- Operating and display elements
- power control: PC22
- Input of workpiece programs (programming)
- Modes of operation
- Diagnostic program: woodScout
- Practical tips

Target Group:

- Machine operator

Prerequisites:

- Recommendation: European Computer Law
Driving (ECDL) Module 1 + 2

Training date:

- By arrangement with the HOMAG Training Center
- Price for 1 participant
- Without accommodation and meals
- Trainings are conducted in groups (several companies) of at least 3 participants.
- Please note "Important Registration Information" at www.homag.de.

D.0101Service: 8699 1 time

TRAINING: NEXT TRAINEES



- Price for the second and each additional participant
- Training fees are 50% of the training fee for the first participant, provided that all participants attend on the same date.



A.10 Number: 37191 x left
I-CHANGE HEAD SET ADJUSTABLE AUTOMATICALLY / FK

- 2 interchangeable heads for mounting on the FK 11/13/21/23 shaped milling unit
- For automatic adjustment to different edge thicknesses on chamfer milling machines and/or for automatic conversion from chamfer milling machines to radius milling machines.

-max . edge thickness for chamfering with the tool radial:

- for R 1.5 = 0.6 mm
- o R2= 0.8 mm
- for R3= 1.0 mm
- Fiber angle of about 15 degrees

-

- designed for I-tools with extraction integrated with the tool
 - No tools
- If this option is selected, item N0701 is skipped.

A.1101Number: 37301 x left

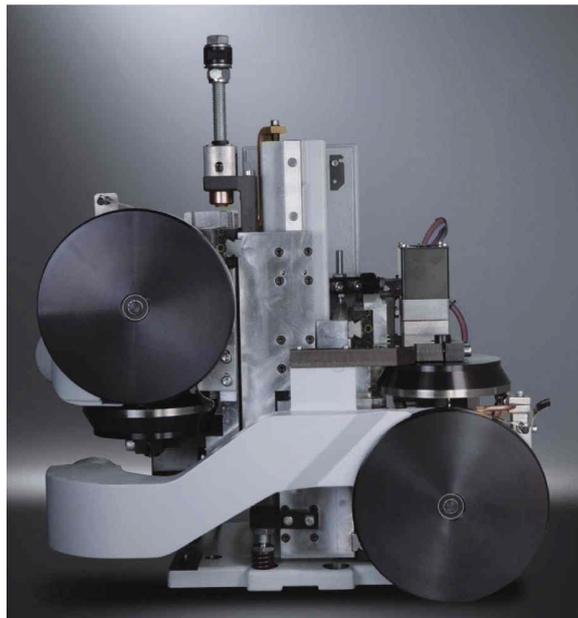
I - A SET OF CUTTERS WITH RADIUS F. FK R=1.5 MM Z=4

- 2 DIA cutters base diameter 62 mm
- Edge thickness max. 1.5 mm

_____g_ R=1 mm

- A. 3Number: 45081x
left MULTIPULLING PLATE MN21 AUTOMATIC.
- For up to 5 different profiles
 - Top, bottom and side scanning for chamfering or rounding pre-milled PVC edges
 - Electropneumatically controlled blowing nozzles
 - For automatic chamfer/beam changeover and for lateral withdrawal of top and bottom tools from the work area.
 - Height adjustment with top clamp
 - Edge thickness max. 3 mm
 - Workpiece thickness min. 13 mm with R=3 mm
min. 10 mm b. Phase 0.5x45 degrees
 - Including PVC chip suction container
 - 2 carbide knives for beveling at an angle of 20 degrees, R=1.5 / R=2 / R=3 / R=5

 s
If this option is selected, item N10 is skipped.



D.04Service : 8358 1 time

DOCUMENTATION AND CONTROL TEXTS: CROATIAN/SERBIAN LANGUAGE

Be translated:

1. User Manual



containing operating instructions and maintenance on DIN A4 paper and CD-ROM

2. Texts on the screen

For machine operators, only for PC22, 52 and 85

3. Spare parts designations in

English on the CD-ROM.

- Delivery time: After delivery of the machine

B. 3D SUPPLY EXW WADOWICE

B.26 PAYMENT

B.29MONTAGE

Assembly includes the following services:

- Setting up machines
- Commissioning
- Test
- Handover (operator instruction/acceptance < 1 day)

B.38 GUARANTEE

The statute of limitations for claims for material defects ends,