

P.00 **KAL370 AMBITION 2274**

HOMAG SINGLE-SIDED EDGE BANDING MACHINE

Single-sided edge banding machine for processing straight workpiece edges and for gluing and post-processing different edging materials in longitudinal and cross through-feed.

1. BASIC MACHINE:

- continuous machine frame for mounting the processing units
- noise protection for jointing part and unit part with individual suction

- working height | 950 mm
- pneumatic connection | 6 bar
- total length | 8365 mm

- floor conditions must correspond to the layout and suction plan

2. WORKPIECE AND EDGE PARAMETERS:

- workpiece width without edge min:

- in case of workpiece thickness 12-22 mm : 60 mm*
 - in case of workpiece thickness 23-60 mm : 100 mm*
- *depends on the workpiece length

- workpiece overhang : 30 mm
 - workpiece thickness : 8 - 60 mm
 - edge height max. = workpiece thickness : + 4 mm
 - edging material coil : 0,3 - 3 mm
 - edging mat.cross section max. :
 - for PVC : 135 mm²
 - for veneer : 100 mm²
 - coil diameter max. : 400mm / 830mm
- the machine operator is responsible for the use of suitable materials (boards, glues, edging materials, cleaning means, lacquers etc.)

3. ELECTRIC EQUIPMENT:

- operating voltage 400 volt, 50 Hz
- switch cabinet installed at the machine
- installation accord. to European Norm EN 60204
- frequency convertor, electronic, with motor braking function
- FI-safety switching only permitted in connection with an all-mains sensitive/-selective FI-safety switch; if the performance of this device is not sufficient, we recommend using a differential current monitor, which is to be provided by the customer
- prescribed environmental temperature: + 5 degrees up to + 40° C (in case of environmental temperature >35°C or air humidity >65% a cooling unit for switch cabinet is recommended)

4. SAFETY AND PROTECTION FACILITIES:

- EC conformity (CE) according to the currently valid Machinery Directive for individual machines in operation
- according to the Machinery Directive an additional EC conformity certificate for linked

machine operation (cells/plants) is required in the defined countries.

- wood dust protection max. 2 mg/m³, subject to the required extraction capacity being provided by the customer according to the suction plan
- condition for our warranty/product liability is the unrestricted observance of the original production instructions delivered along with the machine including the safety instructions

5. HOMAG QUALITY KIT:

- TÜV certificate accord. to DIN EN ISO 9001: 2008
- energy-efficient drives accord. to the EU no. 640/2009
- energy saving functions:
 - ECO Plus button for start of the stand-by mode, which can be activated during the production. After running empty or when the machine is empty it provokes the following:
 - the drives stop running
 - public supply infrastructure is switched off
 - when the machine is not producing, the control voltage is disconnected by means of preset time
 - the function can be switched on and off
 - modern, decentralized control system with passive cooling
 - for the illumination of the machine compartment, modern energy-saving luminaries are used
- in order to save energy the pneumatic cylinders and the blowing nozzles use 2 different pneumatic supplies

P.00001 Number : 0876 1 x left
FEED STEPLESSLY ADJUSTABLE 16-20 M/MIN
- feed frequency-controlled
- adjustment of speed at the input unit

- P.00004 Number : 0467 1 x left
FIXED STOP SIDE ON THE LEFT
- P.00007 Number : 0474 1 x left
WORKPIECE THICKNESS 8 - 60 MM
- preparation of the basic machine for
workpiece thickness 8 - 60 mm
- P.00013 Number : 0479 1 x left
PANEL OVERHANG 30 MM
- panel overhang 30 mm fix
- P.02001 Number : 0699 1 x left
LAQUERING GREY RDS 240 80 05
- P.02004 Number : 0893 1 x left
PREINSTALLATION FOR BOOMERANG TFU140
- mechanical interface adaption
- P.02007 Number : 0472 1 x left
FEED INTERLOCKING
- with interlocking plan and connecting cable

EQUIPMENT PACKAGES

- P.03004 Number : 9074 1 x left
FUTURE PACKAGE 5

WORKPIECE HANDLING

- P.04004 Number : 0395 1 x left
ALIGNMENT OF THE WORKPIECE AT THE INFEEED
- INFEEED FENCE AUTOMATIC
- for machines with a preceding jointing part

- P.04008 Number : 0460 1 x left
PANEL SUPPORT WITH ROLLER GUIDE
- 1000 mm extractable
- P.04011 Number : 0466 1 x left
INFEED INTERLOCKING
- infeed interlocking pneumatically controlled
- P.04014 Number : 0473 1 x left
WORKPIECE TRANSPORT DEVICE
workpiece transport device:
- transport chain with rubber coating, 80 mm wide
- hardened precision running and guiding surfaces
- magnetically braked transport chain
- P.04017 Number : 0470 1 x left
TOP PRESSURE
- compound V-belt
- electronic height adjustment
- height adjustment of the post-processing units with the top pressure
- mechanical digital position read-out
- MIN. WORKPIECE LENGTH 240 MM
- workpiece length min. 240 mm for single-sided machines

APPLY SEPARATING AGENT AND PROCESS FORMAT

- P.04025 Number : 0483 1 x left
SEPARATING AGENT SPRAYING UNIT TOP/BOTTOM
- for reducing the surface contamination
- application of separating agent by means of spraying nozzles before the panel sizing part from top and bottom
- nozzles separately controlled
- without separating agent, the customer has to provide for it
- basic equipment: empty container separating agent Riepe LPZ/II

- more detailed information about suitable separating agents has to be taken from the operating instructions "separating agent spraying"

OVERHANG FIX

P.04029 Number : 0485 1 x left
JOINTING TRIMMING UNIT
For jointing trimming the workpiece narrow surface before gluing.

- panel blow-off device

MOTOR PERFORMANCE 3 KW, 150 MM²
- 2 motors each 3 kW, 150 Hz, 9000 1/min
- hogging cross section max. 150 mm²

HEIGHT JOINTING PROCESSING 60 MM
- designed for workpiece thickness max. 60 mm, depends on the workpiece

TOOL INTERFACE, DOUBLE KEY WAY
- motor shaft diameter 30 x 68 mm, double key way

ELECTROPNEUMATIC INTERMITTENT CONTROL
- electropneumatic control of both motors for intermittent trimming

OVERHANG FIX

ADJUSTMENT DEVICE MANUAL VERTICAL FOR S2
- manual vertical adjustment for better utilization of the tool's blade and to align the jointing cutters to the centre of the workpiece

TOOL DIAMETER 125 MM

P.04039 Number : 0587 1 x left
SET OF DIAMOND JOINTING CUTTERS WD60
- 2 jointing cutters 125x63x30 mm, key way t=3x3

-
- asymmetric execution
 - high processing quality due to low soiling of the workpieces
 - for the processing of already applicated edges which are damaged special tools are recommended
 - the capturing of chips is reduced for the processing of already applicated edges which are damaged

EDGE BANDING

P.04045 Number : 2326 1 x left
PANEL PRE-HEATING UP TO 60 MM PANEL THICKNESS
- for heating of workpiece edge before glue application
- for improvement of the gluing quality

P.04048 Number : 0557 1 x left
GLUING UNIT

GLUE TYPE PU
- ChemCoat-treated antioxidation coating of the melting reservoir
- temperature control
- edge thickness max. 6 mm
- application roller drive in case of feed stop
- glue container lift-off in case of feed stop
- glue container clamping workpiece-actuated

Included in the kit
GLUING PACKAGE PU65

MELTING UNIT PU 4-6 KG/H
- melting capacity max. 4-6 kg/h depending on glue
- container size 2 kg

Included in the kit
GLUING PACKAGE PU65

P.04053 Number : 2009 1 x left
PREPARATION FOR AIRTEC ACTIVATION UNIT
- preparation of the machine/gluing part
in such way that either EVA/PU-glue or airTec
can be installed later
- resetting from airTec to PU/EVA manually
- designed for straight workpiece edges, no
softforming
- installation possible in connection with
strip magazine
- top pressure floatingly supported
- preparation for the cooling of the front
part of the chain track

Note:

- for the later resetting a customer-specific
modification offer must be created

P.04056 Number : 0577 1 x left
GLUE APPLICATION SYSTEM

QUICK CLAMPING SYSTEM F. APPLICATION UNIT QA/PU
For quick change of the application unit

- e.g. when using several application units for
different glue colours

P.04063 Number : 0519 1 x left
APPLICATION UNIT

MODEL PU65
- teflon-coated
- with heated application roller
- reproducible dosing of the application
quantity via vernier
- for processing PU glue e.g. in granular form

Included in the kit
GLUING PACKAGE PU65

P.04067 Number : 0519 1 x left
APPLICATION UNIT

MODEL PU65

- teflon-coated
- with heated application roller
- reproducible dosing of the application quantity via vernier
- for processing PU glue e.g. in granular form

P.04071 Number : 2960 1 x left
PRESSURE TANK FOR APPLICATION UNIT PU

- for storage of an PU application unit with nitrogen admission in order to avoid hardening of the residual glue in the front part when there are long pauses
- incl. connection kit for nitrogen: bottle valve according to DIN 477, no. 10
- required nitrogen is to be provided by the customer

P.04074 Number : 0475 1 x left
EDGE MAGAZINE

MATERIAL ON COILS

- clipping unit
- edging material control with feed stop

2 COIL SEATS

AUTOMATIC EDGING MATERIAL CHANGE

- 2 edging material feeding devices

SERVO-CONTROLLED EDGE FEEDING FOR A1 - A20

- edge feeding of the material on rolls by means of servo drive
- max. edge overhang at front and rear edge when processing material on coils: +/-3 mm in case of feed up to 50 m/min and a maximal coil weight of 15 kg
- in case of surface overhang the accuracy cannot be guaranteed

- in case of feed > 40 m/min and high coil weights a driven roll carriage is recommended
- in connection with laserTec panel overhang of the front and rear edge min. 15 mm

REMNANT EDGE LENGTH CONTROL

MAGAZINE HEIGHT ADJUSTMENT MANUALLY

- magazine height adjustment via spindle +/- 5 mm

P.04083 Number : 0477 1 x left
PRESSURE ZONE

PRESSURE ZONE A 5 ROLLERS

- 1 driven prepressure roller, diameter 90 mm
- 4 postpressure rollers, diam. 70 mm
- pneumatic pressure adjustment

AUTOMATIC ADJUSTEMENT PRESSURE ZONE

For automatic adjustment of the pressure zone in case of varying edge thicknesses.

WETTING DEVICE PRESSURE ZONE

- wetting of the 1. pressure roller to avoid the adherence of glue
- stripping device for all pressure rollers

Included in the kit
 GLUING PACKAGE PU65

P.04089 Number : 9088 1 x left
GLUING PACKAGE PU65

POST-PROCESS WORKPIECE

P.04095 Number : 0582 1 x left
COOLING AGENT SPRAYING UNIT ON TOP/BELOW
 - for cooling the glue joint and for static discharge of the edge protection tape
 - cooling means application by means of

spraying nozzles before pre trimming from top and bottom

- nozzles are separately controlled
- without cooling agent, must be provided on part of the customer
- basic equipment: empty container anti-static cooling agent Riepe LP289/99
- more detailed information about suitable separating agents has to be taken from the operating instructions "separating agent spraying"

OVERHANG FIX

Included in the kit
GLUING PACKAGE PU65

P.04099 Number : 0523 1 x left
SNIPPING UNIT HL81 CHAMFER/STRAIGHT 0,8 KW
for snipping the edge overhangs at the front and rear edge

- 2 motors each 0,8 kW, 200 Hz, 12000 rpm
- pneumatic adjustment for reset from chamfer to straight snipping
- incl. electronic frequency inverter with motor braking function and extension of noise protection
- 2 TCT snipping saws with HSK25, diam. 120 mm

- panel overhang | min. 30 mm
- edge thickness straight | max. 20 mm
- edge thickness chamfer | max. 3 mm
- chamfer | 30°
- panel thickness | max. 60 mm
- edge width | 65 mm
- edge cross section | max. 900 mm²
- feed speed: | min. 16 m/min
 - up to panel thickness 40 mm | max. 25 m/min
 - up to panel thickness 60 mm | max. 20 m/min
- panel gap with 20 m/min | min. 600 mm
- panel sequence front edge/
front edge | 1000 mm

DRAWING SNIPPING STOP

MANUAL ADJUSTMENT CHAMFER SNIPPING STOP

- adjustment of the chamfer snipping stop to different edge thicknesses manually

P.04104 Number : 3113 1 x left
PNEUMATIC ADJUSTMENT FLUSH SNIPPING AND overhang snipping

- for electropneumatic adjustment of the snipping motors to 2 positions.
- position 1: flush snipping
- position 2: snipping with overhang - for post-trimming with profile trimming unit

Included in the kit
FUTURE PACKAGE 5

P.04107 Number : 0508 1 x left
ROUGH TRIMMING UNIT BF10

For rough trimming of the edge overhangs on the workpiece upper edge and on the workpiece lower edge

- height adjustment with the top pressure
- incl. electronic frequency converter

MOTOR CAPACITY 0,55 KW

- 2 motors one above the other,
- each 0,55 kW, 200 Hz, 12000 rpm
- working in opposite movement
- edge thickness | max. 6 mm
- workpiece thickness | 7 - 60 mm
- swivelling range | +/- 1 degree

PNEUMATIC ADJUSTMENT OF ROUGH TRIMMING UNIT BF10+20

- on 2 positions
- position 1 - rough trimming with projecting edge (approx. 0,2 mm)
- position 2 - flush trimming without projecting edge
- separately controlled

ADJUSTMENT WORKPIECE THICKNESS WITH TOP
pressure

P.04113 Number : 0513 1 x left
SET OF I-TCT CUTTERS STRAIGHT
- 2 TCT cutters 70 x 25, HSK 25, t=4

P.04116 Number : 0344 1 x left
PROFILE TRIMMING UNIT FK11
For processing projecting edge material at
workpiece upper and lower edge as well as for
trimming around the workpiece front and rear
edge in connection with snipping unit and
rough trimming unit.

- 2 motors each 0,4 kW, 200 Hz, 12000 rpm
- chuck with rapid change device for 1 set of
changing heads each, manual change
- selection switch longitudinal/all-round
trimming
- incl. frequency changer with motor braking
function and extension noise protection
- electropneumatic movement out of the working
area

- feed | max. 20 m/min
- feed continuous trimming |
- without profile trimming | max. 30 m/min
- panel length - single-sided | min. 240 mm
- double-sided | min. 120 mm
- panel thickness | 12 - 60 mm
- panel distance | min. 500 mm
- if the workpiece thickness is |
- higher than 22 mm, the min. |
- workpiece gap amounts to | min. 600 mm
- edge thickness | max. 3 mm

- per profile and per edging material (wood or
plastics) a separate change head is required
- profile trimming of veneer and solid lipping
is only partly possible
- flush trimming/chamfer trimming of glued
softforming edges is not possible

P.04119 Number : 3719 1 x left
SET OF CHANGE HEADS "I" AUTOMATICALLY
adjustable FK11
- 2 change heads for installation on the
profile trimming unit FK 11
- for automatic adjustment to varying edge
thicknesses in case of chamfer trimming and/
or for automatic reset from chamfer trimming
to radius trimming

- max. edge thickness for chamfer with radius
cutter:
- in case of R 1,5 = 0,6 mm
- in case of R 2,0 = 0,8 mm
- in case of R 3,0 = 1,0 mm
- chamfering angle approx. 15 degrees
- designed for I-tool with tool-integrated
suction
- without tools

SLIDING LATERAL TRACING

Included in the kit
FUTURE PACKAGE 5

P.04123 Number : 3733 1 x left
SET OF DIAM. RADIUS CUTTERS I, R=2 MM T=4 FK11
- 2 diamond cutters basic diameter 62 mm
- edge thickness max. 2 mm

P.04126 Number : 0481 1 x left
MULTI SCRAPER MN21 AUTOMATIC AMBITION
- for max. 5 different profiles
- tracing from above, below and lateral for
chamfering or rounding of pre-trimmed PVC-
edges
- blowing nozzles with electropneumatic control
- for automatic reset chamfer/radii and for
lateral movement out of the processing area
for upper and lower tools
- height adjustment with the top pressure
- edge thickness max. 3 mm
- panel thickness min. 13 mm for radius R=3 mm

- panel thickness min. 12 mm for radius R=2 mm
- panel thickness min. 11 mm for radius R=1 mm
min. 10 mm for chamfer
0,5 x 45 degrees
- incl. suction box for PVC-chips

ADJUSTMENT WORKPIECE THICKNESS WITH TOP
pressure

CHOPPING DEVICE TOP/BOTTOM
- for PVC chip removal

P.04131 Number : 4551 1 x left
HIGH GLOSS SCRAPER FOR HIGH GLOSS EDGE
top/bottom
- 2 TC-knives destined for chamfer 20 degrees,
R=1,0 / R=1,5 / R=2,0 / R=2,5 / R=3,0
- for gloss formation on the edge radius, e.g.
in connection with high gloss workpieces

P.04134 Number : 0381 1 x left
GLUE JOINT SCRAPER FA20 BASIC

ADJUSTMENT WORKPIECE THICKNESS WITH TOP
pressure

P.04138 Number : 4400 1 x left
EDGE BUFFING UNIT FA06 TOP+ BOTTOM
- for cleaning the edges
- 2 motors each 0,18 kW
- height adjustable
- height adjustment with the top pressure
- workpiece thickness max. 60 mm
- 2 molleton disks, diam. 150 x 50 x 25 mm

DETERGENT SPRAYING UNIT TOP/BOTTOM
- spraying unit for application of detergent
onto the panel upper and lower side
- without detergent, customer has to supply for
that

- basic equipment: empty container for separate agent Riepe detergent LP163/93
- more detailed information about suitable separating agents has to be taken from the operating instructions "separating agent spraying"

CONTROL MACHINE

P.06004 Number : 0379 1 x left
POWERCONTROL PC23 POWERTOUC
 Modern control system based on Windows-PC

Hardware:

- PLC control accord. to International Standard IEC 61131
- integrated line control for contactless control of the processing units
- modern industrial PC with operating system Windows 7
- USB connection
- digital field bus system for inputs/outputs and decentralized units
- antivirus software

Software:

- equal HOMAG Group user interface powerTouch
- ergonomic touch operation with gestures such as zooming, scrolling and swiping
- easy navigation for equal and intuitive operation of the machine
- intelligent display of readiness of production by light function
- operator guiding system (BDL) for indicating necessary manual adjustments at the machine in case of resets

BACKUP HARD DISK USB 2.0

- pre-configured external hard disk with USB 2.0 connection and at least 40 GByte storage capacity for 1:1 securing of the machine control
- prepared for connection to a PC23, PC53 or PC86 control which has an USB connection (as of IPC5.0)

- incl. backup software kit

FIRMLY INSTALLED CONTROL PANEL

- operating panel with 21.5" FULL-HD multitouch display in widescreen format

P.06009 Number : 6163 1 time
EMERGENCY INTERLOCKING DISRUPTION

P.06012 Number : 6530 1 time
NETWORK CONNECTION ETHERNET

- enables the machine to be connected to a local Ethernet network.

Hardware for NCxx control:

- Ethernet card with AUI-connection (10 Base-5)
- without cable

Hardware for PCxx control:

- Ethernet-card with RJ45-connection (10/100 Base-T) for twisted-pair cabling
- without cable

- data communication via FTP or Windows network
- additional network software and/or components must not be installed on the machine

Technical hint for the network integration on part of the customer:

- within the machine or machine line Homag uses data networks with the identifications 192.2.x.x or 192.168.1.x
- if one or both identification(s) are also used in the customer network, the customer has to provide a router in order to avoid network conflicts

P.06015 Number : 0844 1 x left
HAND OPERATION FOR RUN-IN MODE
The following functions can be selected
- run-in mode
- feed start
- emergency switch

OPERATING MACHINE

P.07004 Number : 0378 1 x left
SOFTWARE PACKAGE WOODCOMMANDER
- graphically supported creation and storage of machine programs
- administration of tool data via tool macros

P.07007 Number : 0576 1 x left
EDGING MATERIAL SEQUENCE CONTROL
- for pre-selection of the edging material in arbitrary sequence.
If an edging material channel is empty, the next selected channel is triggered

P.07013 Number : 0399 1 x left
CAPTURE AND EVALUATE MACHINE DATA

MMR BASIC
- integrated counters and predefined maintenance intervals always inform the machine operator about necessary maintenance works in due time
- through the need-based maintenance the availability of the machine increases and the downtimes of the machines are significantly reduced
- besides the maintenance data the amount of produced workpieces and the total running time of the machine is gathered
- therefore information about the productivity is constantly available

P.07017 Number : 0401 1 x left
ERROR DIAGNOSIS

ERROR MESSAGE IN PLAIN LANGUAGE
- display of the error description on
the machine control

DIAGNOSIS SYSTEM WOODSCOUT
Software kit for graphical diagnosis of the
machine condition. With the woodScout system it
is possible to systematically eliminate
troubles which in turn considerably increases
the plant availability
- graphical PLC diagnosis in different levels
- learning system due to the possibility of
entering the reasons for disturbances and the
measures to eliminate them
- optimum support for the elimination of
machine down-times

DOCUMENT

P.09004 Number : 8358 1 time
LANGUAGE SELECTION: CROATIAN
- operating manuals and on-screen operator
control texts for machine operators in
Croatian

P.09007 Number : 0782 1 time
DOCUMENTATION ON DATA CARRIER
(data format PDF)
- operating manuals consisting of operating and
maintenance manuals
- spare parts denominations
- wiring diagram on data carrier in German
and English

- help texts are integrated into the machine
control
- operating system dialogues in English

P.09013 Number : 0783 1 time
DOCUMENTATION ON PAPER
(folder, paper A4)
- operating manuals consisting of operating and maintenance manuals

SERVICE AND TRAINING

P.10004 Number : 0663 1 x left
RUNNING IN STANDARD PROGRAM
- the machine is run-in and delivered with HOMAG standard program

P.10007 Number : 0781 1 time
TELESERVICENET SOFT
- remote diagnosis via internet for a quick, low-cost and reliable remote service
- invoicing accord. to separate teleservice contract
- access to the internet is to be provided by the customer
- access to 1 machine PC is possible

P.10013 Number : 8945 1 time
CE FOR CELLS (MACHINE LINES)
EC conformity assessment procedure:
- we perform a EC conformity assessment procedure and provide together with you the installation of the manufacturing cell compliant to the directives
- our service includes the capturing of risk interfaces on your manufacturing cell through our safety inspector for the fields electrics/electronics and mechanics
- furthermore we evaluate a risk assessment of all (machine) interfaces, with description (documentation) of possible necessary modification measurements for the fields electrics/electronics and mechanics
- you receive from us the complete declaration of conformity for the machine line incl. of the following documents:
- CE declaration of conformity