STREFA CNC

Specification

Date : / 25.05.2023
Performance : 1

If you have any questions,
please quote your order
number 233456
Customer :
Machine number : 0-200-23-3456

FLEXLINE DESCRIPTION
The system is designed for flexible production of furniture parts.

- Joining, edge banding and nacelle edge processing are performed on board-shaped components.
- The format and angle are generated by the saw, that is, the thickness of the edge is taken into account when cutting.
  Cutting dimension= finishing dimension - (KDli+KDre)+2*BZ BZ= machining allowance per side
- The feed ruler is set once to the machining allowance.
- With a repair edge, the ruler can be adjusted by hand.
- Flexline is fed manually.
- Machining programs can be selected directly on the control panel,
  Optional pre-selection of programs by barcode VKNR XXXX

Edge treatment:
- Phase 20° Thin edge 0.4mm (melamine)
- Radius of thick 2 edge 2,0mm (ABS)....

Other edge thicknesses are possible as an option

Dimensions of the workpiece with format processing:

- Length: min. 240 mm max. 3000 mm
- Width: min.120 mm max 1200 mm
- Thickness: min. 10 mm max. 60 mm
- Weight: max.
  50 kg

-smallest part: 240 x120 mm
- largest part: 3000x1200 mm

Performance data

- Feed rate m/min20 longitudinal/cross
- Max. number of cycles/min12 in mode1 of piece counting
- max. number of cycles/min20 in serial operation

Aggregate-dependent
z. E.G. FF12
- autom. conversion of two edge thicknesses to
  0.4mm2.0; 20° chamfer on R2 min.mm.1200

+DUTY PAPER

1.1 Machine data
Machine number: 0-200-
23-3456
Product key: O KAL330/10/A20/S2 Specification
prepared by: P.Nass

1.2 Machine Location
Contact Person: Mr. Meyer
Area: Technical Manager

2.1 Office furniture
manufacturing program

3.1 Types of
workpieces
Carcass
production
Mixed fronts

3.2 Processing
material raw
particle board
Plastic-coated particleboard Veneered
particleboard MDF raw
Plastic-covered MDF
MDF veneered

Finished cut with overhang Machining
allowances Milling: 1-3 mm

3.3 Workpiece
dimensions
Min. length: mm120
Max. length: mm3000
With the projection of the workpiece: 30 mm
Width min: 47 mm
Width max: 1200 mm
With the projection of the workpiece: 30 mm
Thickness min: 8 mm
Thickness max: 60 mm
With the projection of the workpiece: 30 mm
Workpiece size min: x120 mm240

Workpiece size max: x1200 mm3000

Special workpiece dimensions: Narrow workpieces
min.47 mm

3.4.1 Goods with stripes
Belt material is processed: Yes Thickness
of solid wood: mm20
Veneer thickness: 0.8-1.2 mm
Laminate thickness: 0.6-1.0
mm PVC thickness: 1.0-3.0 mm
ABS thickness: 1.0-3.0 mm
Other: PP edging is mainly processed

3.4.2 Rolled products
Is processed in rolls:
Yes Melamine Thickness: 0.4 mm
Paper thickness: 0.4mm Veneer
thickness: 0.6-3.0mm PVC
thickness: 1.0-30.0mm ABS
Thickness: 1.0-3.0mm
Other: PP edging is mainly processed

4.2 Groove and rebate
dimensions Side
grooving/bracing
Grooving/bracing from below
Tool board Synchronization

4.3 Passing workpieces with a straight edge
lengthwise and crosswise

G.00 **OPTIMAT KAL330/10/A20/S2**

Single-sided machine for joint milling of straight edges of workpieces, gluing and finishing of various edge materials from roll or in strip form, with edge thickness up to mm20, in longitudinal and transverse feeding.

Fixed stop left side. BRIEF

DESCRIPTION OF BASIC EQUIPMENT:

- BASIC MACHINE
- WORKPIECE HANDLING EQUIPMENT
- TOP PRESSURE
- CONTROL power control PC22
- FREEPLACE connecting unit
- A20 BASIC STICKING PART for goods in rolls to. 3 mm and strips up to 20 mm
- NOISE PROTECTION
- KAPPAGREGAT
- FREE SPACE for more machining units

PRIMARY DEVICE
- Continuous column machine for clamping machining units
- Workpiece support with roller rail, extendable approx. mm800
- Glue roller drive at feed stop

- Lifting the glue container at the feed stop
- Container with glue attaching the actuated element
- Adjustable inlet ruler

DETAIL TRANSPORT DEVICE :
- Transport chain mm80 wide with rubber pad
- Precision hardened running and guiding surfaces
- Magnetically braked conveyor chain

- Composite V-belt drive
- Motorized height adjustment
- Digital position indicator

ELECTRICAL APPLIANCES:
- Volt400, 50/60 Hz operating voltage.
- Adjust operating voltage for country with transformer (optional)
- RCD protective circuit allowed only in combination with differential/selective sensing Earth fault circuit interrupter If the performance of this device is insufficient, we recommend using an on-site residual current monitor.
- Included control cabinet, installed60204 in accordance with European standard EN
- Electronic frequency converter with motor brake function
- Manual switch for configuration mode
- Ambient temperature: + degrees 5 to + degrees 40Celsius

PC22 power control
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
- Windows XP (US) built-in operating system
- Industrial PC with 2Celeron processor at least GHz and Mbyte512 RAM

- Flat TFT cal15owy screen
- PC keyboard and mouse
- 1 Hard drive repaired
- 1 Data backup hard drive
- 1:1 backup (cloning)
- USB connector
- Digital fieldbus system for I/O 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 storage of machine programs
  - 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

- Intervention by unauthorized persons in
  the control system of the machine
  relieves HOMAG of warranty obligations
  and product liability.

SAFETY AND SECURITY DEVICES:
- all machines for EU member states with
  CE mark in accordance with EC Machinery
  Directive 98/37/EC, Annex IIA
- Wood dust tested TRK value max.
  mg/m32 depending on the extraction
  capacity to be provided on site
  according to the extraction plan
- 2-fold documentation

TECHNICAL DATA:

- Feed speed 18 m/min
- Working height 950 mm
- Minimum working width:
  - 55 mm for workpiece thickness 22 mm
  -100 mm for workpiece thickness 60 mm
  (depending on workpiece length)
  -Workpiece projection 30 mm
  -Workpiece thickness 12 - 60 mm
  -Edge strip max. 0.4 - 20 mm
  -Edge cross-sectional strip max. 900 mm2
  -Roller of edge material 0.3 - 3 mm
  -Maximum edge cross-section - for PVC 135 mm2
  - for 100 mm2 veneer
  -Roller diameter max. 830 mm
  -Pneumatic connection 7-8 bar
- Ground conditions must be in accordance with the foundation plan
- The instructor is responsible for providing the appropriate materials (boards/edges/glue).

FREE SPACE MILLING DEVICE

PREHEATING OF WORKPIECES

- For heating the edges of the workpiece before applying glue to improve bonding quality

ADHESIVE UNIT A20 BASIC HOT GLUE

UNIT A34

- 5L glue container
- Electronic temperature control with LED display
- Melting capacity max kg/h
- with more glue required2158 no. VK

THE ROLE OF THE WAREHOUSE

- For solid edges, strip products and roll products
- Feeding the material to the belt through a vacuum suction cup
- Edge control with automatic feed stop in case of no edge
- Roller separator

- 1 driven preparatory roller diameter 150 mm
- 6 Pressure rollers diameter 70 mm
- Pneumatic pressure control
- Central adjustment for different edge thicknesses

NOISE PROTECTION CONNECTING + AGGREGATE PART
- for machining units
- with individual suction

CROSS-CUTTING UNIT HL81/0,8 KW
- 2 motors each 0.8 kW, 200 Hz., 12,000 1/min. for trimming edge protrusions on the front and rear edges
- Hand-tilted motors for oblique beveling
- Edge thickness Phase max. mm3
- 2 HM crosscut saws diameter mm.120
- No overlap possible

G. 00011 x left

DETAIL CIRCULATION FLEXLINE BASIC

Action Description :

Workpieces are placed one at a time, by hand, on a loading table and fed into the machining machine in a controlled manner.

Workpieces coming out of the machine go onto a roller conveyor, are transferred laterally by belt drive and return to the operator via a return conveyor with another roller table. During cross processing, all parts longer than approx. 1,200 mm are turned and returned by the non-driven part of the roller conveyor, due to the different adhesion between the non-driven rollers and the return belt.

Workpieces must be pre-machined to exact dimensions and angles.

consisting of:

Table with air cushion

TBL110 Feeding table
with controlled stop ruler for controlled feeding of workpieces

Workpiece feeding system WZ 10 Fully automatic feeding of workpieces of different sizes
In longitudinal and transverse directions. Manually adjustable working element overhang.

including additional 3detal brackets

Z H R 3 0 detail return system
Two roller conveyor segments, each with integrated elevating conveyor belt; non-driven roller conveyor segments to support and attach manually adjustable width of rotating rollers; driven return conveyor belt with belt width of
1100 mm (frame width of 1200 mm), which is designed according to the length of the basic machine; non-driven roller conveyor with a length of 3000 mm

Automatically adjustable spindle, between the base and the base machine, which results in easy rotation of short, narrow parts.

Dimensions of the turning part:

Length:	up to 200 mm
Width:	up to 800 mm

Working pressure:	6 bar
Air consumption:	130Nl/min

Base length 6

G. 00044 x left
EXTENSION OF THE CIRCULATION OF THE WORKPIECE BASIC
including extension of the workpiece support workpiece including extension of the workpiece circulation through the stroke
Extensions are required for KAL410/10.4

G. 00071 x left
ROLLER CONVEYOR WITH ELEVATOR
for easy transfer of workpieces at the entrance of the machine from the return to the cushion table

Recommended for large, heavy items

G.0010 Number 08151 x left AUTOMATIC WHEEL SHAPER OPTIMAT KL

G.0013 Number 08431 times
WORKPIECE THICKNESS MM 8ANST. 12 MM CAL310/KFL500
- Prepare the base machine for a workpiece thickness of min. mm instead of8 mm12
- Only longitudinal machining possible without corner copying and without profile scraper

G.0016 Number 08651 times
FEED RATE INFINITELY ADJUSTABLE 18-25 M/MIN
- instead of rigid feed m/min
- Feed frequency control
- Speed setting on the input unit

G.0022 SERVICE: 1 TIME
SUPPORTING ROLLS DLAGABLE PARTS
Along the chain guide Min. workpiece width 47 mm

F.01 Number 29291 x LEFT
MECHANISM OF TOP/LEFT DIFFERENTIATION
- Application of release agent with spray nozzles in front of the format section from above and below
- Manual adjustment of workpiece overhang change
- without a release agent must be provided by the customer

F.04 Number 1334 1 x left
JOINING UNITAKAL310/A20/S2 for joint edge milling.
the workpiece before gluing.

LINKING UNIT
- 2 Motors per kW3, Hz150., 1/min
- Electro-pneumatic control of both motors for milling tiles
- Workpiece blow-off device
- 2 I-DIA jointing cutter heads D=125x34x30 mm, KN, Z=2x3 with integrated chip detection function
- Workpiece thickness max. 30 mm

- 2 motors of 4 kW each, 150 Hz., 9000 1/min (Bot)

F.0401 Number 15521 x left
SF20 axis VERTICAL

_
- for automatic adjustment of the cutter center to the board thickness
- Adjustment stroke max. 25 mm

F.0404 Number 34961 times
I-SYSTEM-DIA-FUEGEFRAESATZ WD 60
- 2 I-DIA weld cutter 125x63x30 mm, DKN, Z=2x3 with integrated chip detection function
- High chip collection rate to 97%.
- reduction in suction force by approx 50%.
- High quality machining due to low contamination of workpieces
- Can repair edges up to mm1 (melamine, paper, veneer)

V.01 Number 21581 x left
suspension unit with granular covers
- instead of the L5 glue container
- required at:
  - Melting capacity > 8kg/h
  - Feed rate > 18m/min.
- Melting capacity depending on the glue 18-35 kg/h
- Adjusting the level of the quantity infused

V.0104 Number 21601 x left
QA GLUE POT FRONT PART TO BE REPLACED
For different colors of 2136 glue, the
VK-No preheating station is recommended.

Application height up to 60 mm Workpiece thickness
- 1x for EVA

V.0107 Number 25961 x left
PRESSURE ZONE WITH AUTOMATIC CONTROL OPTIMAT
For automatic pressure zone adjustment for different edge thicknesses

V.0110 Number 24581 x left
EXTENSION MAGAZINE A6/A-E12/A20 ON ROLLERS
- instead of a single cylinder
- Edge thickness x6 3 mm
- Roll diameter x6 830 mm
- Automatic or manual replacement of rollers
- Residual length control in 2400 mm

V. 01131 x left
HORIZONTAL ROLLER SUPPORT
for the first channel of the 6-page magazine

V.0116 Number 24511 x left
Changing BASE BONDING PART A20, INSTALLATION OF EXTENDER
Additional options for the basic adhesive part
can only be sold in conjunction with the
expansion kit.
Expansion module included:

- Manual magazine height adjustment via spindle +/- mm5

V.0401 Number 24741 x left
SIDE HANDLE
- For automatic positioning at different edge heights

N.01 Number 30581 x left
DRIPPERS HL84 STATION HL81
- Standing crosscut fence for fine edges

N.0101 Number 31131 x left
PNEUMATIC CONTROL WOMPOTOR
- For electropneumatic repositioning of transverse motors2
- Position -1 flush covers
- Item - 2-slides with overhang - for re-. Milling with a mold milling machine

N.0104 Number 31141 x left
PNEUMATIC ANGLE REGULATOR
- For electropneumatic conversion from chamfers to a straight edge
- Manual adjustment of the side cross cut stop required when changing the edge thickness

N. 04Number 3209 1 x left
PREFRAESAGGREGAT KW1,5
OPTIMAT
2 Engines stacked on top of each other 1.5 kW each, 200 Hz., 12000 1/min. Height adjustment by means of upper pressure. Counter-rotating operation. Swing range +/- degrees.1
2 HM x70 25 mm cutter, HSK 25 Z=4,
Including electronic frequency converter with motor braking function and noise protection.

N.0401 Number 39001 x left
I-HM-FRAESER SET STRAIGHT
- Surcharge instead of standard tool
- 2 I-HM cutter 70x25 mm, Z=4, HSK R25
  with integrated chip collection system
- High chip collection rate of up to %95.
- Z50 reduction in suction force by approx.
- High quality machining due to
  low contamination of
  workpieces

N.0404 Number 32511 x left
REGAL REGULATORY PNEUMATIC
PREFERRED on the2islands
Position - 1 pre-milling with edge protrusion (about 0.2 mm) Position - 2 flush milling without protruding edges

N.05ok . 500 mm x left
free space for fine mills

N.07 Number 3709 1 x left
FORMING UNIT FK13 AUTOMATIC
For machining edge protrusions on the top and bottom edges of the workpiece, as well as for trimming the front and back edges of the workpiece in combination With a trimming unit and a pre-milling unit.

- Motors2 per kW0.4, Hz200., 1/min
- automatic 8-fold tool changing
- without interchangeable head set - without tools
- Selector switch for longitudinal/circular milling
- Including frequency converter with motor
  braking function and external noise
  protection

- Feed max. 20 m/min
- Workpiece length min. 240 mm
single sided
double-sided min. 120 mm
(below 240 mm only in combination with VK-No. 3745)
- Distance between workpiecesimin min . 680mm
- Spacing between workpieces with PC22 min. 500 mm
- Workpiece thickness 12 -60 mm
- Edge thickness max.3 mm

- A separate replacement 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 edges is not possible

N.0701 Number 37191 x left

I-CHANGE HEAD SET ADJUSTABLE AUTOMATICALLY / FK

- 2 Replacement 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
  - for R 2= 0.8 mm
  - for R 3= 1.0 mm
- Fiber angle approximately degrees15
- designed for I-tools with extraction integrated with the tool
- No tools
- transverse processing of softforming profiles is profile-dependent

N.0704 Number 37331 x left

I - SET OF RADIAL CUTTERSF . FKR=2 MM Z=4

- 2 DIA cutter base diameter mm62
- Edge thickness max. mm2

N.0707 Number 37161 x left

I-CHANGE HEAD SET FOR SHAPED MILLING FK

- 2 Replacement heads for mounting on FK mold milling unit
- Designed for I/O tools with extraction integrated with the tool
- No tools
- transverse processing of softforming profiles depends on the profile

N.0710 Number 37241 x left
I - SLIDE CHAMFER KITF . FK20 GRAD Z=4
- 2 DIA cutter base diameter mm62, degrees20, Z=4

N.0713 Number 37161 x left
I-CHANGE HEAD SET FOR SHAPED MILLING FK
- 2 Replacement heads for mounting on FK mold milling unit
- Designed for I/O tools with extraction integrated into the tool
- No tools
- transverse processing of softforming profiles depends on the profile

N.0716 Number 37381 x left
I - SET OF RADIAL CUTTERSF . FKR=3 MM Z=4
- 2 DIA cutter base diameter 62 mm
- Edge thickness max. 3 mm

N.0719 Number 37451 x left
WORKING RING FOR FK-GERAET
With additional clamping for workpieces with a minimum length of mm120 for single-sided machines.

N.10 Number 34011 x left
UNIVERSAL MILL AGGREGATE KW4 CONTROLLED UF11
- Mounted on a milling stand at the back of the stand
- Cross bracket with spindle adjustment
- Motor 1kW4, Hz150., 1/min
- rotation max degrees90
- Electro-pneumatically controlled intermediate bracket, suction cover on top, direction of rotation switch
- Tool diameter max.150 mm
- No tools
- Electronic frequency converter with motor braking function and noise protection extension

N.1001 Number 34531 x left
INFINITELY VARIABLE HORIZONTAL AXIS FOR UF11
For positioning the machining unit Key switch to lock the motor in place when changing tools

N.1004 Number 1262 1 x left
suspension cover for the same gear
For better chip evacuation in synchronous slotting/milling. Including extended noise protection. Mounting of the milling motor on the rear side of the base.

N.13 Number 3401 1 x left
Milling machine KW4 CONTROLLED
UF11

- Mounted on a milling stand at the back of the stand
- Cross bracket with spindle adjustment
- Motor 1kW4, Hz150., 1/min
- rotation max degrees90
- Electro-pneumatically controlled intermediate bracket, suction cover on top, direction of rotation switch
- Tool diameter max.150 mm
- No tools
- Electronic frequency converter with motor braking function and noise protection extension

N.1301 Number 34531 x left
INFINITELY VARIABLE HORIZONTAL AXIS FOR UF11
For positioning the machining unit Key switch to lock the motor in place when changing tools

N.1304 Number 34581 x leftinfinite vertical axis DLA UF11For positioning the machining unit
Key switch to lock engine in place when changing tools

N.1307 Number 12621 x left
Suspension cover for the same gear For better chip evacuation at the Synchronous groove milling/milling. Including noise protection extension. Mounting of the milling motor on the rear side of the base.

N.16 Number 45081 x left
MULTIRENDER DEVICE MN21 AUTOMATIC
- for up to different3 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 thicknessi max. 3 mm
- Workpiece thickness min, 13 mm with R=3 mm min. 10 mm. b chamfer 0.5x45 degrees
- including suction container for PVC chips
- 2 TCT blade designed for step20 bevel, R=2 / R=3

N.1601 Number 45141 x left
PVC SPA CLEANER TOP/BOTTOM
for better removal of PVC chips

- required at:
  - Machine I in the production line or single machine
  - Automated machines

N.19 Number 45061 x left
EXECUTIVE AGENCY FA11 TOP /BOTTOM to.
Longitudinal edge finishing consisting of:
- PLASTERING EQUIPMENT ADHESIVE JOINT
  - for removing glue residues
  - Height adjustment with top clamp
  - Carbide blade

- USE OF DETERGENT
  - by means of a spray nozzle

- PURIFICATION UNIT
  - Height adjustment with top clamp

N.1901 Number 45221 x left REGULATOR PNEUMATIC PN10/20, FA10/11/12
- For electropneumatic lateral movement out of the work area

- Electro-pneumatic control of the flat scraper. Vertical insertion stroke

E.01 Number 61761 x left
The UPS powers the electronic control unit from the built-in batteries for about minutes10 in case of power failure. All values and states are saved. The computer must be restarted.
The UPS also acts as a voltage stabilizer for electronic devices (online UPS).

E.04 Number 62751 x left
ELECTRONIC HEIGHT ADJUSTMENT

E.07 Service: times63831
WOODSCOUT DIAGNOSIS 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.08 Service: hours82051

CUSTOM SOFTWARE PROGRAMMING

The position includes for programs5 max.

- Create a program overview based on customer drawings
- Create tool allocation plans for individual units
- Creation of workpiece plan with definition of collective setting data according to programs
- Programming the machine
- max. macros30 in combination with VK-No. 6363

E.0801 service: 1 times

Change FLEXLINE CONTROL PACKAGE

- Flexible edge sequence control:
  - -Defined assignment of edgebanding material to the appropriate edgebanding channel in the edgebanding warehouse
  - -Enter up to 8(numeric) digits for edge material designation through machine input NC21/PC21/PC22.
  - -Tracking of parts from machine entry to edge storage
  - -Timed feeding of edge material by automatically recognizing the necessary edge channel, including an automatic edge holding device.

- Equipping in the Gap:
  - -Significant increase in production time caused by a machine changeover in between two parts (unit-by-unit changeover).
  - -The machine does not need to be emptied.
  - -The control system automatically calculates the time needed to changeover each unit and blocks the machine feed for that time.

E.0804Service : hours64571

Change BARCODE READING SYSTEM SINGLE MACHINE OPTIMIZATION

- Allows you to determine the production sequence by reading barcodes.
- Controls necessary machining operations on workpieces with multiple passes on the same machine
- Prepare the control system for automatic barcode transmission from the barcode reader
- The barcode contains all the data necessary for production or the reference number
- Complete with wireless handheld scanner and base station (Datalogic)
- Including installation, commissioning and operational testing at Homag
- The barcode reader is connected to the control unit via a separate interface.
- The barcode reading system can be optionally upgraded with interfaces for connection to industry packages, price on request.

- Only for individual machines without data connection to transport systems

E. 111 x left

INPUT UNIT / FREESTANDING CONTROL PANEL

According to a separate site

plan (Bot)

D.01 Service: times87401

TELESERVICENET

Remote diagnostics via TeleServiceNet instead of a modem, for fast, cost-effective and reliable remote service

- Free phone call to the HOMAG Group via service phone (VoIP)
- services and fees for remote diagnostics are regulated in a separate contract for the provision of teletechnical services
- TeleServiceNet on the device also offers...