STREFA CNC

SPECIFICATION

G.00   BHX500/D
Numerically controlled machining center

1. **BASIC MACHINE**
- stable steel frame construction
- 2 component clamps with integrated
  stop system
- independent travel of clamps in the
  X-axis by means of gears
- digital AC servo motors
- positioning of terminals on the
  component controlled from the
  program

- it is possible to change the position of the terminals during the individual machining phases of a work field
- Automatic measurement of thickness and length of workpieces using a clamping system and limiters

1.1. **BOTTOM MACHINING SLIDE**
- stable cast aluminum construction
- integrated table divided into three fields, with attachable air cushions
- side stop system
- passage in Y and Z axes
- Z-axis ball screw and drive through a toothed bar in the Y axis
- digital AC servo motors
- prepared for installation of various types of equipment

1.2 **TOP MACHINING SLIDE**
- stable cast aluminum construction
- integrated, divided into three parts pressure beam with attachable airbags
- passage in Y and Z axes
- Z-axis ball screw and drive through a toothed bar in the Y axis
- digital AC servo motors
- prepared for installation of various types of equipment

1.3 **DIMENSIONS OF THE ELEMENTS**
- min. element length: 200 mm
- max. piece length: 2500 mm
- min. piece width: 70 mm
- max. piece width: 1000 mm
- if machining is limited   1300 mm
- min. element thickness: 8 mm (2 x 4 mm)
- max. element thickness: 80 mm (2 x 40 mm)
- stacking of elements (so-called stacking)   max. of 2 pcs.
  - elements must have the same dimensions

Attention:
- the elements must be straight on the side they adhere to the stop
- curvature tolerance of the element with length

2,000 mm is +/- 0.5 mm max.
- Length-to-width ratio should be >=1;
  element must be positioned along the longer
  side
- Curved components (>= 0.3 mm) cause
  production tolerances to increase and
  tables to wear out faster
- due to the shavings produced in milling
  operations, cannot be guaranteed,
  That the pieces will be immediately ready
  for stacking
- it is advisable to use an external system
  for cleaning the elements and extraction at
  the exit of the machine
- When drilling out of double elements, the
  quality of drilling depends on the material,
  from which the workpiece is made, tools, feed
  speed and spindle speed; drilling out of
  double workpieces
  can reduce productivity

1.4 **PLACE OF STACKING ELEMENTS**
- air-cushioned table with stable
  frame construction
- integrated fan

1.5 **PLACE OF RECEIVING ELEMENTS**
- cross belt conveyor with stable
  frame construction
- 8 driven conveyor belts with
  adjustable frequency
- 8 electro-pneumatically controlled guide
  profiles

1.6 **PEG DRIVING STATIONS**
- 2 controllable peg driving stations
- for the automatic driving of pins on the
  two longer sides of the element (X+/X-)
  are used
  two stations, moving in the Y and Z axes; in
  the X axis, the item is positioned
  by means of a clamp

The peg driving stations consist of:
- two peg driving tools
  with injection nozzle and pin separation,
  mounted on the outer sides of the upper
  machining slide.

(1 on the left, 1 on the right)
- vacuum pump for glue supply (9:1)
- two glue flow sensors for the glue supply
  valve
- control of the glue tank filling (by
  checking the weight of the tank)
- vibrating conveyor for standard 8 x 30 mm
  or 8 x 35 mm dowels
- Checking whether the vibrating
  conveyor is full using a measuring rod
  and sensor

Attention:
As standard, the machine is factory prepared
for 8 x 30 mm dowels.

2. **CE PROTECTIONS**
- safety hurdles on the sides and
  rear of the machine
- Safety mats in the area where
  the elements are laid out

3. **ENERGY SAVING FUNCTION**
- ECO-Plus button for activating Stand-By
  mode, which can be activated during
  processing; this mode is triggered when
  the program is completed:
  - shutdown of drives without power consumption
  - if the machine is not running, the
    control voltage turns off after a
    pre-set time

4. **DOCUMENTATION**
- printed documentation
  and on CD, with spare parts catalog and
  wiring diagrams

5. **LAKE**
- Grey lacquer RDS 240 80 05

6. EXTRACTION
- for connection to central extraction
- read the connection values from
  the technical data

7. **powerControl**
Modern control system

PowerControl equipment:
- SPS control in accordance with international
  standard IEC 61131
- Windows XP (US) embedded operating system
- IntelCore 2 Duo processor
- 17-inch flat-panel TFT monitor
- 1 SATA hard drive with a
  capacity of at least 160 GB
- central USB port in the operation field
- Ethernet card 10/100 MBIT RJ45
  (without switch)
- Preparation for TSN Soft teleservice to
  benefit from remote diagnosis
  over the Internet, the customer must
  provide a DSL connection; after the
  warranty period for the provision of
  teleservices, a separate contract must be
  concluded
- UPS for computer (power backup)
- terminal with
  potentiometer and
  emergency stop switch

PowerControl software:
- powerControl CNC control:
  - Drive control for all axes and
    simultaneous execution of processes
    thanks to multi-channel technology
  - Look-Ahead function to select optimum
    speeds for crossings
  - Dynamic control to guarantee
    accurate contour mapping

- powerControl software package with
  graphics programs:
  - woodWOP for graphical, interactive
    creation of CNC programs
  - TOOL DATABASE:
    with graphical handling guidance for
    easy management of tool data
  - PRODUCTION LIST SOFTWARE:
    to manage and create production lists
    according to individual production;
    ability to set production order, number
    of preset pieces and save processing
    notes
  - MACHINE DATA REGISTER (aka MDE):

for recording the number of components
produced and checking how much time is
left for the next maintenance operations

- **OFFICE COMPUTER SOFTWARE PACKAGE:**
  - woodWOP for graphic, interactive
    creation of CNC programs
  - woodAssembler:
    for visualizing woodWOP (MPR) programs
    in 3D; this software enables the
    assembly of individual components
    into finished items
  - woodVisio:
    for visualizing objects from the
    woodAssembler and Blum Dynalog
    modules;
    Objects can be positioned freely in
    space; with a library of materials

All software licenses are copy-
protected
via the HOMAG Group server. After
installation, the product must be
activated.
Activation at www.eparts.de

G.0001   Number   : 0033   1 piece
           CONFIG. 2V42, 2H8X/2Y, N2 X-Y 90, F2-ETP-6 KW
           2V42 HIGH SPEED 7500
           2 vertical drilling units (top and bottom),
           located on the machining slide,
           each with 42 drilling spindles
           (individually controlled with variable
           speed range).
           Spindle clamps to ensure that the set
           drilling depth is achieved.
           Route of travel: see attached
                                    occupancy plan
           Z-axis stroke: 60 mm
           Drilling depth: 38 mm max.
           Direction of rotation: clockwise /
           counterclockwise Speed: 1,500-7,500 rpm.
                                    with frequency
                                    control
           Drive: 2 x 2.3 kW
           Drill shank: d = 10 mm

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Total drill length:70 mm
Drill diameter:              see attached plan
                             occupancy
Spindle spacing:             32 mm
Spindle type:                individually
                             controlled
                             2H8X/2Y


2 horizontal drilling units (top and bottom),
located on the machining slide,
each with 10 drill spindles, individually
called by the program.
Scope of the ride:           see attached plan
                             draping
Drilling spindles:           8 each in
the X axis
                             2 each in Y
axis Drilling depth:         38 mm max.
Drilling height
  Z-axis:                    see attached
                             occupancy plan
Direction of rotation :      clockwise /
counterclockwise Speed:      1,500-7,500 rpm.
                             with frequency
                             control
Drill shank:                 d = 10 mm
Total drill length:70 mm
Drill diameter:              see attached plan
                             occupancy
Spindle type:                individually
                             controlled


Attention:
Horizontal Y-axis drilling spindles are
used only for drilling into the edge of
the workpiece opposite the machine's
zero line.

N2 X-Y 90 deg.
2 nutating saw units (top and bottom),
located on the machining slide,
For X- and Y-axis machining,
swiveling 90 degrees.
Route of travel:             see attached
                             occupancy plan
Cutting depth :              30 mm
Cross section
  cutting:                   70 mm2 max.
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Speed:                          1,500-7,500 rpm.
                                with frequency
                                control
Saw blade diameter:             125 mm Saw
blade thickness:                5 mm max.
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F2-ETP-6 KW

2 milling units (upper and lower), located on
the machining slide; designed to hold shank
tools.
Manual tool change.

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Route of travel:                see attached
                                occupancy plan
Tool holder:                    for arbor tools.
                                -niches with a diameter of
                                25 mm
Tool diameter:                  see attached plan
                                occupancy
Usable length
  TOOLS:                        see attached
                                occupancy plan
Tool weight:                    2.5 kg max Tool
pick-up:                        manual, hydraulic
                                ETP 25 quick release
                                system
Direction of rotation:          clockwise /
counterclockwise Speed:         6,000-18,000 rpm
                                smoothly programmable
Drive:                          current motor
                                variable with
                                frequency control
Max. power on the tool:         Up to 5/6 kW for operation
                                continuous /
                                intermittent (S1/S6-
                                50%)
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G.0004     Number    : 0850      1 piece
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PRE-POSITIONING DEVICE FOR BHX
A device for pre-positioning workpieces up
to 1100 mm in length.
It includes:
- 1 rear stop ruler,
  pneumatically lowered
- 1 side stop ruler,
  pneumatically lowered
- 2 top pneumatic cylinders
- 1 pneumatic lifting device
  in the workpiece stacking table

Advantages:
Occupancy time (time spent on new
item positioning)
is significantly shortened due to the
fact that the parts to be processed
are already set in basic positioning.
Workpieces up to 1,100 mm in length can
already be processed in pre-positioning
mode. For longer workpieces, the machine
must be rearmed manually
for standard mode.

E.01   Number   : 6152   1 time
SIMULTANEOUS PROCESSING OF PARTS
AT DOUBLE OCCUPANCY (TOP / BOTTOM)

This option allows simultaneous processing of
two elements using different programs at
double occupancy (top / bottom)
provided that:
- both elements have identical dimensions
  (length, width, thickness)
  and are a pair (left and right elements)
- The parts to be drilled through must be
  stacked one above the other,
  As in mirror image;
  Otherwise, one of the components may be
  damaged
Requirements: MCC version 1.2.400

The product must be activated after
installation. Activation at www.eparts.de

D.01   Service: 8332   1 time
DOCUMENTATION AND CONTROL TEXTS: IN POLISH
Scope of delivery:
1. POLISH operating manuals consisting
   of instructions for use
   and maintenance, printed on A4 paper and
   in electronic form on CD
2. The operating texts on the monitor in
   POLISH for the operator of the
   machine,
   for POWERCONTROL

Price of all items	EUR + VAT

B.26   <u>PLATNOSC</u>

B.29   <u>MONTAGE</u>