

CNC Machining Center Homag
Type BAZ 211 Venture 22L
Used machine - year 2006



OPTIMAT BAZ211 VENTURE 22L

HOMAG - MACHINING CENTER - VENTURE 22L

BRIEF DESCRIPTION OF BASIC EQUIPMENT:

- BASIC MACHINE
- CLAMPING TABLE with LED display system
- CONTROL Power Control, with PC85
- MAIN SPINDLE 15 kW with vibration sensor
- C-AXIS with unit interface
- INTERFACE for FLEX-5 aggregate
- EASY INTERFACE electrics
- PLATE CHANGER 18-fold
- DRILLING HEAD 17 spindles, 4 spindles horizontal + saw 0/90 degrees
- EASY-EDGE RENTAL UNIT
- SAW CUTTING UNIT
- COMBI FLUSH MILLING REFINISHING UNIT
- SOFTWARE PACKAGE for AV space

BASIC MACHINE:

- Machine bed in a heavy, stable design with a compact linear guide system. Backlash-free, preloaded rack and pinion drives and digital AC servo motors in the X and Y axes
 - maximum travel speeds:
 - 80 m/min. in X and Y direction
 - 30 m/min. in Z direction
 - Unit carrier with linear guide system,
 - Ball screw and digital AC servo motor for positioning the Z-axis, travel 535 mm
 - Manual central lubrication for all drives and linear guides
 - 1 water ring vacuum pump 66 m³/h (equivalent to a 100 m³/h rotary vane vacuum pump) for clamping system
 - Pneumatic connection R 1/2 inch, 7 bar
- PAINT FINISH:
- HOMAG textured paint gray RDS 240 80 05

CLAMPING TABLE VENTURE 22L

- torsion-resistant steel construction with linear guides in longitudinal direction for adjusting the clamping consoles
- 8 clamping consoles with hose-free dual-circuit vacuum system
- 8 longitudinal stops in the brackets, stroke 140 mm
- 4 adjustable side stops
- 2 x left / 2 x right (mirror space)
- 16 double-acting vacuum clamps 160x115 mm, 100 mm high
- 8 double-acting vacuum clamps 125x75 mm
- 2 stops on the back of the table for oversized workpieces, with overhang at the front edge of the table
- 6 lifting rails with sliding coating for easy workpiece handling
- all stop bolts can be rotated manually for workpieces with a top layer overhang
- Table designed for
 - Double occupancy when using the gluing unit
 - Pendulum machining for milling and drilling
- Working area and position of the stop bolts according to the technical data
- 4 push-in fittings with single-circuit compressed air system for connecting Pneumatic clamping elements
- Extreme workpiece dimensions must be measured using templates or with mech. Workpiece tensions are clamped
- the machine zero point is at the front left

LED POSITION INDICATION SYSTEM

CNC Machining Center Homag
Type BAZ 211 Venture 22L
Used machine - year 2006



- optical display system for manual
Positioning of vacuum clamps and consoles
- Positioning accuracy of +/- 2.5 mm

ELECTRICAL EQUIPMENT:

- Free-standing control cabinet with integrated operating computer
- Installation possible on the right and left in front of the processing table
- Installed according to European standard EN 60204
- Operating voltage 400 volts, 50/60 Hz.
- Country-specific operating voltage adjustment via transformer (VK no. 6103)
- FI protective circuit only permissible in connection with an all-current sensitive/selective residual current circuit breaker
If the performance of this device is not sufficient, we recommend use a residual current monitoring device on site
- Prescribed ambient temperature:
+ 10 to + 35 degrees Cels.

CONTROL-POWER CONTROL:

Hardware:

- Control-POWER CONTROL PC85 with SPS - control (IEC 61131)
- modern control system based on industrial PC, 2 GHz and 512 MByte RAM
- 1 hard disk installed
- 1 hard disk for data backup
- USB connection
- TFT flat screen with PC keyboard and mouse
- Digital drive technology via fiber optics
- Fieldbus system decentralized, digital
- ETHERNET network connection via additional card and network software
- uninterruptible power supply (UPS)

Software:

- Operating system Windows XP (US) embedded
- Virus protection
- 1:1 data backup (cloning) using a second hard disk
- Operation menu-driven with Windows standard
- PC85 CNC core with:
 - Path control in all axes and parallel processes through multi-channel technology
 - Look-ahead function for optimal speeds at the transitions
 - Dynamic pre-control for the most precise contour accuracy
 - intelligent process optimization (IPO)
for efficient use of the processing units on multi-channel machines
- PC85 software package with graphic operating programs:
 - woodWOP for graphical, dialog-oriented creation of CNC programs including post processor
 - Tool database graphically
 - Production list management
 - CNC operation
 - Clamping stations shown graphically
 - Error message in plain text
 - graphic diagnosis system woodScout (option)
 - up to 24-digit alphanumeric program names
 - woodWOP Wizard: for automatic generation of the processing process in workpiece edging based on the workpiece geometry
 - Schuler MDE Basic
 - woodDesign for AV PC:

Software with a modern 3D interface for the interactive design of cabinet furniture with the output of woodWOP programs with components for the individual processing steps that are processed one after the other

- Remote diagnosis possible via modem
- Billing according to separate remote service contract

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Used machine - year 2006



- Telephone line (analogue) is to be installed on site
- Intervention in the machine control by unauthorized persons persons release HOMAG from the warranty obligation and from product liability

SAFETY AND PROTECTIVE DEVICES:

- Safety monitoring with anti-slip mats
- 4-sided security barrier
- all machines for EU member countries with CE sign EC Machinery Directive 98/37/EG, Appendix IIA
- Wood dust tested TRK value max. 2 mg/m³ if the extraction capacity to be provided on site according to the extraction plan
- Documentation twice

TECHNICAL SPECIFICATIONS:

- workpiece length
 - max. 4000 mm for single occupancy
 - max. 1375 mm with pendulum assignment
 - max. 1550 mm with pendulum assignment for milling with tool diam. 25mm
- Workpiece width front stop: (operating side)
- max. 1525 mm for milling with tool diameter 25 mm
- max. 1525 mm with gluing
- max. 1450 mm for all aggregates
- Workpiece width stop at the back:
 - (Auxiliary stops on the back of the table)
- max. 1730 mm for milling with tool diameter 25 mm
- max. 1650 mm with gluing
- max. 1600 mm for all aggregates
- workpiece thickness
 - max. 60 mm with standard clamp when using the gluing unit
 - max. 300 mm incl. clamping device when used as a router
 - up to max. 60 mm with standard clamp without restriction for Aggregates and suction
 - for chamfer milling at least 12 mm
 - for radius milling at least 16 mm or 2 x radius + 10 mm
 - the specified workpiece dimensions are not the maximum possible
 - Equate processing sizes per unit
 - see separate tables
- min. workpiece size depends on:
 - Clamping devices, workpiece surface and contour
- Working height of lower edge of workpiece 950 mm
- Ground conditions must correspond to the foundation plan

SPECIAL HINT:

- the process technology for edge banding is decisively affects the edge material
- the processing parameters depend on the edge and glue
- for large-area clamping of permeable workpieces (e.g. uncoated chipboard or MDF) is a reinforced Vacuum system required
- Possibly consultation with HOMAG

MAIN SPINDLE 15 kW

- for tool holder with HSK F63 - DIN 69893
- Room extraction for all tools and aggregates
- Regulated three-phase asynchronous motor with current control, liquid-cooled
- 15 kW at S6
- 12kW at S1
- the liquid circuit works automatically
 - via pump and with temperature monitoring
- Tool weight max. 6 kg including mount
- Tool length max. 200 mm from the lower edge of the motor spindle
- tool diameter:

CNC Machining Center Homag
Type BAZ 211 Venture 22L
Used machine - year 2006



- max. 180 mm for milling tools
- max. 200 mm for grinding tools
- Frequency converter for electronic speed regulation
- Speed range continuously programmable from 1000 - 24000 rpm
- Full torque from 1000 - 12000 rpm
- full rated power from 12000 rpm
- when the speed is reduced, the power is reduced accordingly
- Without tool holder and tools

VIBRATION SENSOR FOR MAIN SPINDLE

- for vibration monitoring of the spindle during machining
- Protects the spindle from damage caused by tool imbalance or improper use
- if the threshold value is exceeded, the machine stops with an error message

SPINDLE RETRACTION STROKE

- allows the use of the drill head with form milling tool in the main spindle
- Tool length including tool holder up to max. 150 mm

C-AXIS WITH UNIT INTERFACE

- for connecting the processing units
 - incl. pneumatic interface and swivel drive
- C-axis with torque entrainment and 3-point support
- Drive for all units with swivel axis
 - Swivel range without limitation
 - hose-free compressed air supply

INTERFACE FOR FLEX-5 UNIT

- to the auto. Changing the FLEX-5 unit

EASY INTERFACE ELECTRICAL

- to supply the gluing unit with Electric
- Energy transfer wireless

18-FOLD PLATE CHANGER

- for tools and aggregates with HSK F63
- Possible tool and unit configurations:
- 18 x diameter max. 130 mm or
- 9 x diameter max. 180 mm and 9 x diameter max. 70 mm

DRILLING HEAD 17 SPINDLES, 4 SPINDLES HORIZONTAL + SAW 0/90 DEG

- 1 motor 4 kW, frequency controlled
- Speed selectable via program max. 7500 rpm
- for vertical drilling, opening stroke 50 mm
- 17 drilling spindles up to max. 35 mm bore diameter.
- Each spindle can be called up individually
- Arrangement of the spindles in a T-shape
- 11 spindles in X direction, 7 spindles in Y direction
- Spindle distance 32 mm
- Drill total length 70 mm
- Shaft dia. 10x20mm
- with clamping surface and adjusting screw
- Direction of rotation: Alternating left-right rotation
- without tools
- for horizontal drilling in 4 directions
(x+/x-/y+/y-), 0/90 degrees tiltable
- Maximum speed 7500 rpm
- a drill spindle prepared for grooving saw blade
for grooving in X and Y direction
- Extension stroke 100 mm in Z-direction
- Drill holder diam. 10mm

CNC Machining Center Homag
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- Drill length 70 mm
- drill dia. 10mm max
- with clamping surface and adjusting screw
- saw blade diam. 125mm
- Saw blade width max. 6 mm
- receiving flange diam. 30mm
- 4 countersunk screws M5
- pitch circle diam. 48mm LL
- Counter-clockwise rotation
- without tools

WOODWOP PACKAGE FOR AV PC

- incl. postprocessor for generating programs in DIN 66025
- incl. interface for the transfer of drawing data
CAD systems in DXF format for further processing.
Certain drawing guidelines, such as layer allocation, must be observed
Be respected
- Requirement: AV PC with Windows 2000, NT4 or XP

_The change

- without Easy Edge
- without combi-flush and finishing unit

G.0001 number : 7075 1 piece
REINFORCED VACUUM PUMP 100/140 M3/H
instead of the standard vacuum pump 66/100 m3/h. G.0013

F.01

Number : 7226 1 piece
CHIP CONVEYOR BELT FOR B200/30+40
Chip and offcut disposal via an integrated chip belt.
Conveying height 410 mm.
For chips and small pieces of waste,
Disposal of larger remnants manually.
Exhaust hood or container at the end of the line
on site. Conveying direction to the left to the outer edge of the machine bed.

Number : 7471 1 piece

TOOL TRANSFER PLACE FOR B200/300/K
Auxiliary device for the automatic loading of the tool changer

- Tool transfer station adaptable on the clamping table
- Sensor technology for querying the placement location in the tool changer

F.07 Number : 7568 1 piece

FLEX-5 SAW, MILLING, DRILLING UNIT FOR WZW

- to the auto. Changing to the main spindle
- for sawing, milling or drilling operations
- autom.swivel unit in the A-axis
- the A-axis is adjusted via the C-axis
- the positioning takes place at rest, not during machining
- Swivel range A-axis +/-100 degrees for shank tools
- Swivel range A-axis +/- 90 degrees for saw blades
- max. chipping cross-section when milling approx. 150 mm² for wood-based materials
- Maximum speed 12000 rpm.
- Tool interfaces:
- 1 collet holder ER 25 DIN 6499 for shank tools
up to 16 mm in diameter
- Standard collet diam. 10mm
- Tool length max. 65 mm for tools up to a diameter of 20 mm

CNC Machining Center Homag
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- Cutting cross-section max. approx. 150 mm² at a feed rate of 5 m/min
- receiving flange diam. 40 mm for saw blades
- 8 pcs countersunk screws M5
- TK diam. 52mm RL
- saw blade diameter max. 240 mm, width max. 6 mm (core sheet 5 mm)
- Cutting cross-section max. approx. 120 mm² at a feed rate of 10 m/min
- without tools

Not included in the scope of delivery, but can also be offered:

SAW CUTTING UNIT € 1500,-

- to the auto. Changing to the main spindle
- for grooves and cuts from above with any angle to the workpiece and right-angled notches
- Trimming of excess edges and separating cuts up to max. 50 mm workpiece thickness
- Maximum speed 9000 rpm.
- receiving flange diam. 30 mm with 4 countersunk screws M5
- TK diam. 52mm - LL.
- incl. cutting and chop saw diameter 180x30x3.2 Z=54
- Saw blade thickness max. 10 mm when grooving
- saw blade diameter 200mm max
- Unlimited swiveling via the C-axis
- max. torque 12 Nm, 120 mm² at approx. 10 m/min

F.04 Number : 7523 1 piece

DRILLING/MILLING UNIT 4-SPINDLES FOR TOOL CHANGER € 1600,-

- to the auto. Changing to the main spindle
- for horizontal drilling work and light milling work e.g. grooves, slots, notches and milling of edges
- four-sided spindle exit
- Collet holder ER25 DIN6499 up to max. 16 mm shank diameter
- Tool projection max. 55 mm
- Maximum speed 13500 rpm
- Standard collet diam. 10mm
- Unlimited swiveling via the C-axis
- without tools

F.10 Number : 7529 1 piece

LOCK CASE MILLING UNIT 2 SPINDLES D=16/20 € 1400,-

- To the automatic Changing to the main spindle.
- With 2 spindles, e.g. for lock case and faceplate cutouts horizontally for doors, stake holes, etc.
- With integrated blow-off nozzle
- Two-sided spindle outlet with opposite direction of rotation:
- 1 x Weldon chuck diam. 20mm
incl. reducing sleeve for WZ diam. 16mm
Total tool length max. 180 mm
Tool projection max. 135 mm
- 1 x ER16 DIN 6499 collet with dia.10 mm
Total tool length max. 70 mm
Tool protrusion max. 40 mm
- Maximum speed 12000 rpm.
- Without tools
- Unlimited swiveling via the C-axis