

**P.00      PROFI BMG511/40/19/F/A**

CNC-controlled processing centre in moving gantry construction for trimming and drilling panels of wood or similar material.

Prepared for 1 main spindle, mounted on the right side of the gantry beam.



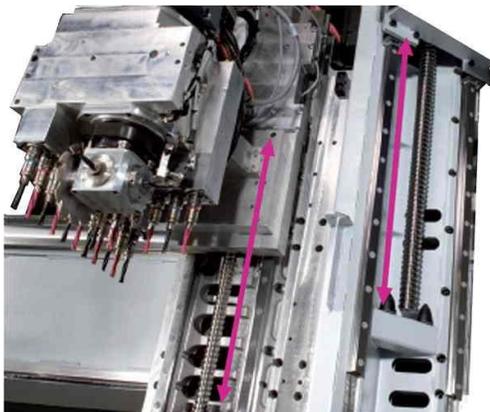
1. BASIC MACHINE:

- sturdy, vibration absorbing machine bed

made of a rigid fibre-reinforced mineral mixture: SORB TECH for highest quality requirements



- machine bed prepared for the installation of an automatic console table: "A"
- linear guiding systems with dust protection
- rack and pinion drives for X and Y axis
- recirculating ball screws for Z-axis
- drive technology with digital control methods for a high dynamic and exact contours
- 2 synchronised servo drives for X-axis
- unit beam single-sided, mounted on the right side of the gantry crossbar
- unit beam prepared for two separate Z-axes (Z1, Z2). Enables rapid and alternate use of the boring head and main spindle



- travelling speeds:
  - vector speed = 85 m/min
  - X axis = 35 m/min
  - Y axis = 80 m/min
  - Z-axis = 25 m/min
- central connecting piece for connection on part of the customer
- central lubrication automatic, for a complete and low-maintenance lubrication of all drives and linear guidances (X, Y and Z axes)



- connecting load for suction, pneumatic, compressed air and electricity are to be taken from the separate installation plan
- floor conditions must correspond to the foundation plan

## 2. PANEL PARAMETERS:

- panel lengths max.

|     |  |                   |  |                                       |
|-----|--|-------------------|--|---------------------------------------|
| BMG |  | all units         |  | tool diam. 25 mm                      |
| 511 |  | single   pendulum |  | single   pendulum                     |
| 40  |  | 4000 mm           |  | max. 2250 mm   4175 mm   max. 2250 mm |
|     |  |                   |  | min. 500 mm   min. 500 mm             |

- panel width max:

|       |  |       |  |         |  |                     |
|-------|--|-------|--|---------|--|---------------------|
| BMG   |  | stop  |  | all     |  | trimming processing |
| 511/  |  |       |  | units   |  | tool diam. 25 mm    |
| ../19 |  | front |  | 1800 mm |  | 2025 mm             |
| ../19 |  | rear  |  | --      |  | 2250 mm             |

- the indicated panel dimensions are not to be equated with the max. possible processing sizes per unit, see separate tables
- the min. panel size depends on: clamping devices, panel surface and contour
- 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
- separate switch cabinet



- operation terminal integrated in the switch cabinet
- installed accord. to European Standard EN 60204-1
- FI-safety switching only permitted in connection with an all-mains sensitive/-selective FI-safety switch on site. If the nominal current of this device is not sufficient, a differential current monitor must be used and 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:

- ride-along partial encapsulation for the processing units, offers an optimum operating safety and process control
- safety monitoring with pressure sensitive cushions according to EN1760-3 for an effective protection of the operating staff



If the customer explicitly desires that the machine is delivered and installed

without safety barriers, the customer is obliged to guarantee the safety at the corresponding machine sides by proper safety measures. This also applies for later modifications, especially in case of later modifications at the site of installation, in case of installation of the machine at another site or in case of resale of the machine

- ATTENTION: the machine must not run without full safety barriers
- the customer waives guarantee and damage compensation rights concerning the fact that the machine was delivered and installed without full safety barriers. The customer is obliged to indemnify the deliverer against any claims of third parties which might be raised due to this circumstances
- 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
- Accessibility of the working areas:
  - the machine has two working fields in the standard. Selectable empty-running modi permit that these fields can be completely run empty.
  - for putting on and withdrawing panels with max. possible processing length in individual operation, the panel must be led under the safety housing
- wood dust protection TRK-value max. 2 mg/m<sup>3</sup>, subject to the fact that the suction capacity to be provided by the customer is in compliance with 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 PACK:

- energy guiding chains (cable trail) in X and Y direction in closed execution in order to prevent cable damages caused by residual pieces, chips and so on



- linear guidances in X and Y direction are covered with a steel band in order to prevent dirt intrusion
- TÜV certificate accord. to DIN EN ISO 9001:2000
- energy-efficient drives accord. to the EU no. 640/2009
- energy-efficient suction hood, horizontal connection left

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- energy saving functions:
  - ECO Plus button for start of the stand-by mode, which can be activated during the last operation. After program end the button provokes the following:
    - the drives stop running
    - the vacuum pumps are switched off

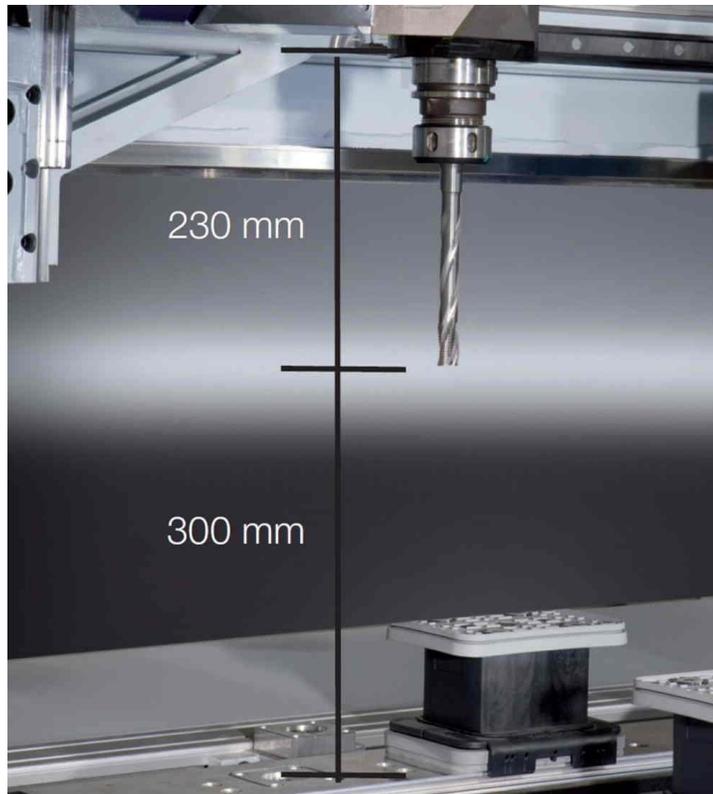
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- when the machine is not producing, the control voltage is disconnected by means of preset time
- when no panel is clamped, the vacuum pump is disconnected by means of preset time
- flap control for reduction of the necessary suction energy by automatic switching over between boring head and main spindle

P.00001 Number : 0699 1 off  
LAQUERING GREY RDS 240 80 05

P.00004 Number : 0661 1 off  
WORKPIECE THICKNESS 300 MM

- Workpiece thickness:
  - max. 300 mm inclusive clamping elements
  - up to max. 60 mm with standard clamping element without restrictions for units and suction

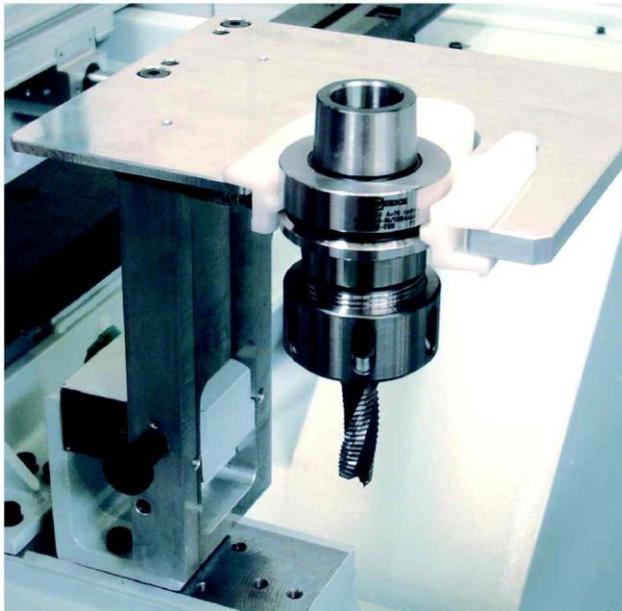


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## **GANTRY**

P.03004 Number : 7471 1 off  
TOOL TRANSFER PLACE FOR BMG300/500/600  
Auxiliary device for automatic equipment of the  
tool changer

- tool transfer place adaptable on the clamping  
table
- sensor technology for inquiry of the free  
place in the tool changer
- only suitable for tools in the tool chuck  
HSKF63
- tool diameter max. 300 mm
  
- for BMG300:
  - add-on position left on the machine bed
- for BMG500/600:
  - for A+K table: add-on position right  
at the machine bed
  - for R table: add-on position left on the  
machine bed



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- P.03007    Number    : 7455            1 off
- PLATE-TYPE TOOL CHANGER 14-FOLD D=130 BELOW
- for tools and units with HSKF63
  - plate-type tool changer for 14 tool/unit places
  - tool weight max. 6 kg incl. chuck for units max. 10 kg
  - the following tool and unit equipment is possible:
    - 14 x diam.            max. 130 mm or
    - 7 x diam.            max. 180 mm and
    - 7 x diam.            max. 70 mm
  - tool diam. max. 200 mm for sanding tools
  - weight of equipment max. 70 kg
  - for BMG311/BMG511 with Drive5C(+) applies:  
saw blade diameter 350 mm, A-dimension 50 mm can be interchanged from the changer
  - with Drive5C/+: saw blade diameter 350 mm, A-dimension 50 mm can be interchanged from the changer
  - the weight distribution of tools and units in the plate-type tool changer must be effected symmetrically



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P.03013    Number     : 7433            1 off  
PROCESSING SPINDLE 15 KW DRIVE5C+  
Cardanic 5-axis head for trimming, boring and  
sawing with arbitrary angle to the panel

- with interface for HSK F63 - DIN 69893
- for precise chuck of tools and units for high processing forces
- three-phase asynchronous motor with surveillance of revolutions by inductive encoder for a high torque already in case of low numbers of revolution, e.g., when using sanding units
- ACTIVE liquid cooling with temperature surveillance in order to avoid thermal damages and to increase service life
- spindle with hybrid bearing for highest precision and long service life in case of high numbers of revolutions
  - 15 kW for S6 operation (cyclical power output in practical operation)
  - 12 kW for S1 operation (permanent operation)
- frequency convertor for electronic regulation of the number of revolutions from 0 - 24000 rpm
- total nominal power from 12000 rpm
- tool weight max. 6 kg incl. chuck
- tool length max. 230 mm from lower edge of motor spindle
- tool diameter:
  - max. 180 mm for trimming tools
  - max. 350 mm for use of a saw blade  
(Pick-up place optional)  
(tool chuck with A-dimension=50 mm, SALES NO. 7942)
- the max. cutting depth depends on the position of the spindle (see technical data sheet)
- incl. Z-axis module
- cardanic arrangement of the setting axes
- the A and C axis of the 5-axis head are

equipped with two gear trains each.

These are prestressed backlash-free against each other which guarantees a maximum rigidity and processing accuracy on the panel

- angle of rotation in the C-axis:  $\pm 361^\circ$
- when A is uneven  $0^\circ$ , the angle of rotation reduces in the C-axis
- angle of rotation in the A axis:  $\pm 100^\circ$
- vibration sensor for surveillance of the spindle during processing
  - records vibrations which arise through tool imbalance or improper use
  - when the threshold value is exceeded, e.g. sudden overload, the machine stops and an error message occurs



- automatic feed reduction when the spindle

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- speed falls
- without tool chuck and tooling
  - incl. suction hood
  - visualization of the vibration data on the operating terminal, e.g. indication of the spindle use in the area of strong loads (improper use), possible as option (see sales no. 6376)
  - working zone in horizontal spindle position see techn. data sheet

Programming 5-axis spindle:

- woodWOP enables programming of the 5-axis spindle as SETTING axis for sawing, boring and trimming works in arbitrary levels
- max. standard tool configurations are:
  - boring and trimming tools diameter 20 mm, total length up to 230 mm
  - rough cutting tools diameter 80 mm, effective length 80 mm, total length 165 mm
  - saw blade diameter 350 mm with chuck having an A dimension = 50 mm
  - standard tools can be swivelled collision-free within the suction hood (A-axis)
- tools with increased disruptive contour result in a restricted working field
- the processing accuracy using the swivelled spindle (A-axis not 0 degrees) can be up to +/- 0,2 mm depending on the used tool length
- increased demands in view of process forces, surface quality or contour accuracy need a previous examination and the production of basic samples. Material, as the case may be clamping devices, tools and programs must be provided for this.
- for trimming works in the 3D range (displacement) or bigger workpiece thicknesses an applicable CAD/CAM system and the Homag CAD/CAM interface are necessary

Suction capacity 5-axis spindle:

- spatial suction prepared for the 5-axis

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- processing
- depending on the system the cleaning effect of the suction is reduced when different processes are carried out (e.g. sawing or nesting)
  - the suction hood can be adjusted in height at 4 levels
  - programming of the hood position is effected subject to panel thickness, tools and position of the A-axis
  - the suction effect is accordingly reduced
  - for optimally damming up contamination, an ENCAPSULATION of the machine is required

Unit interface Drive5C+:

- for the use of processing units in A=0 position, unit application accord. to technical data sheet
- 3-point support system for a safe force transmission in case of high hogging forces
- pneumatic supply for the unit interface, e.g. for HP units or traced units



- In case of multiple spindle machines, sales no. 7057/7058 is to be taken into account

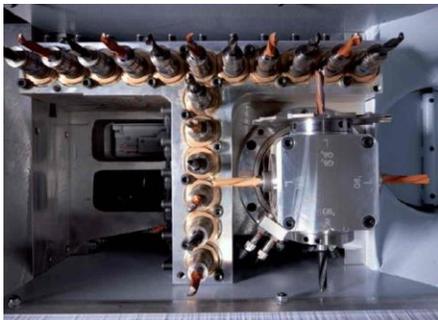


P.03016    Number        : 7473            1 off  
BORING HEAD 21 SPINDLES: V17 / H4 / S0/90°  
- 1 motor 2,2 kW, frequency-controlled  
- number of revolutions max. 7500 rpm  
  selectable by program for quick processing  
  also in case of small diameters  
  
17 VERTICAL SPINDLES HIGH-SPEED:  
- every drilling spindle with quick change  
  system for reduction of set-up times  
- each spindle can be called up individually  
- spindle retraction stroke 60 mm  
- drill spindles locked in the retraction  
  stroke in order to achieve the drilling depth  
  in any case  
- arrangement of the spindles in T form  
- for BMG  
  - 7 boring spindles        : Y direction  
  - 11 boring spindles     : X direction  
- for B600 / B700:  
  - 7 boring spindles       : X direction  
  - 11 boring spindles     : Y direction  
- spindle distance         :            32 mm

- drill diameter : max. 35 mm
- total length of drill : 70 mm
- shaft diameter : 10 mm
- with clamping surface and adjusting screw
- direction of rotation: left/right-hand rotation alternately

4 HORIZONTAL SPINDLES WITH SAW, 0/90°:

- spindles 0/90° swivelling
  - retraction stroke: 113.5 mm in Z direction
  - a boring spindle reinforced with chuck for a grooving saw for grooving in X and Y direction
  - arrangement of the spindles crosswise
  - 2 boring spindles : X direction (+X/-X)
  - 2 boring spindles : Y direction (+Y/-Y)
  - drill diameter : max. 10 mm
  - drill chuck : d=10 mm
  - total length of drill: 70 mm
  - with clamping surface and adjusting screw
  - drill depth max. : 34 / 43 mm
  - direction of rotation: 3 x left, 1 x right
  - saw blade diameter : 125 mm
  - saw blade width : max. 6 mm
  - cutting depth : max. 28 mm
  - chuck flange : d=30 mm
  - reference circle diam. : 48 mm LL
  - countersunk head screws : 4 pcs. M5
  - direction of rotation left-hand rotation
- incl. Z-axis module
  - incl. suction hood
  - without tools
  - 1 free space for add-on trimming spindle



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P.03019 Number : 7427 1 off  
TOOL LENGTH CONTROL FOR BMG  
Measuring system for length control of shaft  
tools in the machine (no combi-/ step-/ profile  
tools or units)

- tool diameter max. 80 mm
- tool length min. 100 mm incl. tool chuck
- after interchanging of the tool from the  
tool changer a length measuring will be  
effected and compared with the tool database
- by a woodWOP program single tools can be  
selected for measuring
- the lead distances depend on the collision  
measuring
- alternate operation limited



## **INTERCHANGEABLE FUNCTIONS**

P.04004 Number : 7535 1 off  
TRIMMING UNIT VERTICAL WITH TRACING RING D=130  
For vertical trimming processings with  
mechanical tracing on the workpiece surface  
e.g. grooving the wooden joints

- For automatic cyclical change-over into the main spindle
- tracing ring with pneumatic blow-off device
- tracing way 10 mm
- tracing ring inner diameter 130 mm
- tracing ring outer diameter 150 mm
- tool diameter max. 120 mm
- adjusting range from lower edge of clamping chuck 20 - 40 mm
- number of revolutions max. 18000 rpm
- tool chuck by hydraulic expansion clamping chuck diam. 25 mm
- smaller shaft diameters are to be clamped by means of reducing bushings
- tool weight max. 3 kg
- without tools
- without reducing bushings

### Comment

floating head for grooving





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P.04013 Number : 7717 2 off  
CUTTER HEAD WITH REVERSIBLE CARBIDE TIPS  
45 DEGREES INCLINED  
- t = 3, 6 reversible carbide tips included  
per piece  
- edge thickness max. 4 mm

### **WORKPIECE FIXING AND POSITIONING**

P.05004 Number : 0777 1 off  
BASIC CONSTRUCTION AUTOMATIC CONSOLE TABLE  
- clamping table with automatic positioning  
of the consoles and vacuum clamps  
- positioning accuracy approx. +/- 1,5 mm  
- working height 960 mm lower edge workpiece  
- linear guides for exact and torsion-free  
adjustment of the clamping console  
- table construction with great free space  
below the consoles for removal of chips  
and residual strips  
- double occupation and pendulum operation  
to increase the productivity  
- working field and position of the stop pins  
according to technical data sheet  
- before the reset it is to ensure that  
residual pieces are removed out of the  
working room  
- extreme workpiece dimensions have to be  
clamped with templates or mechanical  
workpiece clamps  
- the reference point of the machine is at  
the front left  
- workpieces are put on by hand from the front  
side  
- in case of processing highly resinous woods  
an increased cleaning effort is necessary  
- metallic chips may cause disturbances in the  
operation of the A-table  
- in case of course of motion of the A-table a  
safety distance of at least 800 mm has to be  
maintained. This is ensured by an additional  
safety device, with release by the operator



- P.05007    Number    : 7209            3 off  
CARRIER PROFILE FOR X-STOP
- Aluminium profile with grooves for mounting of adjustable lateral stop pins.
  - Adjusting range see Technical Data.
  - Without stop pins.
  - The position at the consoles must be appointed according to Technical Data.



P.05022 Number : 7349 9 off  
CLAMPING LEVER FOR ADJUSTABLE LATERAL STOPS  
- clamping lever for fast and toolless  
adjustment of the side stop pin in Y-  
direction  
- suitable for workpieces with panel oversize



P.05025 Number : 0755 8 off  
CONSOLE Y=2200 MM FOR A-TABLE  
- clamping console for automatic console table

P.05028 Number : 0757 32 off  
AUTOMATICALLY POSITIONABLE PLATFORM A-TABLE  
- vacuum supply for reception of a vacuum  
clamp



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- P.05031 Number : 7276 8 off  
SLIDE COATING FROM SPRING STEEL FOR A-CONSOLE
- for the protection of the guide track in case of high stress for example due to falling remaining pieces
  - for the processing of materials with hard surfaces
  - for the manufacturing of doors, stairs and working plates
  - not suitable for the processing of gypsum and cement bonded materials
  - per console



- P.05013 Number : 7301 25 off  
LATERAL AND LONGITUDINAL STOP PINS 140 MM
- control of final position, with electro-mechanic control, stroke 140 mm from table surface
  - stop pins selectable in groups
  - the position on the clamping table has to be stipulated according to Technical Data



- P.05043    Number    : 7208            4 off
- LIFT-OFF RAIL ROLLERS STROKE 100 MM
- lifting rail with integrated transport rollers, laterally installed at the console
  - lifting device for 100 mm free space below the workpiece support
  - total elevation approx. 105 mm
  - lifting power per lifting rail 35 kg
  - the position at the consoles must be appointed accord. to Technical Data
  - not suitable for solid wood or veneered surfaces due to pressure marks



P.05235 Number : 0763 4 off  
CONNECTION FOR PNEUMATIC CLAMPS  
- one circuit pneumatic system by means of plug coupling



P.05046 Number : 0765 8 off  
CONNECTION FOR POWERCLAMP CLAMPS A-TABLE  
- double circuit pneumatic system for the use of powerClamp clamping elements  
- 1. A-platform prepared for the mounting of the powerClamp clamping element  
- the production in alternate production is effected by the activation of the existing foot switch

P.05232 Number : 7389 1 off  
LOW/HIGH-PRESSURE CONTROL F. PNEUM. CLAMPS  
- For the use of mechanical/pneumatic clamping elements with unsecured manual intervention by the machine operator  
- when the clamping element is activated, the panel is hold with low pressure, only when the program is released it comes to full clamping force for the processing

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P.05238 Number : 0762 4 off  
VACUUM CONNECTION FOR TEMPLATE  
- by means of plug coupling



P.05247 Number : 7376 16 off  
VACUUM CLAMP 160 X 115 MM FOR A-TABLE  
- vacuum clamps with double sealing lip for  
stepless positioning on the console  
- rubber coating can be changed in case of  
waste  
- with tracing valve  
- clamp height 100 mm



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P.05253    Number    : 7377            8 off\_  
VACCUM CLAMP 125X75 MM FOR A-TABLE  
- vacuum clamps with double sealing lip for  
  stepless positioning on the console  
- rubber coating can be changed in case of  
  waste  
- with tracing valve  
- clamp height 100 mm



P.05256    Number    : 7273            4 off  
POWERCLAMP CLAMPING ELEMENT (8-78) FOR A-TABLE  
- mechanic/pneumatic clamping element for  
  clamping squared timber pieces, narrow parts,  
  strips and stacks of plates  
- arrangement on the clamping console with

- 
- manual clamping
- clamping range adjustable from 8-78 mm, clamping stroke 25 mm
  - base plate lowerable in order to have free access to the clamping elements for reclamping
  - actuation of the clamping elements as group per processing place through the available foot switches
  - wide panels are to be supported in addition, e.g., with vacuum clamps



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## **ENERGY AND SUPPLY**

P.06004 Number : 0594 1 off  
COMPRESSED AIR SUPPLY 7 BAR  
- input pressure min. 7 bar

P.06007 Number : 7085 1 off  
VACUUM SYSTEM 300/360 M<sup>3</sup>/H  
50 Hz = 300 m<sup>3</sup>/h  
60 Hz = 360 m<sup>3</sup>/h

- vacuum pump with a nominal power of 300 m<sup>3</sup>/h
- low-wear and energy-efficient vacuum pump with claw technology from type Busch
- in case of several vacuum pumps each pump can be individually connected by a softkey, this enables an energy efficient vacuum output



P.06013 Number : 0741 1 off  
SWITCH CABINET POSITIONING RIGHT  
- the detached switch cabinet will be positioned on the right side in front of the processing table

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## **CONTROL MACHINE**

P.07004    Number     : 0651        1 time  
POWERCONTROL PC86 POWERTOUCH  
Modern control system based on a Windows PC

Hardware:

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



- PLC control accord. to International Standard IEC 61131
- modern industrial PC with operating system Windows 7
- backup manager and storage medium for comfortable data backup
- USB connection
- hand operation for run-in mode



- digital drive technology

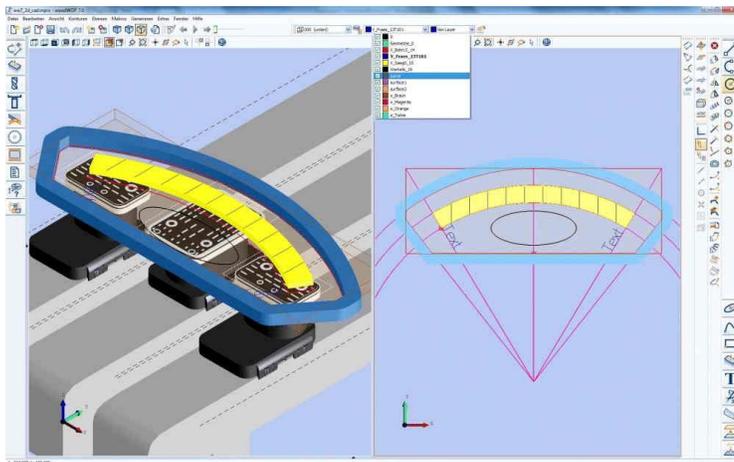
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- decentralized, digital field bus system
  - virus protection software
  - network connection ETHERNET via additional card and network software. Within the machine or machine line Homag Group uses data networks with the identification 192.2.x.x or 192.168.1.x. If the address range is also used in the customer network, a special project planning has to be effected and, if necessary, additional hardware has to be used by the customer
  - UPS (uninterruptible power supply), protects the computer from damages in case of mains interruption, overload and short circuit.



Software:

- equal HOMAG Group operating surface  
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
- control for continuous line operation in all axes and parallel operations through multi-channel technology

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- look-ahead function for optimum speeds at the transition points
  - dynamic look-ahead-control for accurate contours
  - woodWOP for graphic and interactive creation of CNC-programs. Great program library with example programs for contours, corpus furniture, worktops, doors: free download under [www.homag.com](http://www.homag.com)
  - inclusive CAD-Plugin for creating CAD contours and for the import of existing CAD drawings in DXF format
  - graphic tool data base: Software kit for assistance of the Homag Group units listed in the scope of delivery. Consisting of woodWOP processing macros, NC sub programs and administration of unit data
  - production list administration
  - CNC operation
  - graphic presentation of the place occupation



P.07007    Number    : 6201    1 time  
PC KEYBOARD: ENGLISH

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P.07013 Number : 7004 1 off  
CONTROL COLUMN FOR PROGRAM START  
- arrangement according to layout and suction  
plan

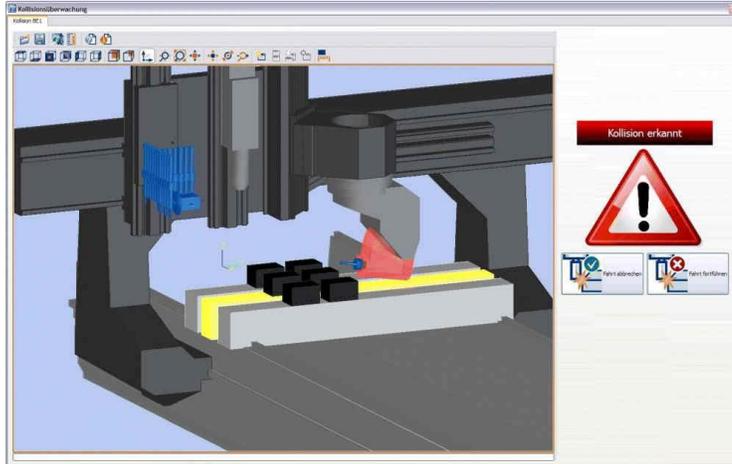


### **OPERATING MACHINE**

P.08004 Number : 6384 1 time  
COLLISIONCONTROL  
- collisionControl supervises possible  
collisions of machine components and clamping  
devices during the operation  
- takes into account the whole machine as well  
as all allowed tools, all processing heads,  
sucking clamping devices and the table level  
- clamping means which change their position

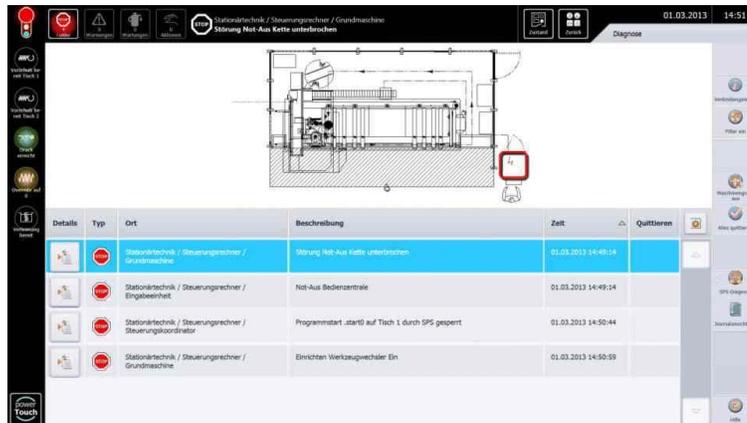
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- during program flow (e.g. Move-Part) undergo a monitoring process in which the position upon program start is supervised
- machines with a LED indication or in case of A-tables the individual consoles can additionally be supervised
  
  - automatic machine stop in case of an imminent crash situation
  - indication of the crash situation as current summation with coloured collision bodies
  - supervision of manually programmed movements from one point to another in manual operation
  - presentation of the machine as moving 3D-model in live operation (no simulation, no material abrasion)
  
  - not supervised are:
    - collisions with the panel
    - collisions with the suction hood
    - collisions with the tracing ring in case of sensoFlex
    - synchronous processings in case of multiple channel machines
  
  - caveat emptor:
    - collisionControl supervises collisions based on the CNC kernel and graphical objects
    - deviations from reality are possible
    - no guarantee against collisions of the machine
    - no liability in case of damages

Included in the kit  
SOFTWARE PACKAGE BMG  
Position: P.08034  
Number: 9066



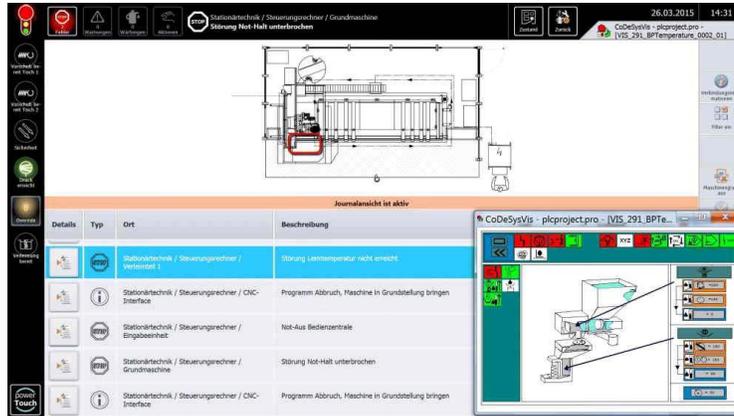
- P.08007      Number      : 6391      1 time  
MOVEPART X+Y DIRECTION FOR A-TABLE  
Extension of the PC86 control for moving apart panels in X and Y direction, e.g. after a dividing cut
- the workpiece motion is executed by a synchronous traversing motion of several consoles respectively vacuum clamps
  - includes SPS extension and creation of a movePart component in woodWOP with corresponding NC sub program
  - always all consoles per table (also those which are not required) have to be programmed in woodWOP
  - the clamping means which are not needed must be manually removed
  - after the course of motion the displaced panels are to be panel sized, the allowance of the raw panel must be foreseen big enough
  - not suitable for synchronous operation and/or multiple operation
  - BMG300/500/600: in case of movePart the dynamic alternate operation is deactivated. The pendulum assembly is then effected in standardly defined areas.

P.08013      Number      : 0779              1 time  
ERROR MESSAGE IN PLAIN LANGUAGE  
 - display of the error description on  
 the machine control



P.08016      Number      : 6383              1 time  
DIAGNOSIS SYSTEM WOODSCOUT  
 Software kit for the graphical diagnosis of the machine condition. With the woodScout system it is possible to systematically eliminate troubles, which leads to a considerable increase of 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

Included in the kit  
 SOFTWARE PACKAGE BMG  
 Position: P.08034  
 Number: 9066



P.08019 Number : 0780 1 time  
 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.08022 Number : 6396 1 time  
AUTOM. ALIGNMENT OF CLAMPING ELEMENTS A-TABLE  
Extension of the PC86 control for the automatic alignment of clamping elements on the standard stop pins

- Includes SPS extension and creation of a component in woodWOP with the corresponding NC sub program
- as the case may be the clamping means have to be adapted for automatic alignment

P.08025 Number : 6620 1 time  
WOODWOP PACKAGE: BOF/BMG (SINGLE-SEAT LICENCE)  
CNC programs for the CNC control can be created and graphically simulated with this software kit.

It contains the following functions:  
woodWOP:

- comfortable, completely menu-guided operating surface
- 3D view of the panel, processings, consoles and clamping devices
- graphic indication of arbitrary working levels
- contour creation via an integrated contour programming
- dimensions are input as absolute values or variables
- interactive setting of drillings and contour lines with the mouse
- incl. automatic suction proposal with 3D view
- incl. woodType for engraving texts
- incl. file explorer "Mosaic" for quick and simple administration of own woodWOP programs
- incl. software for reducing remaining surfaces to small pieces for automatic recognition of the remaining surfaces between a panel and the raw panel and generation of the trimming paths

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Post processor and tool data base editor:

- creation of programs in DIN 66025
- administration of tools and tool data
- simple creation of own profile tools incl.  
3D tool generator

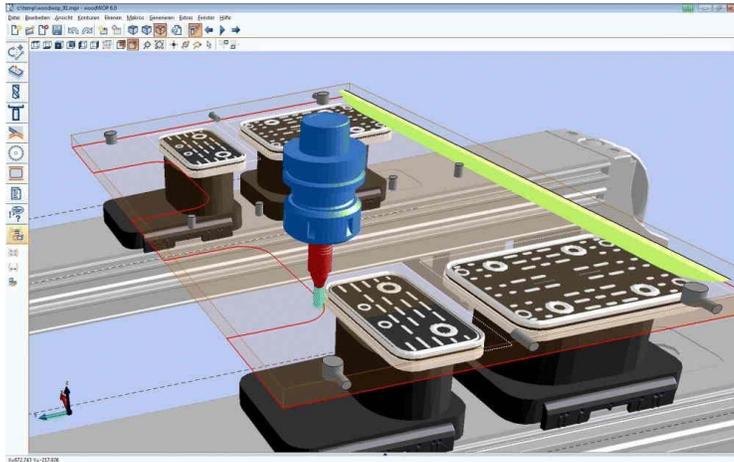
DXF-interface:

- interface for take-over of drawing data from  
CAD-systems in DXF format for further  
processing
- special drawing guidelines such as e.g. layer  
occupation must be adhered to

System requirements:

- operating system: Windows 7, 8, 10
- processor : 2 GHz or higher; Intel, AMD  
or similar; Dual-core  
processor recommended
- main memory : 1 GB RAM, 2 GB RAM  
recommended
- graphic card : OpenGL 1.5 compatible,  
mind. 128MB; we recommend  
OpenGL 2.x, 512 MB, ATI  
Radeon, NVIDIA  
GeForce or similar
- licence valid for one working place (further  
licences optional)
- terminal servers are not supported
- on a machine computer only single-seat  
licences are running
- on an office PC all software products are  
protected by single-seat licences or  
floating licences. An installation with  
different types of licences is technically  
not possible
- the installation of the software respect. the  
integration of the machine into the customer  
network is effected by the customer himself.  
Optional with support through our HOMAG-  
Software Support (with costs)

- the product must be activated after installation. Activation under <https://eparts.homag.de>



P.08028      Number      : 6677      1 time  
WOODMOTION      (SINGLE-SEAT LICENCE)  
woodMotion graphically simulates the processing steps on the office PC by means of a CNC program of a stationary machine with PC86 control

- graphic processing simulation with material removal on the panel in individual operation
- 3D view, free displacement, turning and zooming
- indication of panel, consoles, clamping elements, tools in 3D
- creation of own profile tools via contour programming in woodWOP possible by the user
- collision surveillance between the tool and the programmed clamping elements
- collision surveillance between tool holder (HSK), units and processed panel
- saving and loading simulation processes
- high proximity to reality through a CNC

- 
- simulation on basis of a virtual machine control (Vilma)
- comprehensive error detection in the foreground (e.g. exceeding the software limit switch)
  - Caveat emptor
    - woodMotion is a simulation
    - deviations from the reality are possible
    - no guarantee against collisions of the real machine
    - the delivered graphic data do not claim to be complete and correct

System requirements:

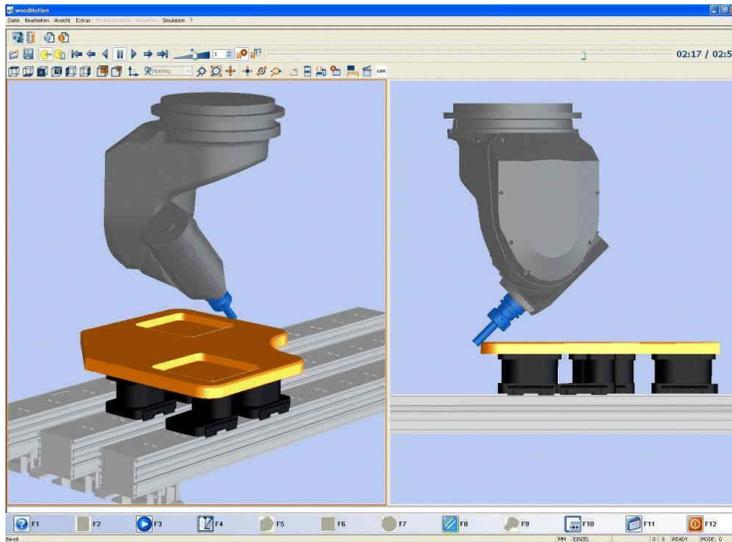
- operating system: Windows 7, 8, 10
- Processor : Single-core or multiple-core processor, Intel or AMD, 2 GHz or higher level
- Main memory : 1 GB RAM; 2 GB RAM recommended
- Graphic card : OpenGL-compatible, 128 MB, resolution 1024x768, 16 bit colour depth;  
we recommend:
  - OpenGL Hardware acceleration and
  - OpenGL 2.x, 512 MB, resolution 1280x1024, 32 bit colour depth
- terminal servers are not supported
- on a machine computer only single-seat licences are running
- on an office PC all software products are protected by single-seat licences or floating licences. An installation with different types of licences is technically not possible
- the product must be activated after the installation. Activation under <https://eparts.homag.de>

Included in the kit

SOFTWARE PACKAGE BMG

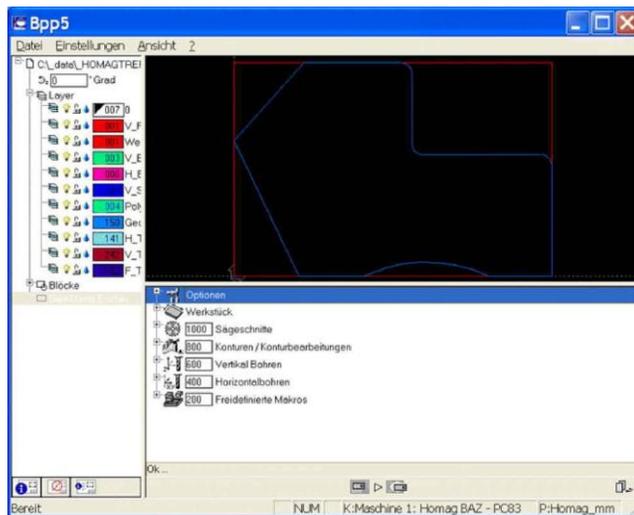
Position: P.08034

Number: 9066



- P.08031      Number      : 6611      1 time
- UPGRADE WOODWOP-DXF-IMPORT PROFES.(SINGLE USER)
- interface for CAD data import from 2D-CAD-programs to woodWOP
  - import of 2D-DXF files
  - conversions can be carried out accord. to fixed profiles, the profiles (rules) for the conversion can be modified by the operator
  - display of the geometry, layer and drawing elements
  - creation of the woodWOP-program
  - requirements for the DXF file:
    - the drawing elements have to be filed on the corresponding layers for differentiation of the processings
    - the layer should include numeric values for the definition of the Z-axis
  - alphanumeric layer definition
  - incl. DXF import Batch Process, for conversion of an arbitrary number of DXF

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- files in one stacking sequence
  - system requirements: Windows 7, 8, 10
  - terminal servers are not supported
  - The product must be activated after the installation. Activation under <https://eparts.homag.de>



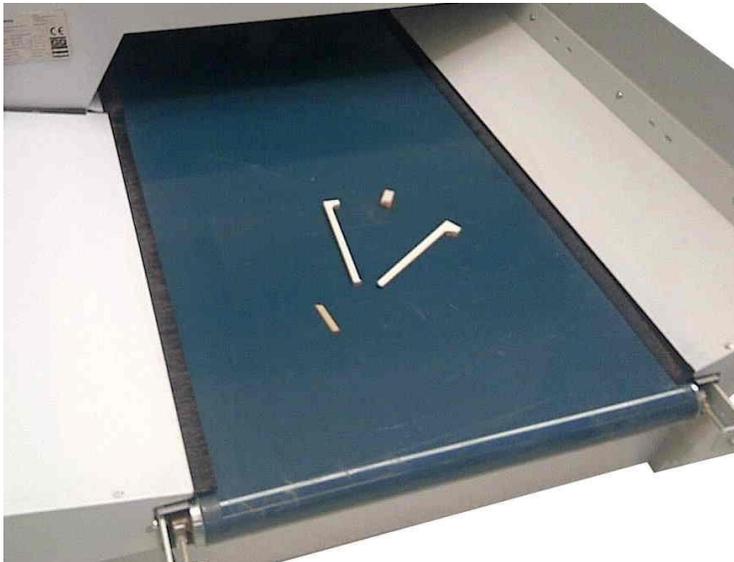
P.08034      Number      : 9066            1 off  
SOFTWARE PACKAGE BMG

### **REMOVE**

P.09004      Number      : 7228            1 off  
CHIP CONVEYOR BELT RIGHT BMG/../../19

- Removal of chips and residual pieces by means of an integrated chip conveyor belt
- conveyor height B300 = 410 mm
- conveyor height BMG = 225 mm
- for chips and small waste pieces; removal of big residual pieces must be done by hand
- suction hood or container at the end of the belt to be provided by the customer
- transport direction to the right up to the outer edge of the machine bed

- 
- additional chip guiding sheets along the transport belt lead the chips and residual pieces safely onto the belt. Thus an accumulation of chips and residual pieces below the transport belt is prevented and damages of the belt material and the drive are avoided



### **PROTECTION OF THE OPERATOR**

- P.10004    Number    : 7141            1 off  
PROTECTIVE GRID RIGHT  
- supports with safety barrier dowelled onto the floor
- P.10007    Number    : 7107            1 off  
PROTECTIVE GRID LEFT  
- supports with safety barrier dowelled onto the floor

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P.10013 Number : 7108 1 off  
PROTECTIVE GRID BACK WALL B../30-42  
- supports with safety barrier dowelled onto  
the floor

P.10016 Number : 7105 1 off  
ACCESS DOOR RIGHT IN CLIMB-OVER PROTECTION  
- access door front side right, integrated in  
the climb-over protection



### **DOCUMENT**

P.11004 Number : 8322 1 time  
LANGUAGE SELECTION: ENGLISH  
- operating manuals and on-screen operator  
control texts for machine operators in  
English

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