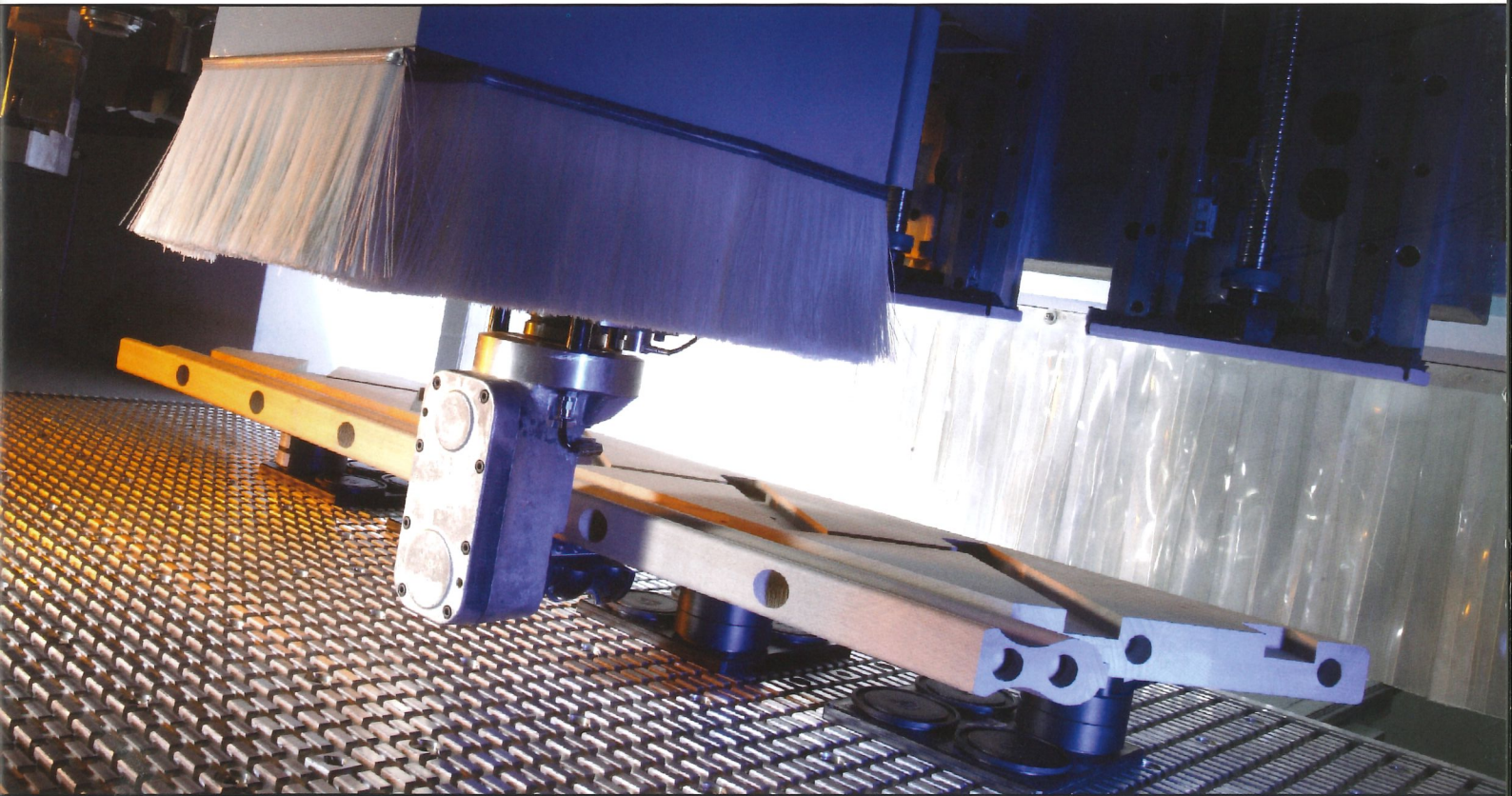


Processing Center BOF 600



Optimat | **profi line** | **power line**

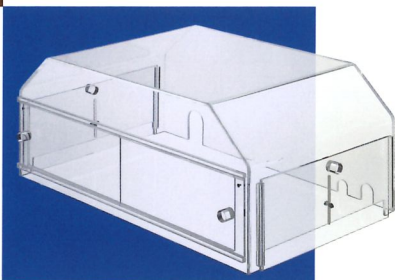




Invest wisely and gain immediately: With the new BOF 600

An enormous degree of flexibility and high output at an unbeatable price – this is what users can expect from the BOF 600, a highly economical processing solution for the entire furniture and shopfitting, interior fittings and structural element sector. Whether trimming, drilling, thread tapping or cut optimization, whether for wood materials, solid wood, plastics or aluminium –

the BOF 600 is the first choice every time. By concentrating several work steps, it makes a substantial contribution to reducing production times. Which means that not only do you produce faster, you also save costs and sharpen your competitive edge. Invest wisely and reap the profit straight away – with the BOF 600.



Processing center BOF 611
with enclosure (optional)



The illustrated models do not always portray the standard equipment.

BOF 600 – Streamlining for every sector

The BOF 600 is impressively compact, and comes in either an open or optional fully enclosed version. As a result, while requiring only a minimum of space it permits the processing of

large workpiece formats. These benefits coupled with its amazing versatility make it the ideal solution for joineries and small-scale industrial producers.



The BOF 600 offers considerable time saving potential for structural element production compared to standard joinery machines – for instance treads for staircase production can be processed with time savings of up to 80%.



The BOF 600 is ideally suited for the production of carcass furniture. Users benefit from processing rates around double the speed of conventional production.



Doors made of varying materials and in a wide choice of different designs are processed with high speed and precision on BOF 600.



Window makers moving away from conventional processing methods to use the BOF 600 can now produce non-standard windows and front doors in the same way as standard elements – and save considerable time due to complete processing on a single machine.

BOF 600 – 10 advantages to benefit you

1 Absolute safety

The optional enclosure offers highly effective protection from noise, flying splinters and dust.

Placement of the processing units at the back of the machine keeps operators safely out of the danger zone. The innovative new safety system used in the BOF 600 makes safety equipment requiring large amounts of space, such as safety tread mats, superfluous.



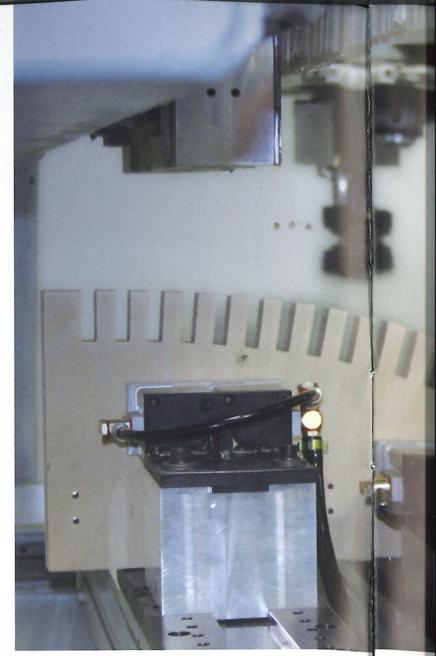
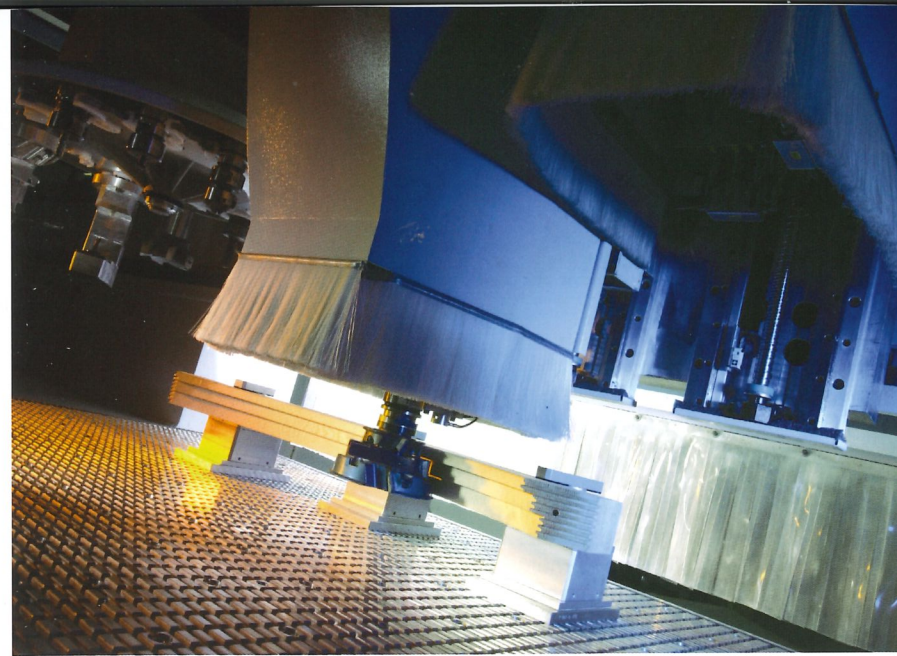
2 Flexible clamping

Patented double lip system: Dual-circuit vacuum system without disturbing hoses. Freely positionable suction cups in different sizes on the consoles permit any optional type of workpiece clamping.

positionable suction cups in different sizes on the consoles permit any optional type of workpiece clamping.



We also offer a large selection of pneumatic clamping elements as an add-on for wide-ranging different processing operations.



5 High-powered and durable – for optimum quality production

High-powered trimming spindles with an output of 9.0 or 15.0 KW permit fast feed rates even where high cutting forces are required, for instance in window or staircase manufacture.

The fluid cooling system reduces heat generation and so guarantees a long service life and high trimming spindle precision. The variable speed of 0 to 24,000 rpm takes care of optimum processing results and outstanding surface quality.

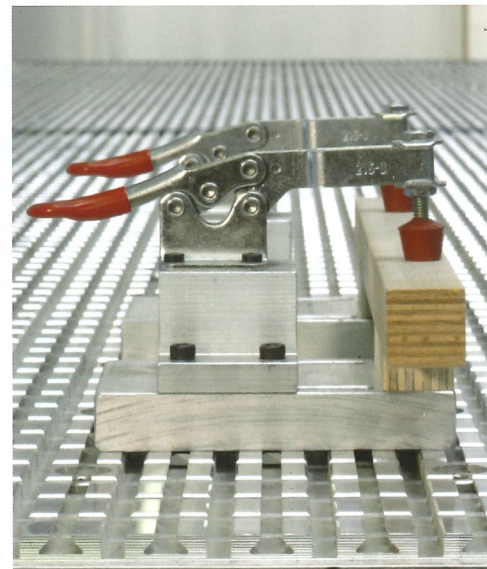
3 Simple set-up

The **patented** LED set-up aid takes care of simple, precise suction cup positioning, even with low ceiling heights and irrespective of light conditions.



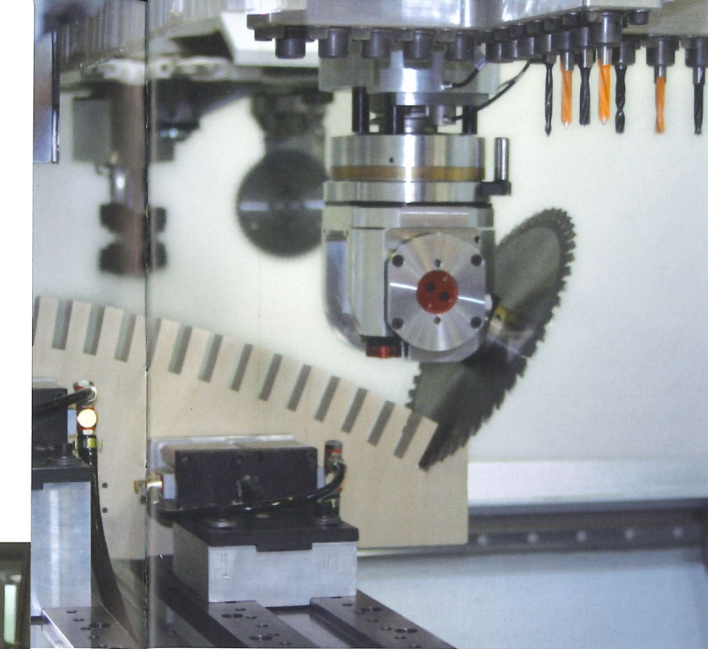
4 Optimum precision

An aluminium grid table with dovetail guides guarantees precise mechanical clamping element fixture at any optional location.



Integrated vacuum connection ports with thread: Optionally for mechanical fixings or for the deployment of vacuum clamping elements. Additional apertures with a high throughput rate (optional) permit quick opening using the switch cabinet key. Ideal for the generously dimensioned vacuum system for large-area clamping (e.g. for MDF fronts)





6
NEW!

Five-axis-function

The compact, exchangeable five-axis unit FLEX5 (patented) offers even greater flexibility; for example for the automatic production of precise shift cuts or boreholes at any optional angle.



7

High degree of availability and stability

The pneumatic interface of the C-axis permits the passage of compressed air, for example to power an air jet cleaning unit. This allows the traced

trimming unit to be used without the risk of stray chips impairing the tracing quality. The three-point support for the C-axis ensures optimum rigidity where heavy processing units are used in continuous operation, for example for staircase production.

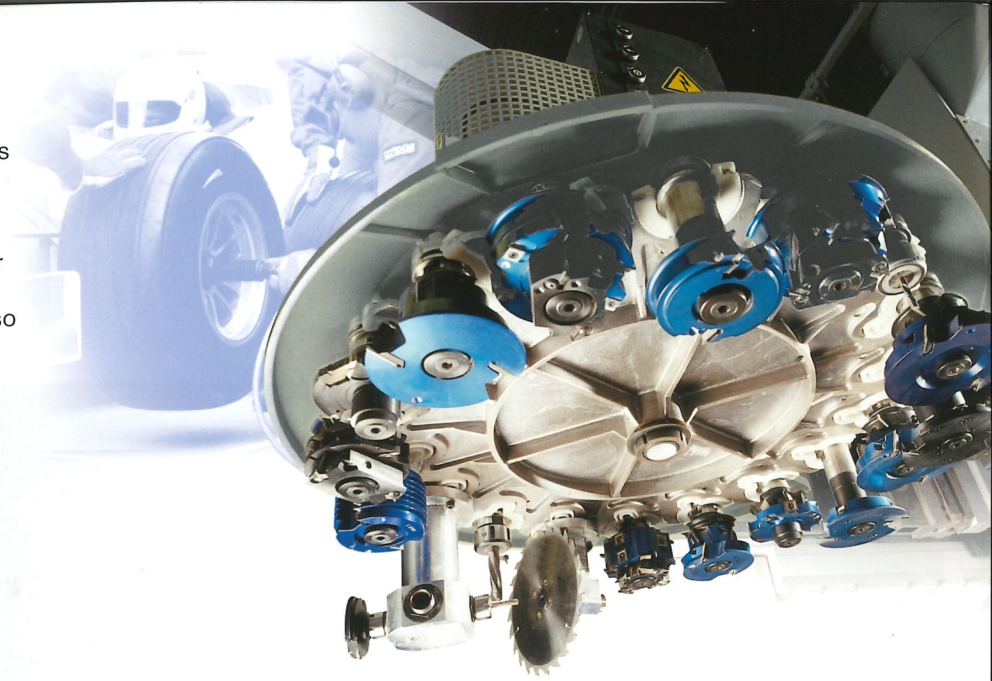


Processing center
BOF 611

8

Short set-up times

Fast plate changers with generous tool slots permit extremely short chip-to-chip times and slash the times required for tool changing. They also offer space for a wide selection of large units and tools (up to 18 tools). Optionally also with electronic tool recognition.



9

Extreme output

The high-speed drill head operating at up to 7,500 rpm guarantees fast, precise processing even for small tool diameters. The patented clamping system offers maximum stability and security – even with boreholes in the hardest materials or material mixes. Ideal for multiplex or Trespa processing. The quick-change system, also a patented development, permits fast, toolless drill bit changeover.

10

Simple operation

Simple, safe operation of the BOF 600 is guaranteed by the power control system PC85 with soft-keys. Only those functions actually required by the operator appear as an option on-screen. This simplification enhances clarity for the operator and prevents unnecessary errors. The control desk is ergonomically designed to permit swivel and rotational movement. Efficient machine utilization is guaranteed in conjunction with the world's most frequently used programming system woodWOP.



BOF 600 – the right version for every application

The choice is yours

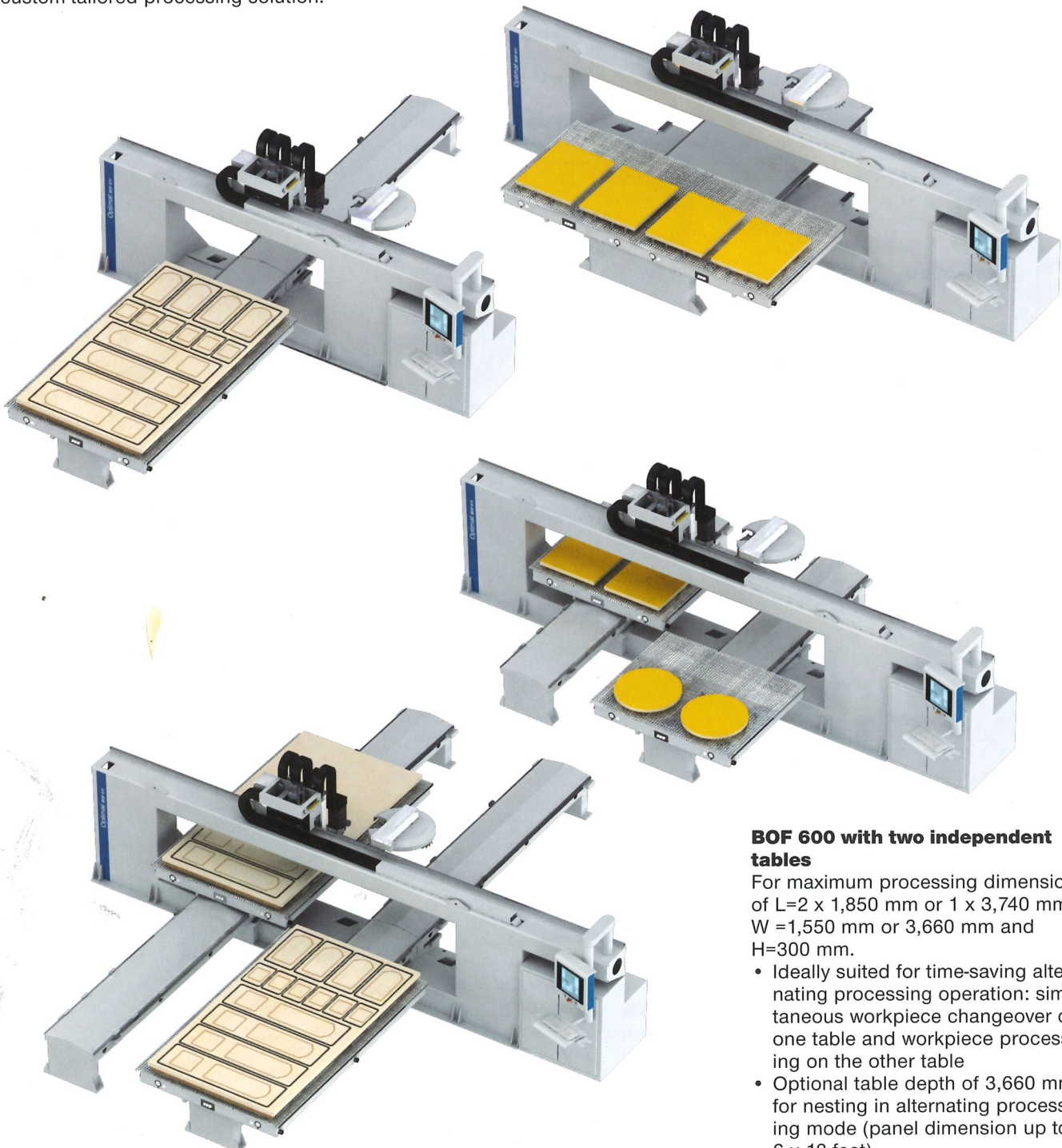
With the BOF 600 we are offering users a processing center designed to adjust precisely to individual needs. No matter what sort of workpiece size you are processing, or what level of efficiency is called for – the various upgrade options are designed to cover every conceivable requirement. And you benefit from the advantages of a custom-tailored processing solution.

BOF 600 with one table

For maximum processing dimensions of L=3,740 mm, W=1,550 mm and H=300 mm with a tool diameter of 25 mm.

- Nesting (cut optimization) of free-form components, fronts etc. with panel dimensions of up to 5 x 12 feet

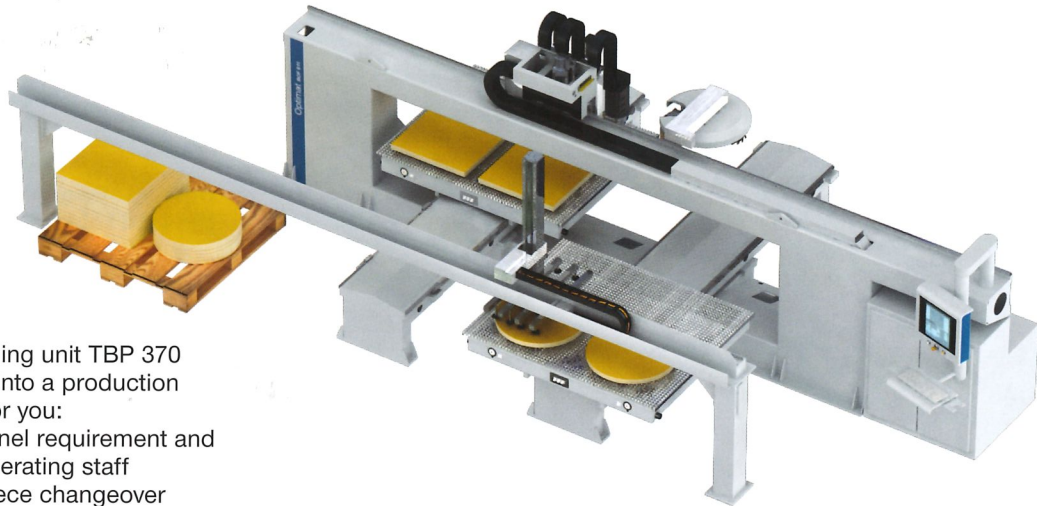
- High productivity with 4-workpiece positioning (e.g. with fronts 600 x 600 mm)
- Also ideal for processing staircase components (up to 300 mm workpiece thickness)
- Two variants with longitudinal and transverse table for optimum integration into your production flow



BOF 600 with two independent tables

For maximum processing dimensions of L=2 x 1,850 mm or 1 x 3,740 mm, W = 1,550 mm or 3,660 mm and H=300 mm.

- Ideally suited for time-saving alternating processing operation: simultaneous workpiece changeover on one table and workpiece processing on the other table
- Optional table depth of 3,660 mm for nesting in alternating processing mode (panel dimension up to 6 x 12 feet)



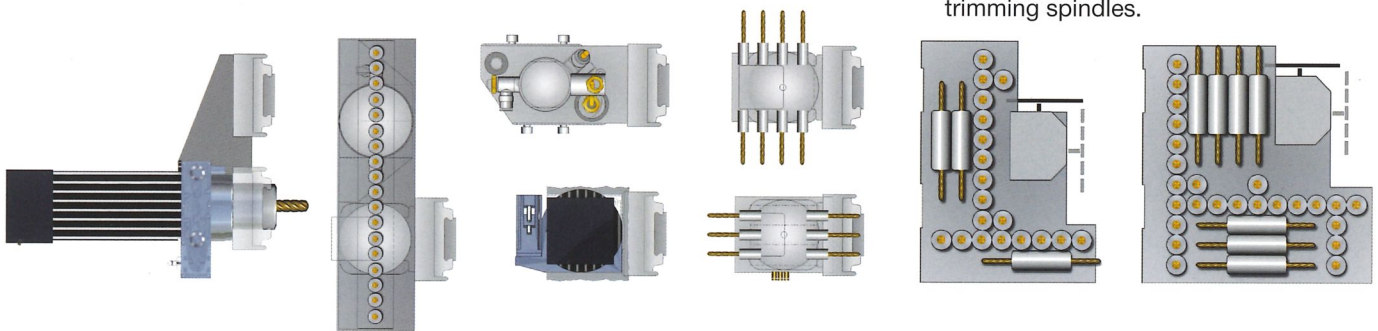
Production cell

The integrated feeding unit TBP 370 turns the BOF 600 into a production cell. The benefits for you:

- Reduced personnel requirement and less stress for operating staff
- Reduced workpiece changeover times
- Continued optimum accessibility for manual feed (e.g. for non-standard parts)
- Extreme operating simplicity through utilization of the machine control system also for the feeding unit

Performance optimized unit assignment

In the BOF, several different drilling head variants can be configured in conjunction with different add-on processing units. This allows the BOF 600 to be individually configured and tailored in line with the various applications together with the high-performance trimming spindles.



Horizontal trimming spindle with 6.0 kW output

18-spindle vertical drilling unit with 25 mm spacing

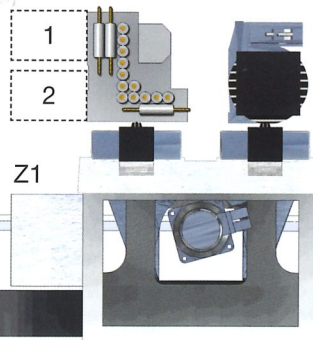
Measurement tracing unit for workpiece position measurement

Horizontal drilling gear with 6 or 8 spindles (available in X and Y direction)

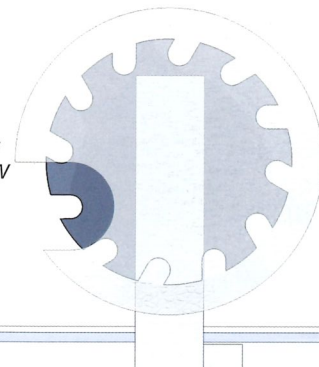
Drilling heads with up to 25 vertical and 14 horizontal drilling spindles including a swivel-action grooving saw

Vertical trimming spindle with 6.0 kW output

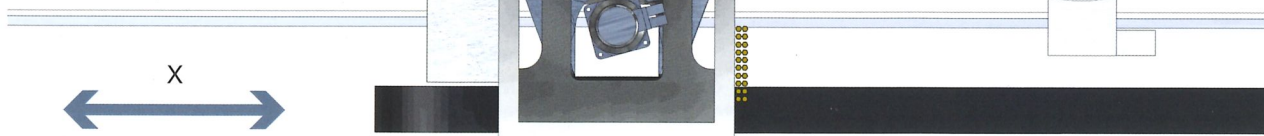
2 free spaces at every drilling head for add-on units



Trimming spindles with 9.0 or 15.0 kW output



12-slot or 18-slot plate changer



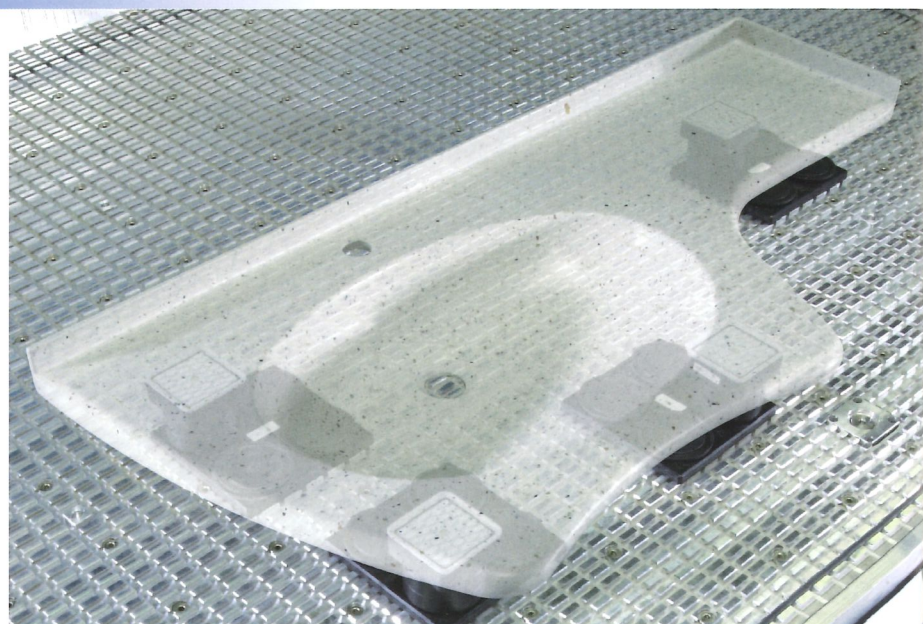
BOF 600 – table variants for every application



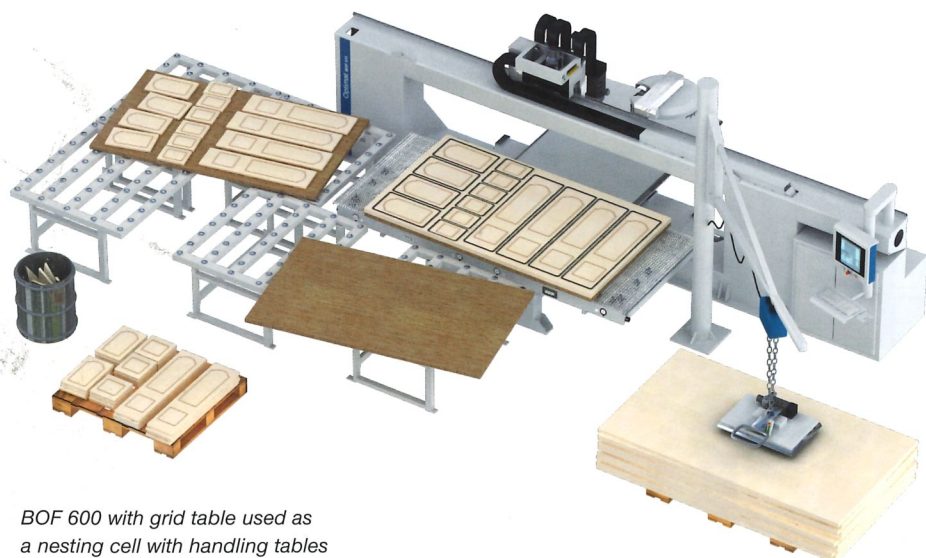
Processing center BOF 600 with finish nested MDF fronts

Universally applicable: the grid table

The dovetail grooves on the aluminium grid table permit positive fixture of clamping elements and consequently the reliable fixture of workpieces also under high hogging forces. Transmission of the vacuum in the machine bed construction accelerates vacuum build-up, reduces transmission losses and eliminates the need for elaborate pipework. Through the use of different clamping elements at variable clamping heights, the grid table is also suitable for the deployment of units.



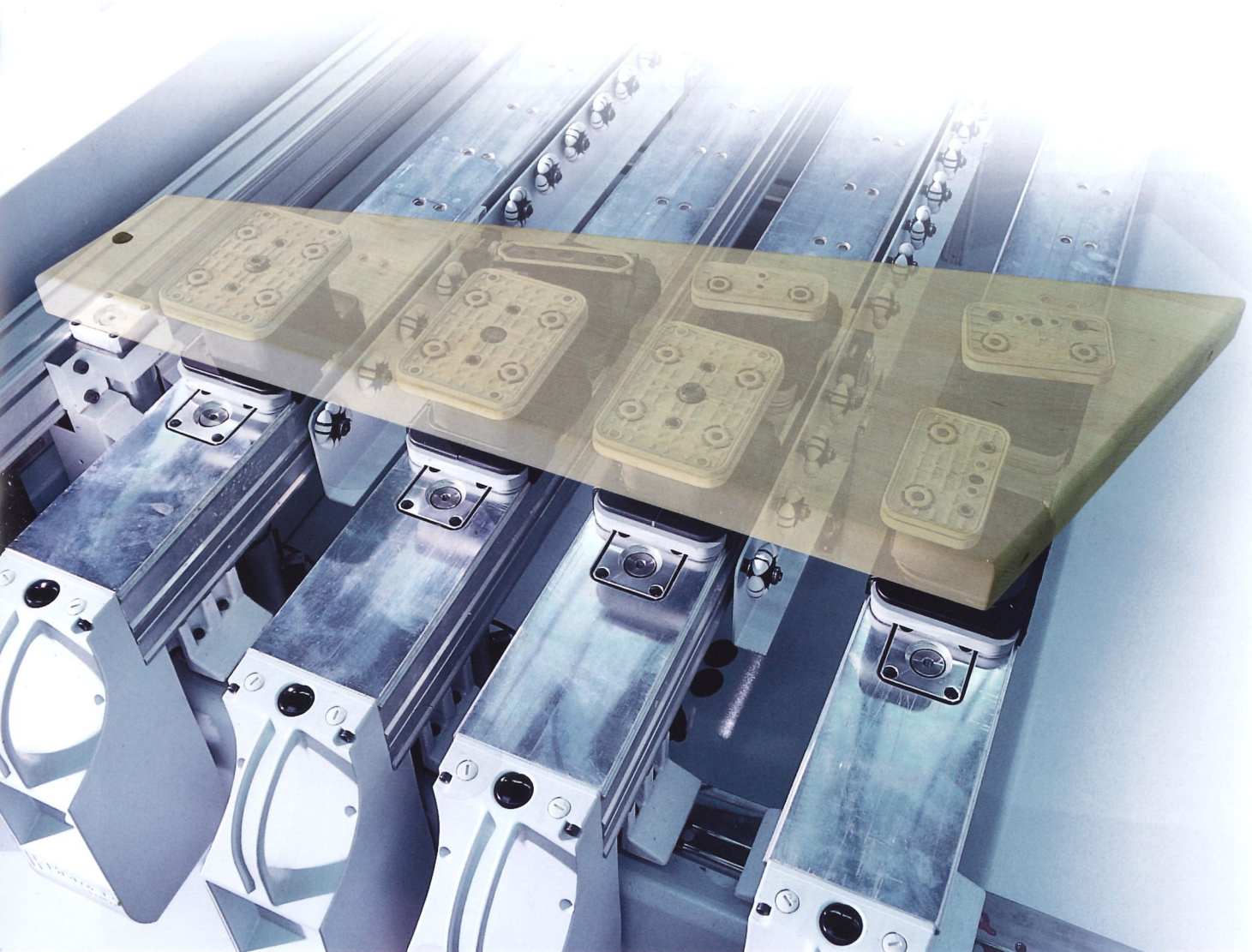
Universal clamping elements permit precise processing of wide-ranging different products (e.g. Korean washbasin panels, furniture components or doors)



BOF 600 with grid table used as a nesting cell with handling tables

Nesting

As the grid tables can naturally also be combined with high-performance vacuum pumps, this provides an optimum solution for workpiece clamping with dummy boards using the nesting method. For this, we offer a special software solution (woodNest).



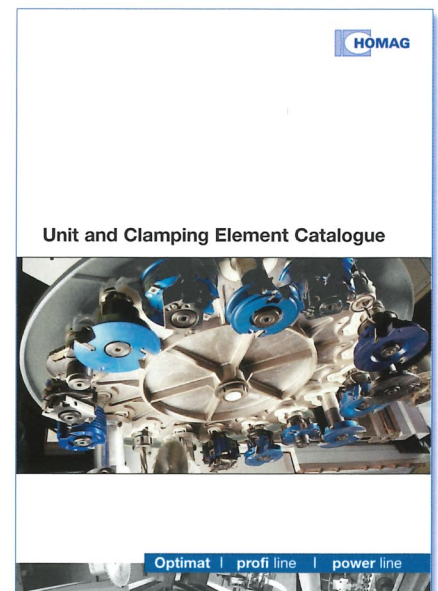
**Speed plus precision:
the console table**

Each console on the table can be quickly and simply adjusted with a simple hand operation. The console table features a hoseless dual-circuit vacuum system for a variable number of freely positionable vacuum clamps. The precise, flexible fixture of workpieces on the highly rigid consoles and the LED set-up aid guarantee absolute processing precision and a marked reduction of set-up times.

**First choice in terms of
efficiency and reliability**

Waste piece disposal takes place automatically by means of program-controlled slides and conveyor belts during operation. This not only cuts right down on the time and work input required, but also enhances productivity and operator safety.

For an overview of other available units, please refer to our unit and clamping element catalogue.



High-performance spindles, flexible drilling heads – everything in its favour

Greater speed, precision, flexibility

- Perfect results through the use of high-speed spindles for fast feed rates and speeds of up to 24,000 rpm as a standard feature
- High-precision standardized tool-holding interface HSK 63
- Three-dimensional interface for
 - Optimum power transmission
 - Optional high-rigidity C-axis for continuous deployment of heavy units (units can be swivelled and rotated as required)
 - Compressed air transmission, e.g. for cleaning away chips or to control tracing tools
- Trimming spindles feature electronic speed monitoring. The spindles offer a wide range of possibilities and benefits:
 - Consistent standard of surface quality and protection of spindles against damage in the case of inhomogeneous materials (e.g. knots in wood)
 - Large-diameter tools can also be deployed (sanding disks up to 200 mm)

Units for every application

Our comprehensive modular range of units is being extended all the time, and offers a wide choice of units for optimum equipment of the high-speed plate changer. This allows you to extend the application spectrum of the BOF 600 precisely to address your own specific requirements, and leaves you ideally equipped to adapt to future applications.

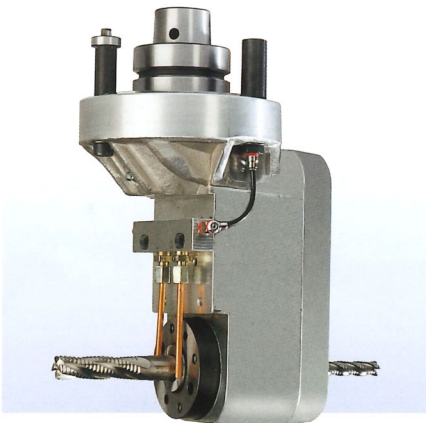
> **Main spindle** External drive via main spindles with 9.0 or 15.0 KW

> **C axis** C-axis for rotation (optional)

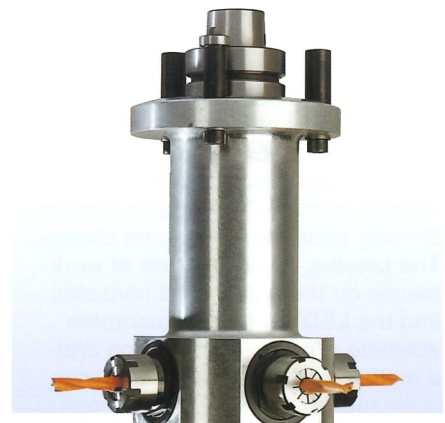
> **Pneumatics** Pneumatic supply



5-axis unit FLEX5



2-spindle lock case trimming unit



4-spindle horizontal trimming unit

A drilling head with added extras

The drilling head's **patented** clamping system guarantees an extremely high spindle retaining force, meaning that the programmed drilling depths are guaranteed even when processing

the hardest materials (aluminium or Trespa). It even allows boreholes of up to 50 mm depth and in widely varying materials (e.g. material mixes of plastic, wood and acrylic glas) to be processed without problems. The

high speed of up to 7,500 rpm guarantees maximum processing quality even when working with small tool diameters and demanding materials such as Multiplex or Corean.

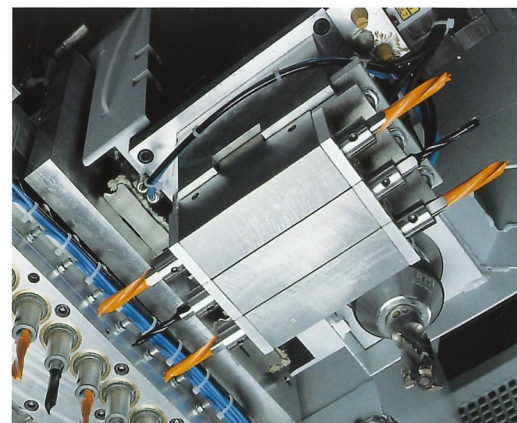


Working spindle and drilling head with separate Z axes for tool changes on the working spindle during application of the drilling head (Option Performance Pack).



*The **patented** high-speed drilling head change-over system permits the drills to be exchanged without the need for tools.*

Adding on one or two additional units (e.g. horizontal drilling gear in X with 6 spindles and additional trimming spindle) at the drilling head increases productivity by eliminating tool changeover times.



Control, software, diagnosis – always in command

The **power** control system PC85 is an open-ended, flexible control system for highly flexible machines offering extreme operating simplicity. The latest control system generation permits combination of all processing modes. The interleaving of program steps by means of intelligent process optimization (**IPO**), for instance, permits main spindle tool changes while the drilling head is operational. This permits batches as small as size 1 to be efficiently produced.

woodWOP – rationalization through high-speed programming

The world's most commonly used programming system in the wood-working sector ensures optimum machine deployment. Starting with take-over of CAD drawings and data from trade-specific software packages (optional) through to simple programming of the processing steps and the graphic tool database to provide an overview of available tools.

woodScout – Help in a language you understand

Should problems occur, the unique woodScout diagnostic system (optional) provides assistance by providing a graphic display of the fault location in the machine and reading out an error message in plain text.

woodDesign

The wood**Design** package is available, permitting fast graphic input of carcass furniture.

Machine data acquisition

The PC85 control system is fitted as standard with a basic machine data acquisition system to help analyse and optimize organizational integration and the material flow. A professional version is optionally also available, which allows detailed evaluations and feedback to higher-level host systems.

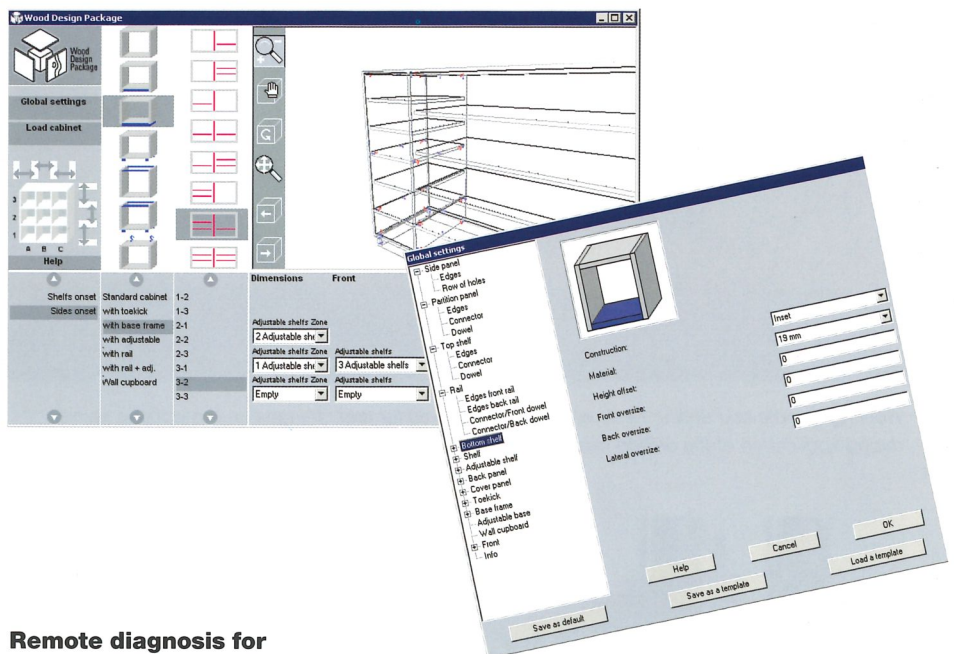
Tool life determination

In order to reduce peripheral costs, a tool life determination feature is optionally available, as well. This allows you to optimize your tool inventory and maintenance costs.

Integration capability

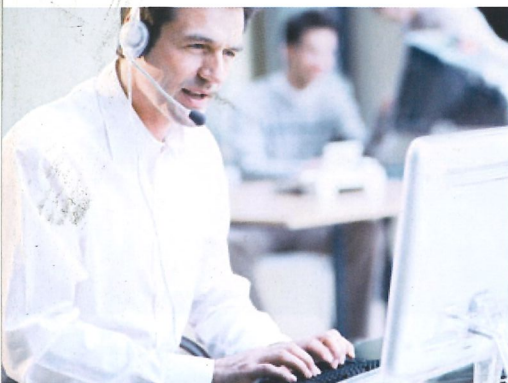
Interfaces are optionally available to allow the integration / link-up of trade-specific software packages. This allows already existing data to be adopted from the production engineering department.

Everything from a single source
Additional software products are available to supplement the wide woodWOP performance spectrum. These include for instance the special woodNest software for nesting parts to ensure cutting waste optimization. The same operating principle and service from one and the same source guarantee a seamless addition to your existing equipment. More detailed information is available on request.

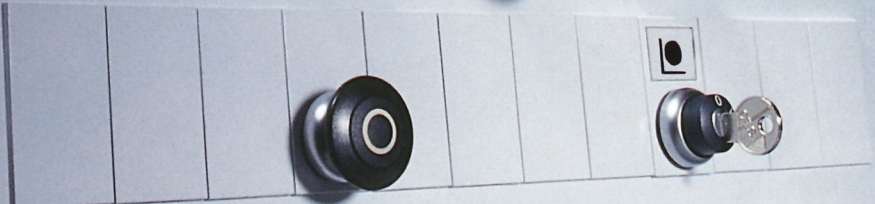
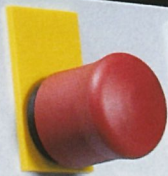


Remote diagnosis for greater availability

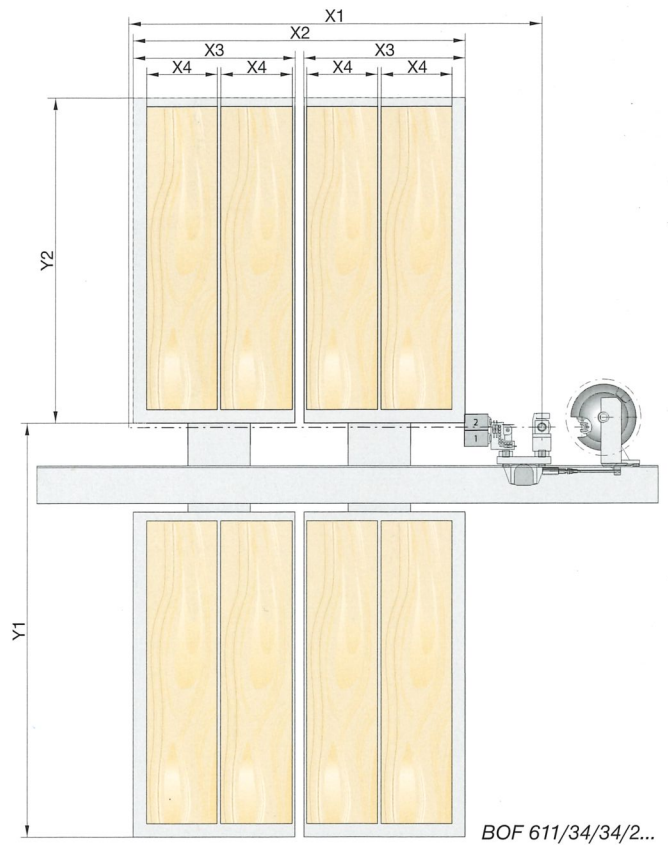
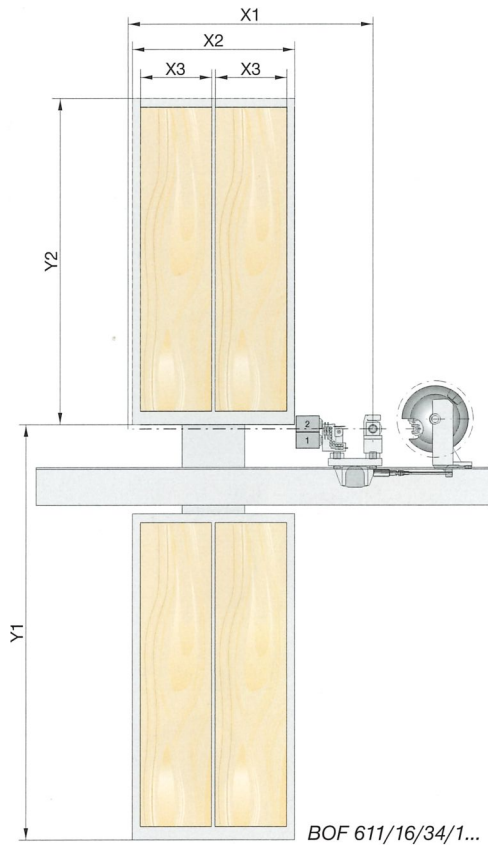
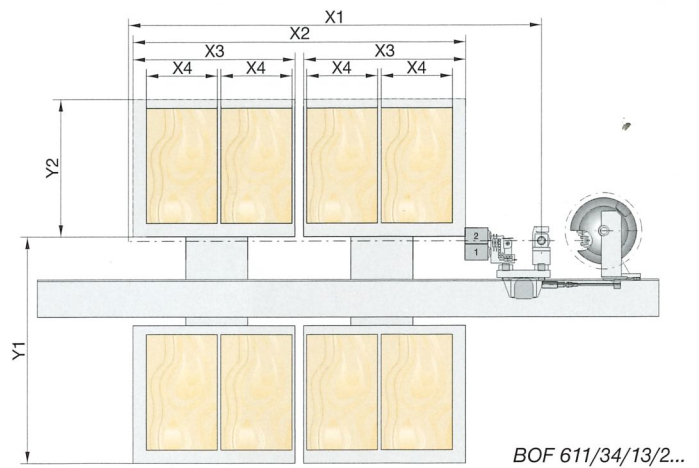
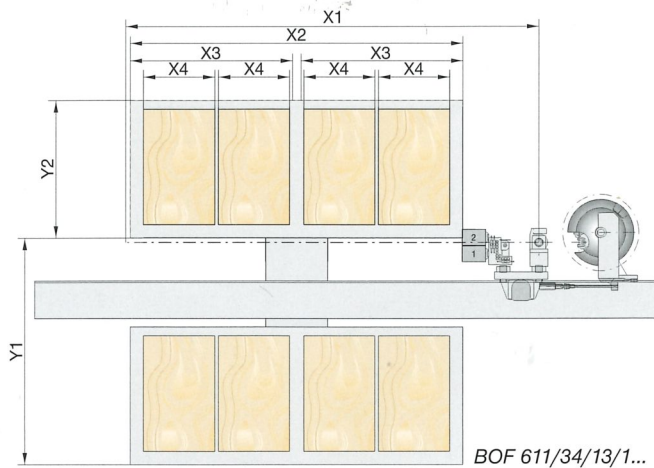
To allow you to resume full production quickly in the event of a problem, we offer a remote diagnosis service by telephone, modem and video transmission.



HOMAG



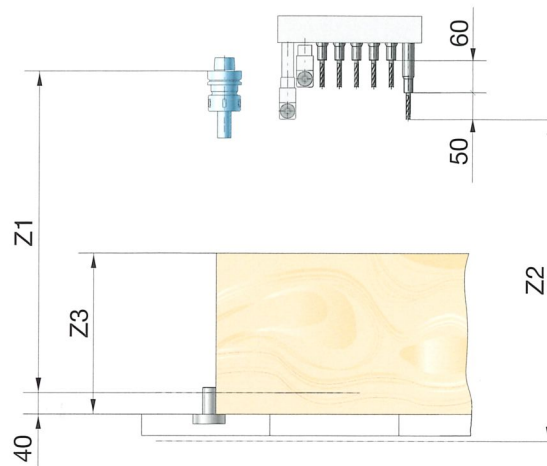
BOF 600 – big on performance, small on space



BOF 611		/34/13/1R*		/34/13/2R		/16/34/1R		/34/34/2R		/34/13/1K*		/34/13/2K	
Traversing paths		mm	inches	mm	inches	mm	inches	mm	inches	mm	inches	mm	inches
X axis	X1	4650	(183,1")	4650	(183,1")	2750	(108,3")	4650	(183,1")	4650	(183,1")	4650	(183,1")
Y axis	Y1	2550	(100,4")	2550	(100,4")	4660	(183,5")	4660	(183,5")	2550	(100,4")	2550	(100,4")
Processing dimensions with tool diameter 25mm													
Single processing	X2	3740	(147,2")	3740	(147,2")	1830	(72,0")	3740	(147,2")	3590	(141,3")	3590	(141,3")
Alternating / double processing	X3	1830	(72,0")	1830	(72,0")	800	(31,5")	1830	(72,0")	1670	(65,7")	1670	(65,7")
Quadruple processing	X4	800	(31,5")	800	(31,5")	-	-	800	(31,5")	800	(31,5")	800	(31,5")
Processing dimensions Y direction	Y2	1550	(61,0")	1550	(61,0")	3660	(144,1")	3660	(144,1")	1400	(55,1")	1400	(55,1")

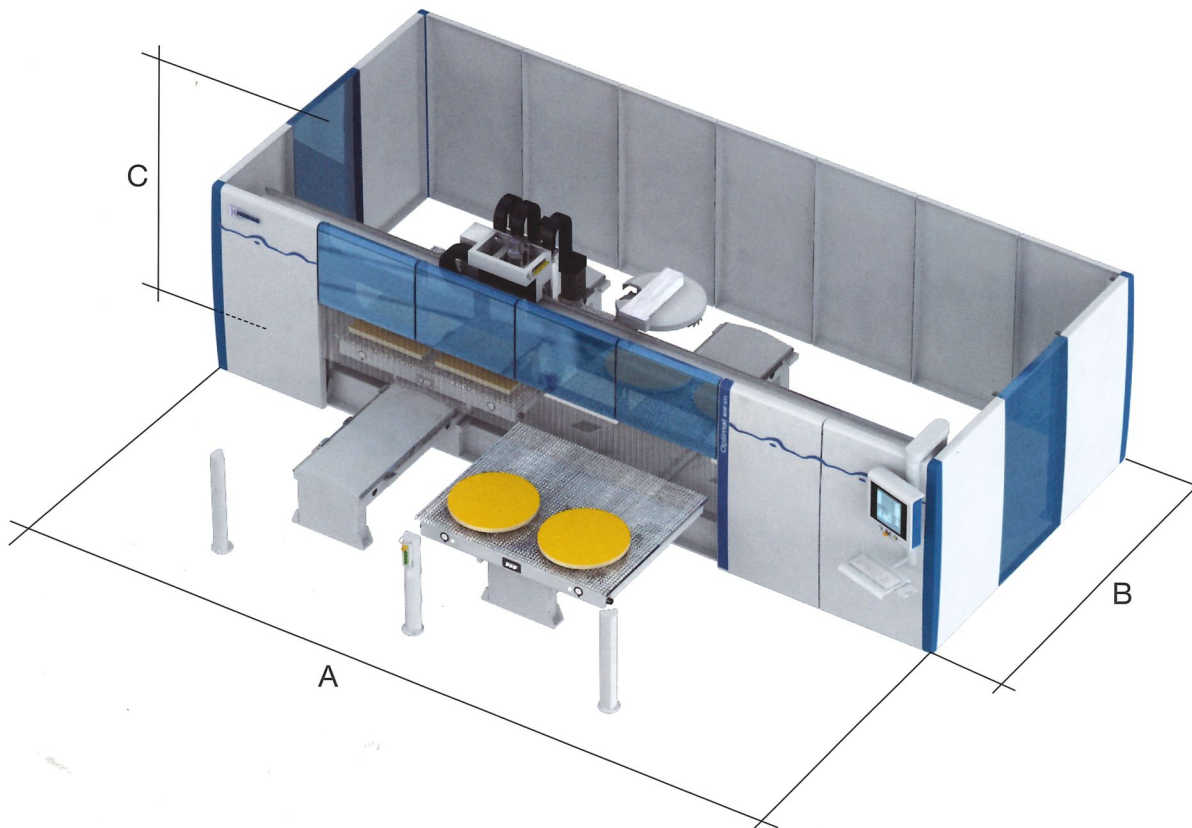
*R= Grid table

*K= Console table



BOF 611		/34/13/1R		/34/13/2R		/16/34/1R		/34/34/2R		/34/13/1K		/34/13/2K	
Traversing paths		mm	inches	mm	inches	mm	inches	mm	inches	mm	inches	mm	inches
Z axis Working spindle	Z1	600	(23,6")	600	(23,6")	600	(23,6")	600	(23,6")	600	(23,6")	600	(23,6")
Z axis Drilling head / Add-on units	Z2	600	(23,6")	600	(23,6")	600	(23,6")	600	(23,6")	600	(23,6")	600	(23,6")
Processing dimension *	Z3	300	(11,8")	300	(11,8")	300	(11,8")	300	(11,8")	300	(11,8")	300	(11,8")
Incl. clamp	Z3	300	(11,8")	300	(11,8")	300	(11,8")	300	(11,8")	300	(11,8")	300	(11,8")

* using suitable unit and tool lengths



BOF 611		/34/13/1R		/34/13/2R		/16/34/1R		/34/34/2R		/34/13/1K		/34/13/2K	
Set-up dimensions		mm	inches	mm	inches	mm	inches	mm	inches	mm	inches	mm	inches
X direction	A	7100	(279,5")	7100	(279,5")	5300	(208,7")	7100	(279,5")	7100	(279,5")	7100	(279,5")
Y direction	B	4875	(191,9")	4875	(191,9")	9100	(358,3")	9100	(358,3")	4875	(191,9")	4875	(191,9")
Z direction	C	2950	(116,1")	2950	(116,1")	2950	(116,1")	2950	(116,1")	2950	(116,1")	2950	(116,1")



A member of the Homag Group



Homag Holzbearbeitungssysteme AG

Homagstraße 3-5
72296 SCHOPFLOCH
GERMANY

Tel.: +49 7443 13-0
Fax: +49 7443 132300
E-Mail: info@homag.de
Internet: www.homag.de

