

profit H200/H300

FORMAT[®]



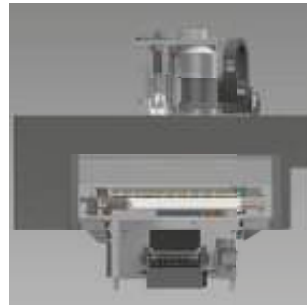
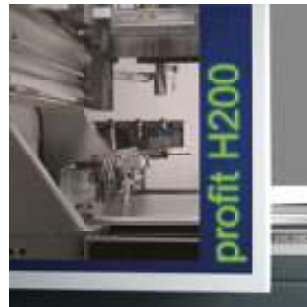
Convincing in all areas

Affordable CNC technology is becoming increasingly important in the universal workshop in particular. Regardless of whether a series of regular standard products or individually designed one-offs are to be made, the universal Format-4 profit H200 and profit H300 CNC machining centres produce finished workpieces with maximum efficiency and are a real profit earner even from day one.



QUICK
INFO

fg.am/h300eng



Hose free dual
circuit vacuum
pod system

Automatic central
lubrication system

Visual display of the
status using changing
coloured lights

Unlimited processing
possibilities

The solid gantry
design including
gantry drive

Controlled
extraction hood



profit H200

Working area



Hose-free FORMAT-4 2 circuit system with vacuum pod height of 100 mm

The dual circuit vacuum console table with manual vacuum pod positioning prevents any unintentional movement of the clamps whilst loading the workpiece. Various different Format-4 vacuum pods can be used to hold in place all conceivable work-piece shapes and sizes quickly and securely.



Position display of the consoles and vacuum pods

The workpiece, consoles and vacuum pods are all displayed in the CNC board at the same time. This guarantees, that the workpiece is securely positioned and that there can be no collision between the tool and vacuum pod. The exact position of the vacuum pods on the consoles is shown using a laser.

Linear positioning laser

Line laser for virtual 0-position in the Y direction for precise positioning of segmental arch frames.



Rows of stops

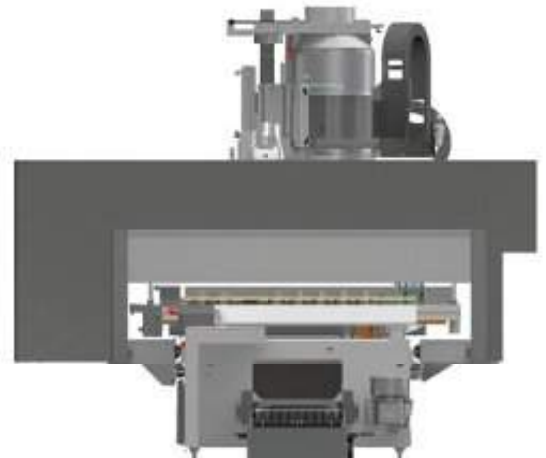
Workpiece cylinder stops at the "double zero point" (second fence row)

In addition to the workpiece cylinder stops at the "standard zero point", a second row of stops is available on each console as an option, to be able to process narrow workpieces in the front working field.



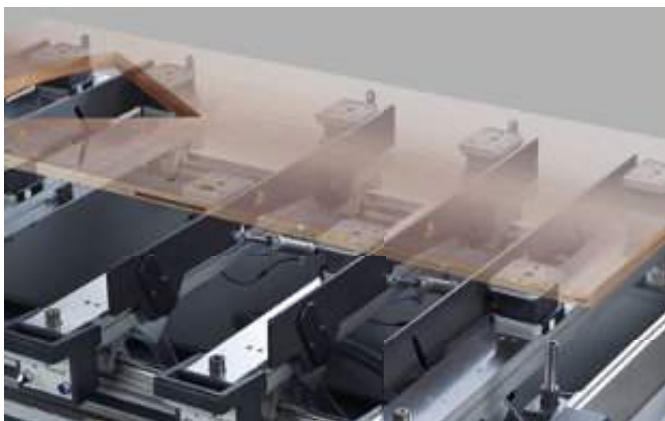
Frame processing

Continuous fence in the Y direction for an exact positioning of frame components.



Moving gantry

The gantry is driven on both sides along the X-axis, running on an angled and cambered tooth rail. (H300)



Loading supports

Loading supports assist in the simple loading and unloading of large or heavy workpieces. A major advantage is that they enable you to operate the machining centre alone.



Reinforced loading supports

Optional reinforced supports for particularly heavy workpieces.



Template milling

For template milling there is a separate connection available. Using templates makes it possible to fix complex components in place, that could otherwise not be processed using vacuum pods.



Console activation

Specially designed for use with compressed air controlled frame clamp systems, this function offers new possibilities and enormous clamping strength when it comes to the processing of solid wood. The ability to be able to deactivate the consoles individually makes it possible to remove offcuts without having to release the vacuum that is holding the workpiece in place. This ensures that the workpiece stays in exactly the right position for the next working process (inner profiles etc.).

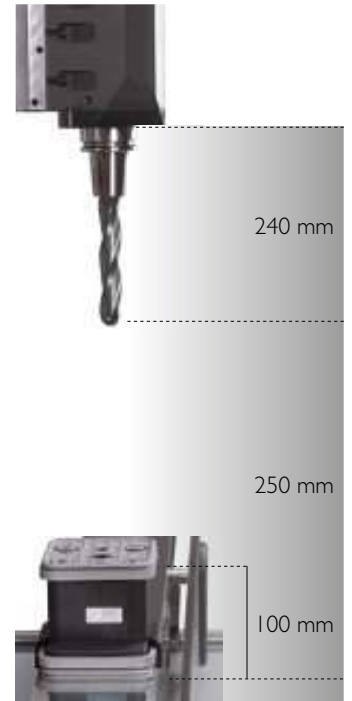
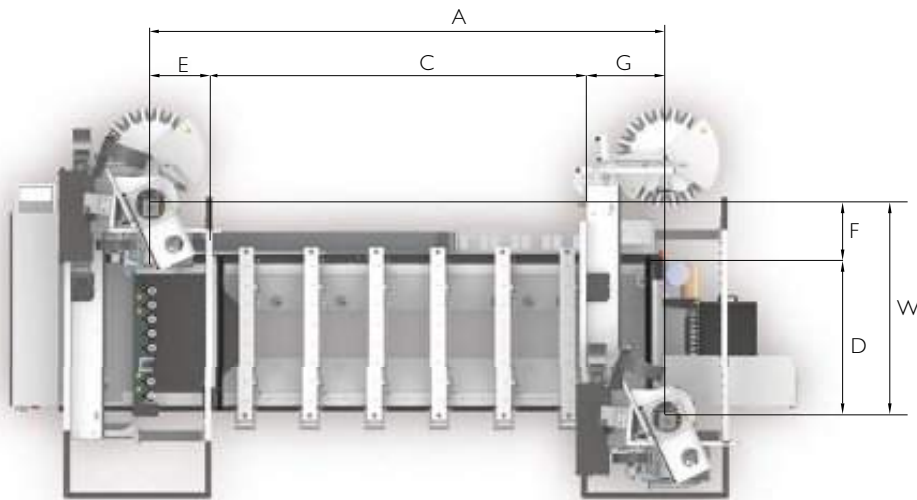


Workpiece stop for veneered panels

Additional to the workpiece fence cylinders there are also separate fences available for the processing of veneered surfaces with a projecting edge or laminated panels.

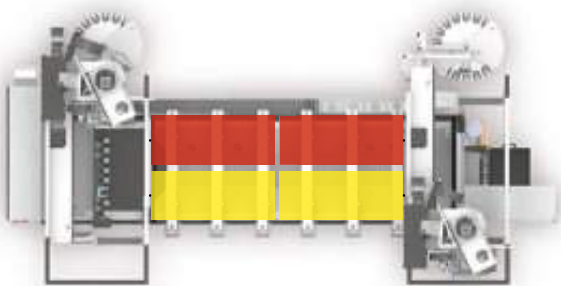


Field configuration of consoles, clamping options

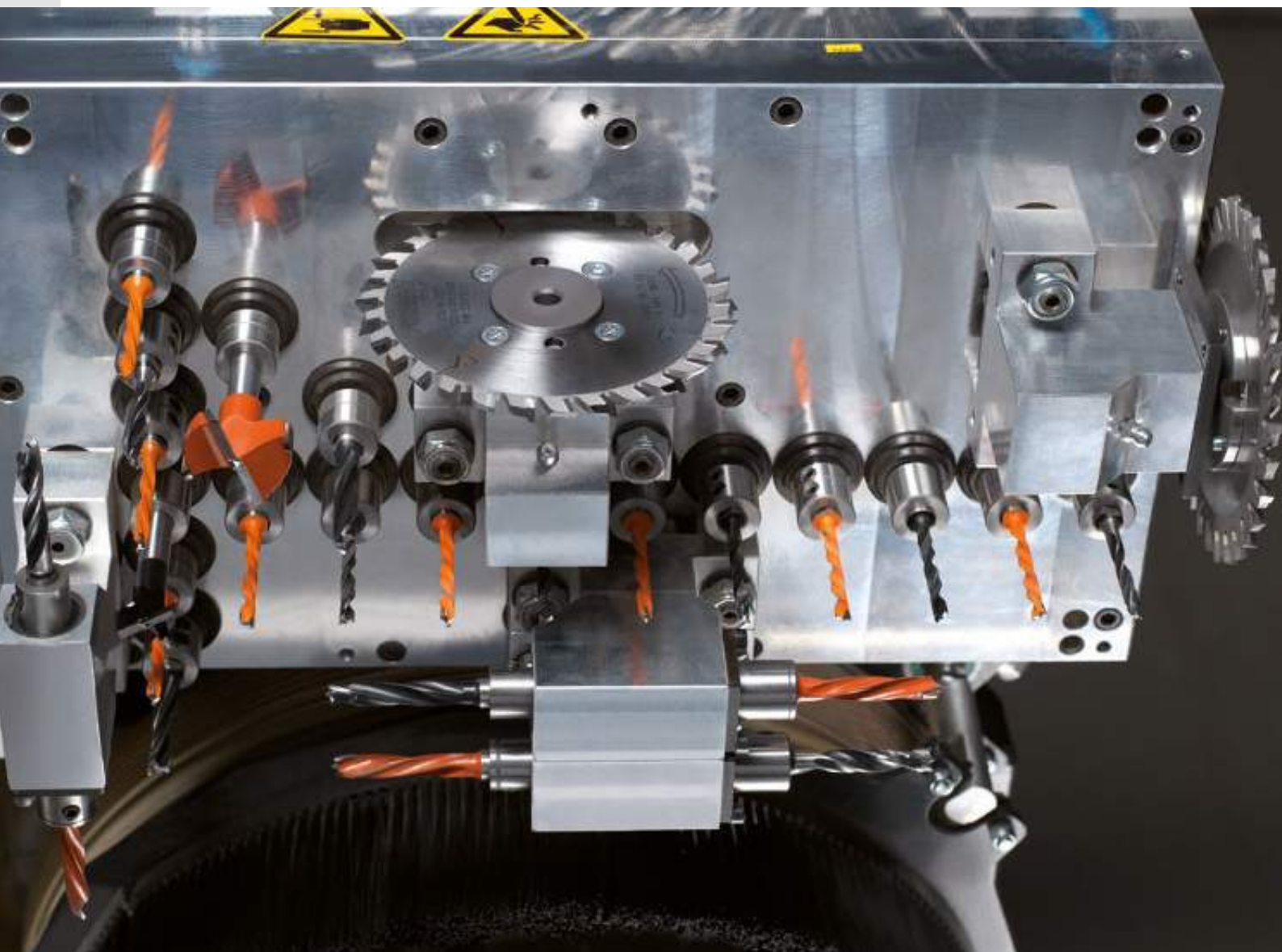


Working areas, traverse distances

<i>profit H200</i> 13.33	<i>profit H300</i> 16.33	<i>profit H300</i> 16.53
A 4,000 mm	A 4,000 mm	A 6,000 mm
B 1,670 mm	B 1,970 mm	B 1,970 mm
C 3,300 mm	C 3,300 mm	C 5,300 mm
D 1,280 mm	D 1,580 mm	D 1,580 mm
E 540 mm	E 540 mm	E 540 mm
F 390 mm	F 390 mm	F 390 mm
G 160 mm	G 160 mm	G 160 mm



2 working fields in the X direction for pendulum operation: With front and rear fences



Drilling head

The drilling head with 24 spindles

- 18 vertical drilling spindles, 32 mm distance between spindles: Each can be used individually
- 6 horizontal drill spindles, spaced at 32 mm:
 - 4 in the X and 2 in the Y axis, each can be used individually
- Integrated grooving saw units positioned in both the X-axis and Y-axis direction
- Inverter driven motor up to 7,500 rpm

Highlight

The complete working field can be covered by the drilling head for vertical and horizontal drilling.



DH 24 6H 2S



Configuration option DH 16 4H 2S

Spindle

With a motor power of 12 and 15 kW and up to 24,000 rpm, the main milling motor is controlled using an inverter and is attached directly to the support module of the drilling head in the Z axis. Dual linear guides guarantee highly precise vertical guiding. The main milling motor is positioned using ground ball screws. The HSK F63 tool clamping is done automatically. The clamping of the tool is checked using sensors, which then confirm that it is safe to start the operation. The tool holder is cleaned pneumatically. The C-axis is optionally available as the fourth axis and is interpolating (360°) with a compressed air interface for the units.



Chip deflector

A chip deflector mounted to the spindle controlled by the C-axis enables the unrestricted use of existing tools. When processing workpiece edges the dust and chips are directed towards the extraction canal.



Chip conveyor

Chip conveyor for waste pieces and residual chips and dust: For the removal of offcuts and chips from the machine chassis (right hand side). At the end of the conveyor belt they are separated using a separating slide and then extracted. The offcuts are collected in a container.



Controlled extraction hood

The extraction hood positions itself fully automatically to one of 3 positions in relation to the workpiece height which significantly reduces the dust and noise emissions.



Extraction connection

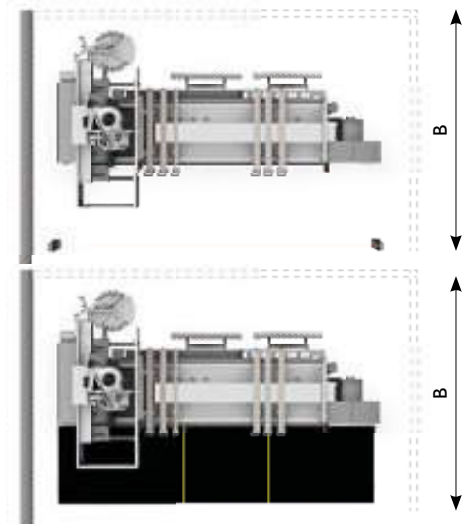
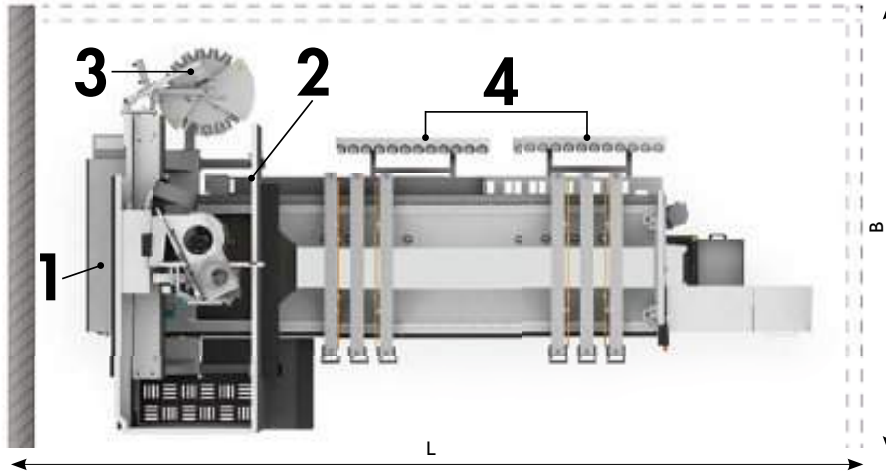
With the automatic control of the extraction connection, the full extraction capacity is moved between the drilling head and main spindle, depending on what is being used at the time.



Compressed air nozzle/spraying unit

Mounted onto the main spindle to optimise milling work.

Tooling positions and space requirements



Symbolic image

	profit H200 13.33*	profit H200 13.33	profit H300 16.33	profit H300 16.53
Height [H]	2,300 mm	2,300 mm	2,300 mm	2,300 mm
Length [L] with bumper	-	6,588 mm	6,588mm	8,573 mm
Width [W] with bumper	-	3,493 mm	3,642 mm	3,642 mm
Length [L] with light barrier	5,838 mm	6,323 mm	6,338 mm	8,323 mm
Width [W] with light barrier	4,290 mm	4,290 mm	4,440 mm	4,440 mm
Length [L] with safety mats	-	6,323 mm	6,338 mm	8,323 mm
Width [W] with safety mats	-	4,235 mm	4,385 mm	4,385 mm
Weight (depending on equipment, without packaging)	3,650 kg	3,650 kg	3,900 kg	4,300 kg

*Special equipment



1 12 position linear tool changer

On the left hand side of the machine including one pick up place for aggregates.



2 4 position linear tool changer moving in the X-axis direction

Tool changer for 4 tools or aggregates, mounted to the gantry. Ensures quick tool changes even when working in pendulum operation.



3 18-position rotary tool changer mounted to the outrigger

The rotary tool changer with 18 tool positions is mounted to the back of the gantry and moves together with the gantry along the X-axis. The 18-position rotating tool changer, keeps tool changing times to the bare minimum.



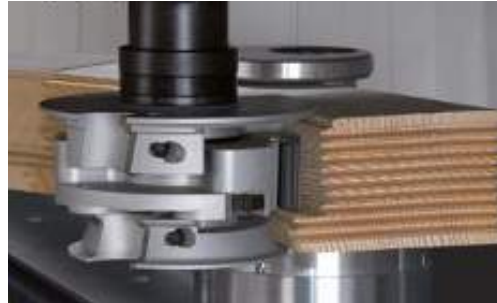
4 12 position linear tool changer mounted to the machine chassis

The tool changer with 12 tooling positions improves productivity and creates more space for additional tools on the machine.

Application examples



Steps/staircase production



Solid wood manufacturing



Frame processing



Template milling



Cabinet production



Working with veneer fences

Workpiece examples

Unlimited processing possibilities, for a variety of shapes and uses

The high flexibility and quick operational readiness of the profit H200 and H300 CNC machines are supported by Format-4 programming software. They ensure, that every individual workpiece, whether easy or difficult to produce, can be produced quickly, economically and profitably. The Format-4 programming software with numerous functions is particularly efficient, multifunctional and self-explanatory.



Various materials:

Plastics, Alucobond, mineralised substances, packing material

The variable speed control (max. 24,000 rpm) and the variable feed rate in combination with the right tool, guarantee outstanding results, even when processing plastic. Regardless of whether it is thin workpieces on a template or heavy workpieces, Format-4 covers everything.

