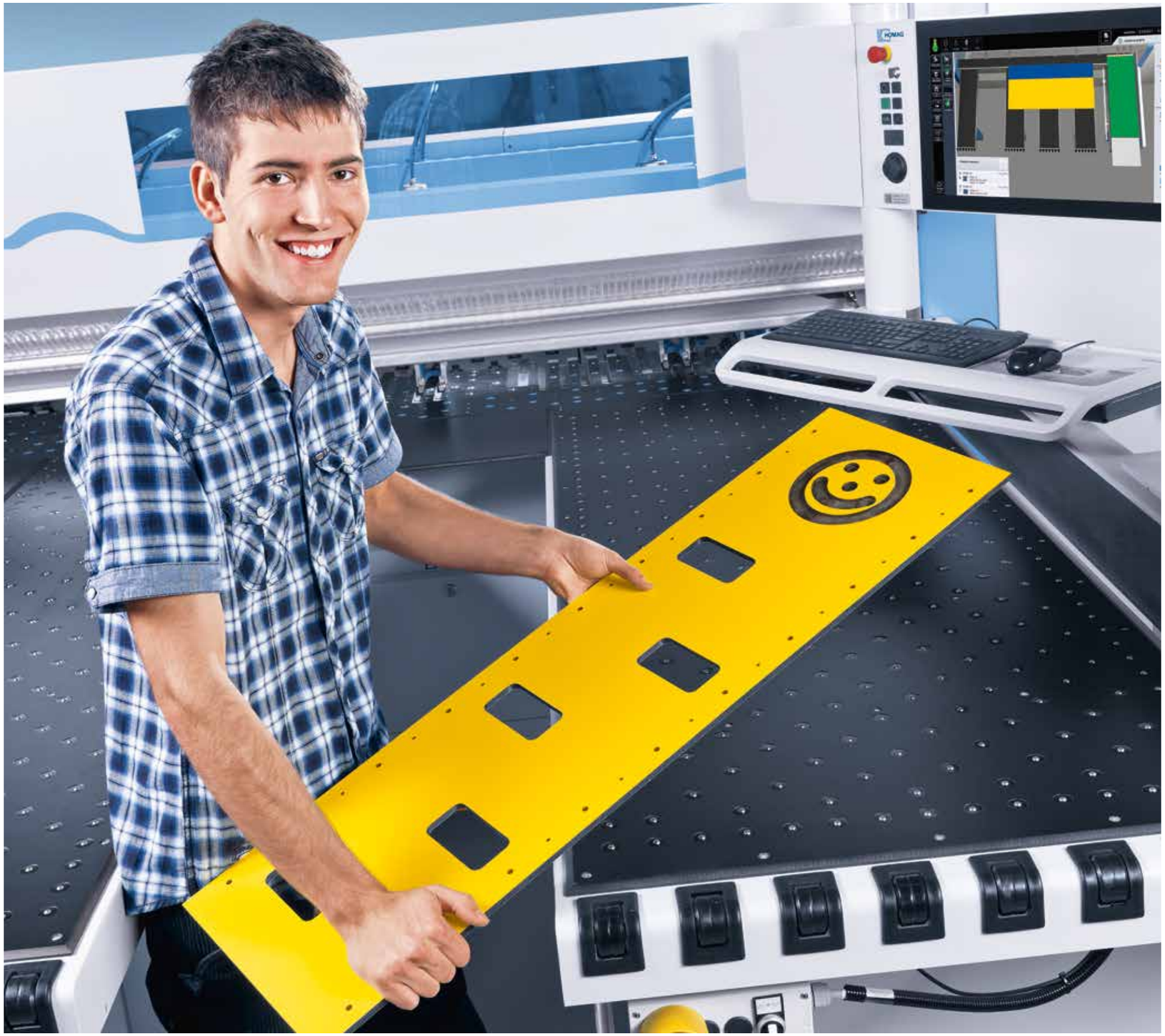
HOMAG

Sawing, drilling, routing – HPP 300 multiTec



HPP 300 multiTec – the efficient solution for builders of facades and partition walls

The HPP 300 multiTec panel dividing saw completes three fully automated processing steps in a single pass: sawing, drilling, and routing. What is the advantage? This allows you to produce complete and ready-to-assemble elements with a high level of precision on just one machine – without having to change station. In short: With the HPP 300 multiTec, as a builder of facades and partition walls you get exactly **YOUR SOLUTION.**

Find out more here: **www.homag.com**

VIDEO:

HPP 300 multiTec

Contents

“It’s as if the HPP 300 multiTec was tailor-made for facade construction thanks to its versatility and rapid processing capabilities, whether it be fiber-cement, wood, aluminum composite or HPL panels.”

Walter Leopold, owner of Holzbau Leopold GmbH & Co. KG

multiTech technology – intelligence and precision working together

The whole is more than just the sum of its parts — this is the motto under which the Homag saw professionals developed a 3-in-1 solution that is technically unique: the HPP 300 multiTec. Here are its main features at a glance.

HPP 300 saws

The HPP 300 automatically takes on cutting unprocessed panels. A program fence with clamps positions the material at the cutting line. It is held there by the pressure beam and is precisely cut.

“The HPP 300 multiTec is a saw that can drill and rout in one single pass, saving time and money. We have developed the HPP 300 multiTec for builders of facades and partition walls and for anyone who requires accurate and clean drilled holes in a panel. Thanks to the HPP 300 multiTec, these customers now no longer have to use additional CNC machining. There is also no need for post-processing on the construction site.”

Christian Galambos, software engineer at HOMAG

Illustrations may show the technical principle but not the precise machine variant described.
For example, further optional features may be shown.

Separate pressing and hold-down system

The program fence with clamps grips the panel to be processed and positions it on the multiTec unit for drilling or routing. There it is fixed in position by a special pressing and hold-down system with integrated extraction device before being processed from below.

The drilling and routing unit

The innovative multiTec drilling and routing unit is integrated into the rear machine table of the saw below the table level. The drilling unit has nine drilling spindles. You can use drill diameters between 2 and 35 mm. There is also a routing unit. The saw uses the cutting pattern to automatically determine which unit is to be used.

THE HIGHLIGHTS

- **Fully automated sawing, drilling, and routing**
- **Precisely manufactured, ready-to-assemble elements**
- **Faster production due to significantly reduced processing times, as processing on the CNC machine is not necessary**
- **Any dust generated does not settle on the panel**
- **Software-controlled with numerous expansion options such as cutting plan optimization using Cut Rite software, or CADmatic functions such as “material-dependent parameters” for automatic adjustment of the saw to the respective panel material**
- **Suitable for almost all panel materials made from wood and plastics, as well as panels made from plaster and composite materials**
- **More ergonomic and precise work than when processing with circular saws or vertical saws**
- **Due to the elimination of current conventional handling processes, the risk of damage is significantly reduced**

HPP 300 multiTec – saves effort, time and costs along the entire line

With multiTec, you can produce ready-to-assemble elements in a single pass. There is no need for you to change machine, which saves a lot of panel handling, nor to carry out error-prone drilling work on the construction site.

WITHOUT MULTITEC: VERSION 1

Unprocessed panels stack

Cutting on the saw

Destacking onto pile
Parts must be labeled here to ensure that working steps are clear for the CNC.

Drilling/routing on CNC

Destacking onto pile

Transport parts to construction site

WITHOUT MULTITEC: VERSION 2

Disadvantages: Handling (risk of damage), cleaning of parts etc.

Unprocessed panels stack

Drilling/routing on CNC

Destacking onto pile

Transport parts to construction site

WITH MULTITEC

Unprocessed panels stack

Cutting on the saw
With drilling and routing

Destacking onto pile
Label parts when desired

Transport parts to construction site

“Drilling on the saw is up to 60% cheaper than conventional drilling. In addition, the HPP 300 multiTec is already significantly cheaper to purchase than, for example, alternative metal processing machines that are required.”

Walter Leopold, owner of Holzbau Leopold GmbH & Co. KG

Mr. Leopold, why did you opt for the HPP 300 multiTec?

“I had heard of the manufacturer but had no experience of its products. What particularly impressed me about the HPP 300 multiTec was its high processing speed. Another great advantage is the minimal amount of dust produced – this is partly due to the powerful extraction system, but also because the holes are drilled from below meaning that hardly any dust remains on the panel.”

What materials can you process with the saw?

“80 percent of our work with the HPP 300 multiTec is for processing facades and 20 percent of its use is for timber work. When building facades, we process a wide range of materials. For example, we use fiber-cement and HPL panels made of plastic laminate, as well as aluminum composite panels, and of course all types of timber. Our multiTec masters this diversity effortlessly.”

What is the cost of drilling a hole?

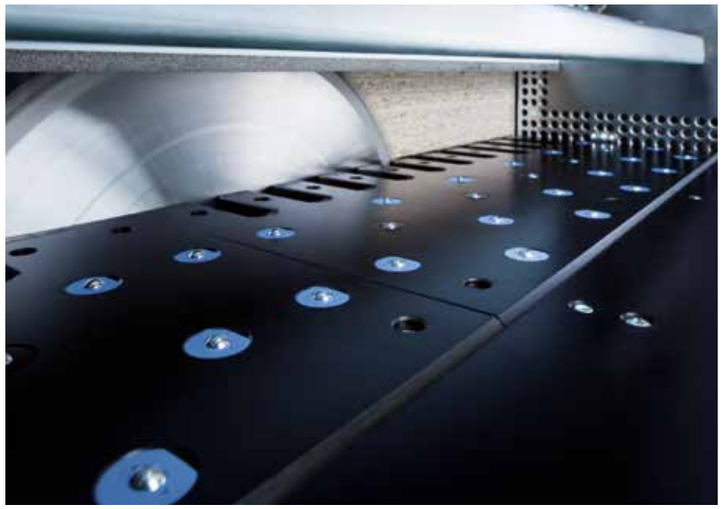
“The production costs for a manually drilled hole are approximately EUR 1.10 to 1.20. Drilling with multiTec is now fully automated and we have halved our cost per drilled hole – a hole only costs around 60 cents now. And there are other decisive advantages: For example, I no longer have to clean the surfaces of the machined parts after processing; they come out of the machine clean. We used to drill panels at the construction site – now when the panels leave they are ready for assembly. This speeds up the assembly process and means that production and assembly aren't at the mercy of the weather.”

State-of-the-art equipment

Horizontal panel dividing saws from HOMAG are the epitome of state-of-the-art technology for cutting. Here, we will show you some of the highlights. Further information is available in the “3 series” brochure as well as in our current “Handling” and “Software” brochures.

“With the HPP 300 multiTec you get an overall package that is technically innovative. In addition to state-of-the-art drilling and routing technology, it offers almost all optional features of the tried-and-tested 3 series. This means you can customize your saw from A to Z as required.”

Martin Kress, Product Manager for HOMAG



dustEx*

The machine table is equipped with innovative dustEx combi-nozzles that guide dust and chips directly to the extraction system on the right-angled fence.

Cutting gap closers*

Open and close automatically during the machine cycle, preventing narrow strips or routings from getting caught in the cutting line.

Dust-trap curtain on both sides*

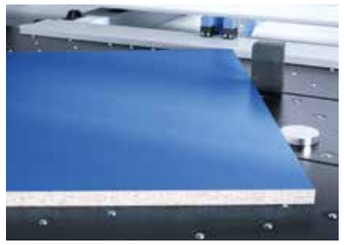
- Protects operators from dust
- Improves extraction
- Ideal for dust cuts
- Attached to the front and rear of the pressure beam. Dust-trap curtain only at the rear when combined with the labeler at the pressure beam

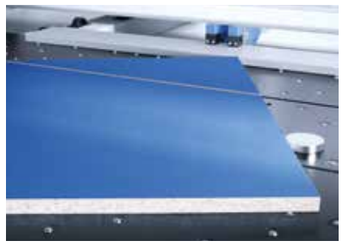
Plaster package

With the plaster package, even the most demanding of plaster materials can be processed smoothly and accurately.

Clamp activation*

Protects panel materials with sensitive or protruding edges and reliably prevents damage.





Manual angle cuts*

The angle cut device allows you to control angle cuts using the CADmatic control software.

VIDEO:

dustEx

Cutting gap closers

VIDEO:

Manual angle cut

Illustrations may show the technical principle but not the precise machine variant described.
For example, further optional features may be shown.

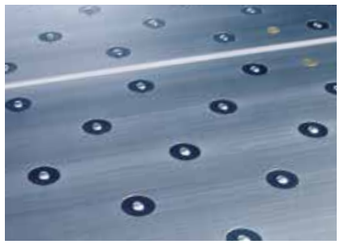
* available as an option

Leading technologies for smooth processes

From automatic feeding solutions, to the patented side pressure device for short cycle times, to fully automated labeling: With the HPP 300 multiTec, you will benefit from numerous HOMAG technologies to improve efficiency and ensure smooth processes.

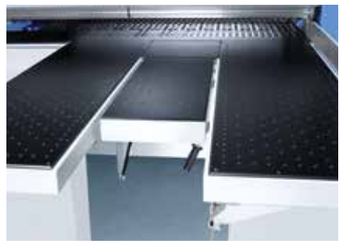
HOMAG patent:
Central side pressure device

- Integrated directly in the saw carriage – shortens cycle times by up to 25% in comparison with conventional systems
- Infinitely variable adjustment of contact pressure – depending on panel thickness. This allows even thin panels, laminates or sensitive materials to be processed perfectly. Another key feature is the new control system for the contact pressure, which is dependent on the book height: the taller the book, the greater the pressure



Aluminum-anodized table surface*

The special coating ensures exceptionally gentle material handling. Ideal for materials with highly sensitive surfaces.



Tiltable air cushion table*

- Prevents thin materials from sagging
- Increases the work surface
- Primarily for large panels
- Folds down for easy access to the cutting line

VIDEO:

Central side pressure device

Illustrations may show the technical principle but not the precise machine variant described.
For example, further optional features may be shown.

Manual or fully automated labeling*

Effective part identification ensures smooth processes. The manual label printer (no image) allows you to print customized labels directly at the saw and design them to include bar codes, text and graphics if required. If you also use our Cut Rite optimization software, the material goes directly to the next processing step with printed instructions. In this way, you can integrate the saw perfectly in your production flow.

The fully automated labeler near the pressure beam (image), and therefore in your field of vision, goes one step further. Here, the finished parts/books are automatically labeled. It makes no difference whether you feed the panels from the front or the rear. If desired, the position of the label can be individually controlled.

- Suitable for panels, offcuts and finished parts
- Gives precise details of the destacking location
- Gives precise instructions for further processing
- Saves time
- Minimizes errors
- Guides the operator

Additional start-stop button*

Allows the program sequence to be started independently of the operator control panel. Equipped with an emergency stop button.

Grooving and turbo grooving*

With these functions, you can save a full work step in post-processing. This is because your saw will also groove the panel material. The turbo grooving, or kerfing, option completes the grooves significantly faster than a processing center. During this process, the blade moves back and forth and cuts the grooves in both directions of travel, meaning grooves are formed at maximum speed.

Automatic feeding*

HOMAG offers various feeding solutions from a simple gantry to complex storage control connections, providing the optimum solution for everyone.

- Storage, feeding and sawing are perfectly tailored to each other
- Ergonomic handling – even with just one machine operator
- Easy to use

Learn more about automatic feeding in the “Handling” brochure.

Fully automatic labeling

Kerfing

* available as an option

The software makes the difference

Digitalization and networking open up the possibility for enormous saving potentials and can massively improve efficiency during production. To allow you to benefit from this when working with timber or constructing facade and partition walls, we can offer you the right software solutions.

Construction software

Are you already using a CAD/CAM software? Then you are no doubt mostly constructing whole projects and are coordinating these with your customer.

.btlx/.wup

NEW: Innovative COBUS NCAD interface

COBUS NCAD filters your construction data, retrieves the relevant information and uses this to generate the data for the subsequent production process at the push of a button.

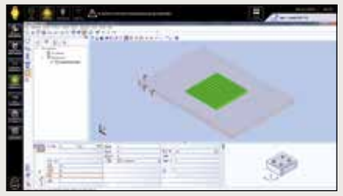
COBUS NCAD also determines the necessary file format such as: .mpr for woodWOP, .xls(x)/.csv for Cut Rite or .wup for WEINMANN. The interface knows which data is needed by which machine or software, and generates it automatically. Even better: If the appropriate rules are stored, COBUS Workplan even decides independently which parts are produced on which machine.

This means tasks that may previously have regularly taken several hours now only take a few seconds in the work preparation stage. Spontaneous plan changes are easily achieved in seconds.

.mpr/ .mprx

.csv or .xls (.xlsx)

.wup



woodWOP

woodWOP is the tried-and-tested HOMAG software that allows you to perform all CNC programming. woodWOP is used by the HPP 300 multiTec saw for drilling, undercut holes and routing cut-outs or pockets.

.mpr/ .mprx

.mpr/ .mprx

HOMAG CNC processing center

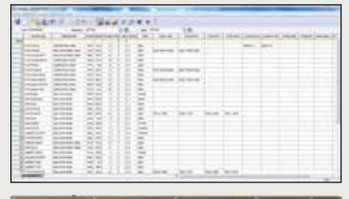
Cutting pattern creation and optimization in the office

For decades now, we have been providing more performance and efficiency in panel sizing technology with our proven Cut Rite optimization software.

- Optimized project control
- Efficient cutting processes
- Full control of costs
- Faster calculations

You can use various data for the Cut Rite parts list:

- Manual input
- Insert woodWOP files
- Insert from the part library
- Insert from .dxf
- Insert from the machining library
- Import from .csv, .xls(x), etc. with up to 50 variables
- Lists can be edited and processed as needed



.saw

HPP 300 multiTec with CADmatic 5

Thanks to the new HOMAG CADmatic control 5 software, the HPP 300 multiTec is simpler and more intuitive than ever before.

- 21" full-HD monitor with multitouch display in widescreen format
- The new 3D assistance graphic assists the operator
- Standardized HOMAG Group powerTouch user interface
- Simple handling via tapping/swiping (touch functions)
- Graphically supported diagnostics
- Permanent access to all the functions for sawing, drilling and routing

WEINMANN machines for the timber work industry

An overview of the HPP 300 multiTec

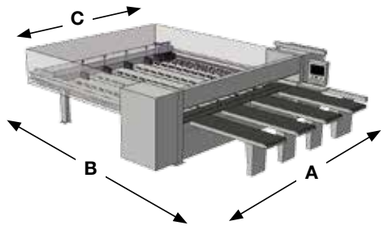
Size, performance, equipment: Here you can find the most important technical data for the HPP 300 multiTec at a glance.
Want to find out more? Then just ask your HOMAG sales advisor. They will be pleased to give you more details.

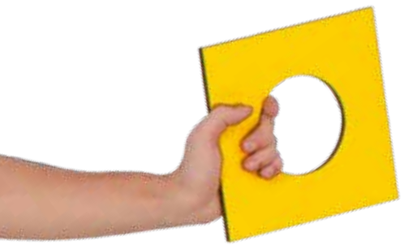
TECHNICAL DATA*	
Saw blade projection (mm)	80 (optional: 95)
Cutting lengths (mm)	4300/5600
Program fence speed (m/min)	up to 90**
Saw carriage speed (m/min)	up to 130 (150 as an option)
Main saw motor (kW)	50 Hz: 11 (18 or 24 as an option) 60 Hz. 11 (21 or 28 as an option)
Scoring saw motor (kW)	1.5 (2.2 as an option)
Average total air requirement (Nl/min)	140
Required compressed air supply (bar)	6
Suction (m^3/h)	4400 for cutting length 4300 (30-32 m/sec) 6000 for cutting length 5600 (30-32 m/sec)
Working height (mm)	920
Air cushion tables (mm)	4/5 x 2160

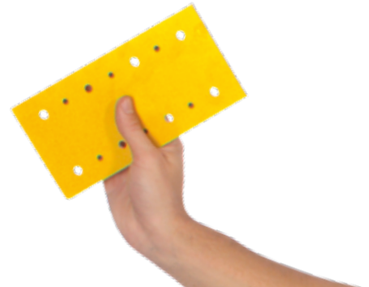
TECHNICAL DATA FOR THE DRILLING UNIT	
Travel speed X axis (m/min)	45
Travel speed Z axis (m/min)	20
Number of vertical drilling spindles	9, of which 3 are in the cutting direction, 5 in the program fence direction, 1 corner spindle
Drilling spindle spacing (mm)	32
Drill diameter (mm)	max. 35, min. 2
Panel thickness for drilling (drilling depth is tool-dependent) (mm)	max. 40, min. 6
Book height for drilling (mm)	max. 30, min. 12
Strip width (mm)	max. 1600, min. 100

* Values refer to the standard version
** Forwards 25 m/min
*** Dim. A: incl. 64 mm. Dim. C: Standard program fence width.

MACHINE DIMENSIONS***			
	A (mm)	**B (mm)**	**C (mm)**
HPP 300/43/59	6514	9417	4786
HPP 300/56/72	7864	10,757	6136







LifeCycleServices

HOMAG LifeCycleService

Optimum service and individual consultations are included in the purchase of our machines. We provide support through service innovations and products that are tailored exactly to your company's requirements. With short response times and fast customer solutions, we can guarantee excellent availability and cost-effective production for the entire life cycle of your machine.

HOMAG finance – tailor-made financial solutions

- We offer you tailored financing proposals for your machinery or plants. Our financial advice goes hand in hand with our expertise relating to technical questions. Your personal contact person will take care of the whole process
- The benefits for you: You can invest in new technologies without delay, while remaining financially flexible

1200

service staff worldwide.

650

spare parts orders processed per day.

85.2%

fewer on-site visits due to successful remote diagnostics.

>150,000

machines electronically documented in 28 languages in eParts.

Remote service

- Hotline support via remote service for the control system, mechanics, and process technology. This results in 85.2% fewer on-site service visits!
- Mobile applications such as ServiceBoard reduce costs by providing fast assistance in the event of malfunctions via mobile live video diagnostics, online service messages, and the online eParts spare part shop

Spare part service

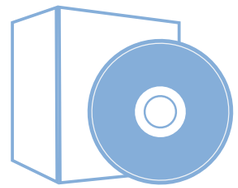
- Identify, request and order spare parts 24/7 via www.eParts.de
- Parts available worldwide through local sales and service companies, as well as sales and service partners
- Reduction in downtimes due to specific spare part and wear parts kits

Modernization

- Keep your machine pool up-to-date and increase both the productivity and product quality. This means that you can meet future product requirements today!
- We provide support through upgrades, modernizations, and individual consultations and development

Training

- Thanks to training that is precisely tailored to your needs, your machine operators can operate and maintain HOMAG machines as efficiently as possible
- You will also receive customer-specific training material with tried-and-tested exercises



Software

- Telephone support and advice from Software Support
- Digitalization of your sample parts using 3D scanning saves time and money in comparison to reprogramming
- Retrospective networking of your machine fleet with intelligent software solutions from design through to production

Field service

- Increased machine availability and product quality thanks to certified service personnel
- Regular checks through maintenance/ inspection ensures that your products are of the highest quality
- Minimized downtimes in the event of unforeseeable malfunctions due to the high availability of our technicians

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BLUECOMPETENCE Alliance Member
Partner of the Engineering Industry Sustainability Initiative

Choose the Original
Choose Success!
For the success of original technology.
A VDMA campaign

Images can also show options and are not binding for orders. Subject to change | HPP 300 multiTec | 05/2017 | E | Part number 4-099-70-0218