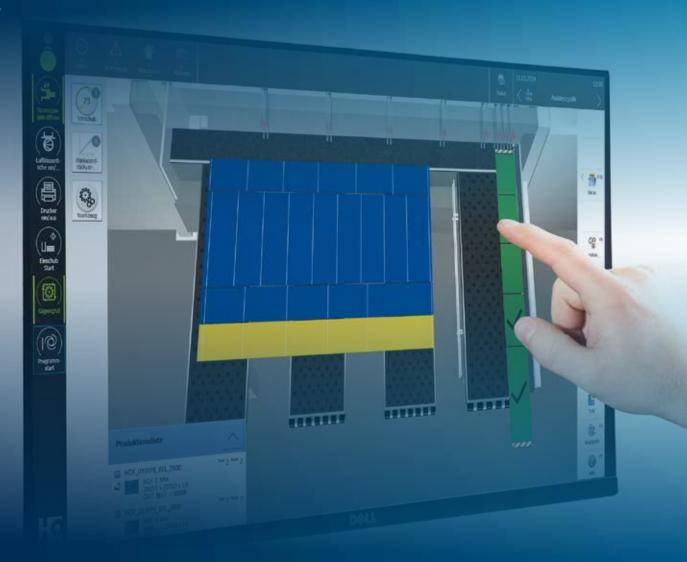
# Saw control system CADmatic

Performance tailored to your needs.

Software



HOMAG Software CADmatic | Contents 03



# CADmatic – the saw control system for woodworking shops and industry professionals

Clearly arranged, with easy-to-understand displays and intelligent operator guidance – that's exactly what the CADmatic control software has to offer. Developed by HOMAG saw professionals – and successfully in operation for over 35 years. All HOMAG panel dividing saws are controlled with this software.

# YOUR SOLUTION

# **CONTENTS**

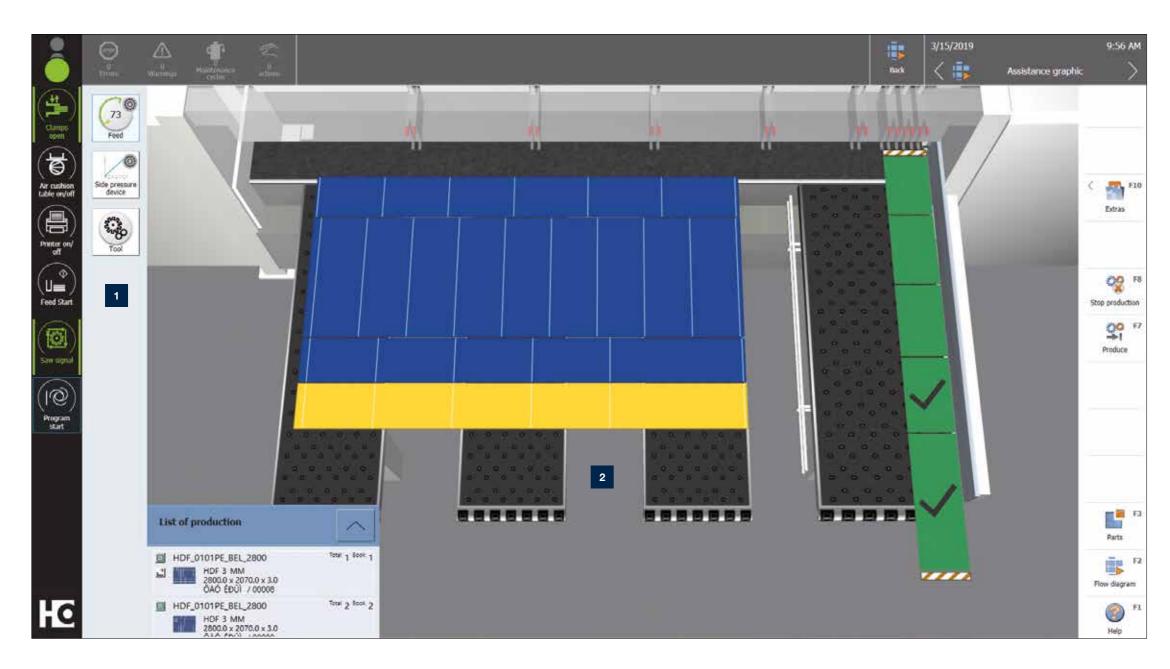
- **04** CADmatic 5
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HOMAG Software CADmatic 5

HOMAG Software CADmatic 5

# CADmatic 5

Intuitive machine control – simple, quick and clear: That's what CADmatic 5 represents. The most recent version of the control software guides the operator by means of an assistance graphic and uses a widescreen monitor including powerTouch. The machine control unit is therefore a pleasure to use. What's more, all HOMAG saws now come tapio-ready as standard, allowing direct access to cloud-based digital assistants. Find out more at **www.tapio.one** and **www.homag.com.** 



# 1

Zoom, swipe, scroll – simple gestures, familiar from smartphones, are sufficient to utilize the control software's entire range of functions. CADmatic 5 also offers many further benefits:

- Intelligent display of production readiness
- Softkey buttons
- Standardized navigation: All content can be selected via a single window.
- Uninterrupted operation thanks to software messages that appear in pop-up fields
- MMR basic for need-based maintenance and for recording key machine data



# 3D assistance graphic with preview and review feature

The 3D assistance graphic uses a realistic representation of the saw to show all work processes to be executed manually from various, selectable perspectives, until these processes are actually executed. The different coloring of the components symbolizes the various processing states. It is therefore possible to identify all necessary information for a smooth workflow quickly and easily at all times.

# Next generation of powerTouch: **powerTouch2**

Faster, clearer, easier to use: Enjoy the benefits of our further improved powerTouch user interface. We have optimized our standardized operating concept and further adapted it to our customers' needs. You can now control your HOMAG machines more quickly and more intuitively. The new, modern design is clearly structured. The innovative touch operation is designed to enable you to get the desired result easily and comfortably.

With the new powerTouch generation, you can enter information on the machine more quickly. Compared to the previous version, you can achieve a time saving of up to 30%. This is possible thanks to new features, such as autocomplete, a pop-up keyboard that can be kept open and Windows-like functions, such as the selection of common actions directly via the start button.

Our successful powerTouch philosophy – simple, standardized, ergonomic, evolutionary – systematically enhanced



- The powerTouch2 screen is clearly laid out and logically structured. You can see all the main information at a glance, but you still have all the details.
- Functional pop-up keyboard that can be kept open, including auto-complete for faster input (when you enter the first few letters, frequently used applications are suggested and you can select them directly).
- We have also improved the traffic light dialog again. You can now directly influence the machine's production readiness by selecting actions via the traffic light icon.
- 4 Enhanced "Start" menu that displays additional information (e.g. indicates how many messages there are, or has status bars that show how far the application has progressed) and allows actions to be called up directly (e.g. confirm actions without having to go to the application).

# Apps and digital assistants.

Quick and easy support in the machine environment.

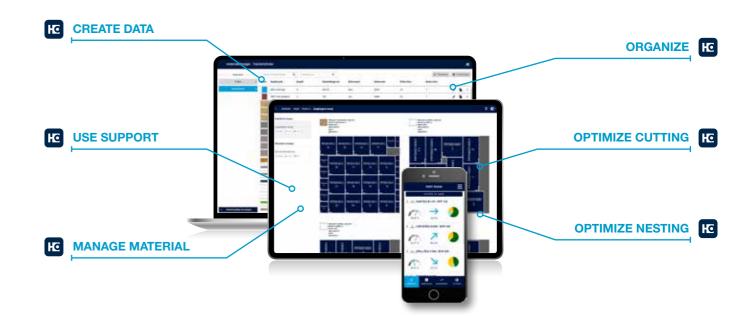
Some people still use pen and paper to create their cutting patterns. But they look at their smartphone if they want to know what the weather is like – instead of looking out of the window. We asked ourselves: why not combine the best of both? Our apps and digital solutions make your everyday work easier: machines, material, tools, cutting patterns, components – you always have everything in your pocket or on your desk.



More information at digital.homag.com

# WE HAVE DEVELOPED POWERFUL AND SMART SOLUTIONS FOR YOU:

- √ Always low investment
- √ Always up to date (no updates necessary)
- √ Always easy to use (no complex software)
- √ Always helpful



**HOMAG** Software CADmatic 5 | Apps and digital assistants 07



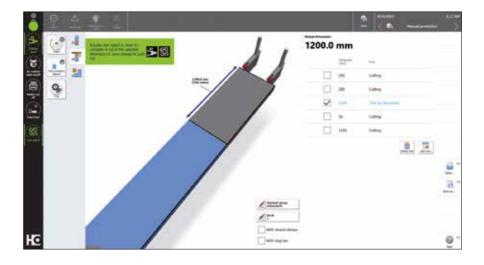
# Standard features

From cutting to length all the way to managing tools, the standard features of the CADmatic control software alone offer you an enormous variety of functions. You can then find extras – under optional features.



# **Cutting pattern input**

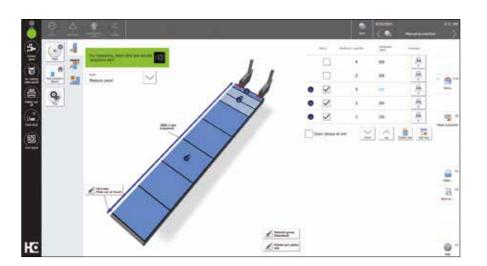
The full range: This is where you enter all the data your saw needs in order to cut the panel material.



# **Fixed position**

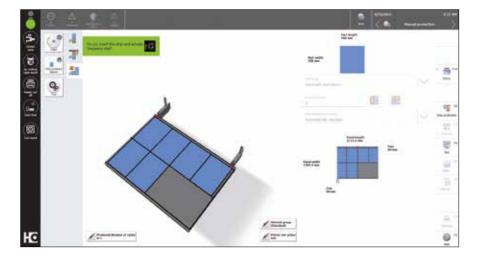
The program fence is used as a fixedposition stop, with clamps either open or

- Input lists can be saved
- Easy trimming of edges



# **Cutting to length**

Cutting to length is controlled by a number of pre-settings, allowing you, for example, to enter the book height and to specify whether the collet chucks should open at the end. In addition, it is possible to save dimension lists that have already been entered. Finally, your input data is checked for plausibility.



# Single parts

For single cuts, enter the required part dimension as well as the lengthwise and crosswise trims separately. Depending on the number of required components, the system suggests a certain layout and takes into account any available panel formats for the selected material.



# **Graphically supported** diagnostics

The graphically supported diagnostics show you immediately if, for example, an emergency stop has been activated or a service action is required. What's more, if your machine is equipped with a secure Internet connection (serviceRemote), most errors can be remedied directly online. This feature saves time and increases your productivity.



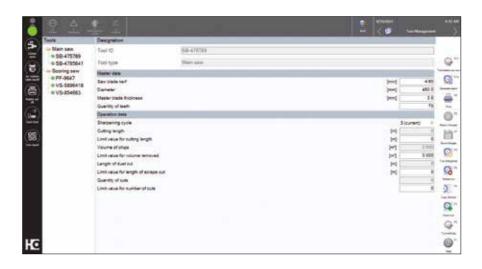
# **Cutting pattern** management

Many cutting jobs need completing more than once. The good thing about this is that any cutting patterns created at the saw are saved and can be retrieved whenever needed, saving time and costs. Furthermore, you can define individual production sequences using the program sequence feature (including parts overview). You can do this easily via the touch function.



# Parameter management

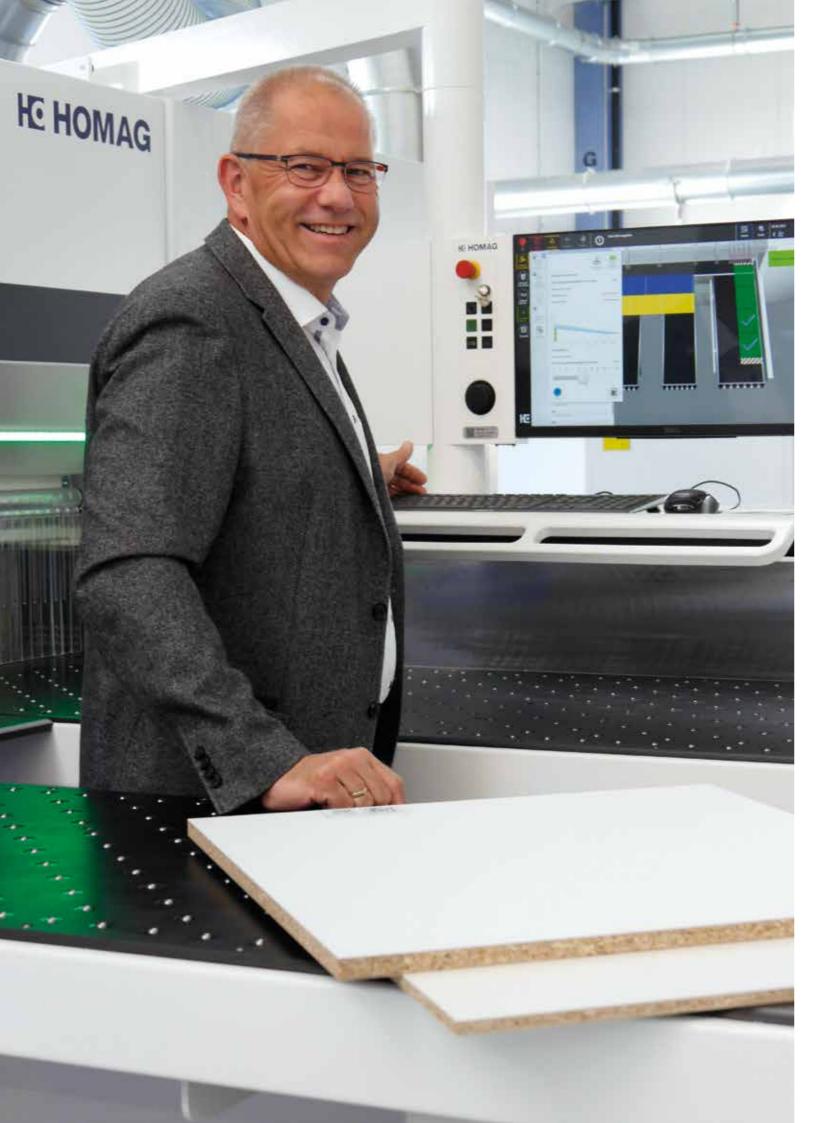
Trim dimensions, speed or acceleration: CADmatic allows you to define basic machine settings, known as material parameters. These parameters are then automatically accessed for each cutting process. For this purpose, you create a user-defined parameter list. You also have the option of changing the stored values whenever necessary.



# **Tool management**

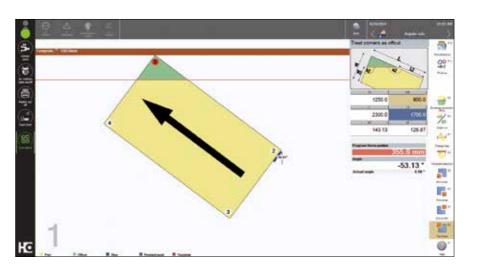
How much material have you already cut with this saw blade? Does its condition still meet your quality requirements? The tool management feature knows the exact answers to such questions and indicates when it is time to change the tool. To make use of this feature, simply enter estimated values for the specific material mix.

Do you use a number of different tools? If so, you can save the respective parameters under an appropriate name. The software then assigns the data for usage and volume to each tool separately. If a tool has to be replaced due to wear, you simply reset the corresponding counter to zero. Alternatively, tools can also be managed with twinio.



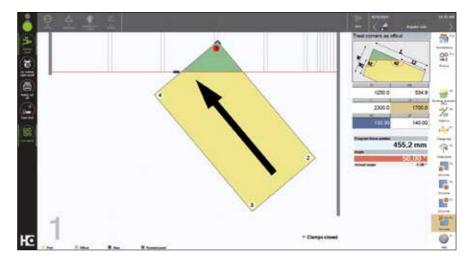
# Optional features

Special tasks and processes that go far beyond cutting require additional control options. Simply select the right options for your production.



# Manual angle cut

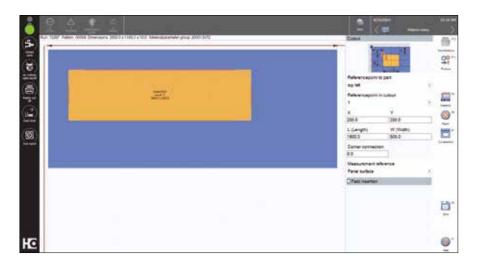
This feature allows you to control angle cuts quickly, conveniently and precisely.



# Automatic angle cut

The angle cut program allows you to control precise angle cuts either manually or automatically using a special angled clamp, depending on how the machine is equipped. This feature enables you to achieve precise results quickly and easily.



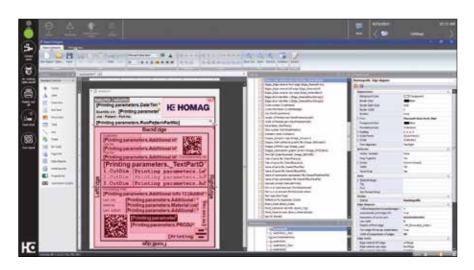






# **Cut-out and stress elimination cut**

Laminated materials warp during cutting due to tension being released. The stress elimination cut provides a solution here. Tension is released via specific pre-cuts in the material. What's more, the cut-out feature allows sections to be cut out of panels – for kitchen sinks, for example.

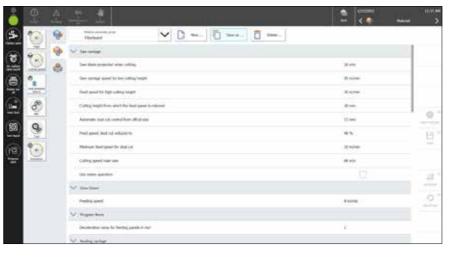


# Labeling

No matter whether single parts or entire stacks, using the "labeling" option, you can label the results of your work with all the relevant information in time with the cuts and pass data on to downstream machines.

How does it work? The layout editor allows you to define the label design and enter the required data in CADmatic. You are able to include text information as well as graphics and freely selectable

bar codes. The system will then generate the labels in perfect time with the processing cycles. Depending on the system, the labels are then attached automatically or by hand. An optional feature that sets industry benchmarks where scope for design and hardware quality is concerned, leaving nothing to be desired.



# **Material-dependent parameters**

When processing many different materials, the saw needs readjusting each time the material is changed. This readjustment increases setup time at the expense of production time. Adjustment can be automated and significantly accelerated using the add-on module "materialdependent parameters."

You only need to enter the parameter settings for each material once. These settings may include, for example, settings for the travel of the

side pressure device, for the saw blade projection or for the point of immersion for postforming material. Other parameters such as the pressure of the clamps and pressure beam or the speed can also be specified if your saw is equipped with one of these options.

When you change materials, you then only have to retrieve the corresponding profile - and your saw is automatically adjusted. This process is performed fully automatically and in the blink of an eye.



# materialManager Advanced

- Automatically optimally adjusts all connected machines to the material being cut, thereby ensuring greater performance and quality in production
- Also helps less experienced operators get more out of the machine
- Extends the service life of the tool and reduces interruptions due to tool changing
- Automatic suitability check for material-tool combination





# CADplan — cutting pattern optimization at the saw

Our motto is "get more out of it." That's why HOMAG has taken its CADplan cutting pattern optimization feature directly to the saw. The benefit to you is that you simply enter all the parts lists and panel lists for the current order in CADmatic, or import the required lists in

CSV file format. CADplan then promptly generates optimized cutting patterns, minimizing material wastage and making your company more productive. The ideal solution for small- to medium-sized orders.

# In addition to CADplan, there are other optimization options at HOMAG



# intelliDivide

Simply upload the parts list. Done! The result? A choice of several alternatives for cutting patterns and entire runs. That's how easy intelliDivide makes it.

In detail: the cloud-based optimization software intelliDivide utilizes significantly higher computing capacities than are available for locally installed optimization software and can therefore swiftly provide the user with several alternative optimization results.

# More on intelliDivide





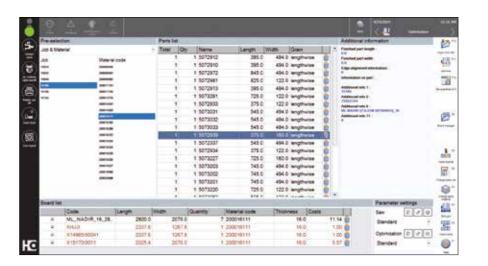
# Cut Rite cutting optimization software

Efficiency through planning: This short phrase sums up the key benefits of the Cut Rite software. With this world-leading software solution, you can optimize waste and systematically lower the overall costs for cutting.

# Highlights

- Seamless, precise and highly efficient processes ensure optimized project control
- Full cost control within the cutting process: material costs and processing time are calculated automatically when the quotation is

Find out more in the "Cut Rite" brochure.



# **Just-in-time optimization**

The just-in-time optimization feature from HOMAG goes one step further than CADplan, allowing you to import the parts lists currently required directly from the office and to process them on the saw without time-consuming manual input, and precisely when you need them. When importing these lists and processing them on the saw, if the same materials are required by different jobs, they can be grouped and optimized together. Thanks to this feature, the "just-in-time" addon module allows very dynamic, production-related cutting pattern optimization.

Any offcuts available at the saw can be entered by hand before starting production and can then be included in the optimization process. The intelligent parts management feature allows a company's entire panel stock to be managed via CADmatic - an interesting alternative for all panel-dividing saws without storage control connection.

In addition, you also have the option of importing cutting patterns that have already been optimized from the office. Data will then simply be imported from an industry-standard optimization software program, such as Cut Rite.



# Integrated camera monitoring

Especially for large panel dividing saws, HOMAG offers an integrated camera monitoring system for the rear machine table. Whenever the saw is fed, the CADmatic automatically displays the current camera image, enabling you to keep an eye on everything at all times. Furthermore, it is also possible to record the camera images for troubleshooting and workflow-optimization purposes, and to forward the images to the HOMAG Service department.



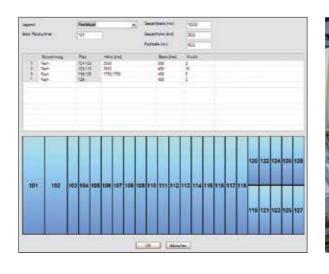
# Storage control connection and production planning

# From feeding ...

A storage system that controls the saw: The CADmatic control system features a data connection to your storage system, providing the basis for completely automated feeding. Current stock information from your horizontal, block stack or high-bay storage system is provided at the same time as production and is taken into account in all CADmatic calculations, allowing material usage to be optimized. Even offcuts are registered and recorded in the storage system.

# ... to real-time production planning

CADmatic is prepared for connection to your internal ERP or PPS product planning system. All production data is passed to the planning system in real time, allowing you to react promptly even to last minute changes in orders and take them into account for your production planning.





# Storage location management for panels and offcuts

# 1. Transparency in your offcuts store in the blink of an eye

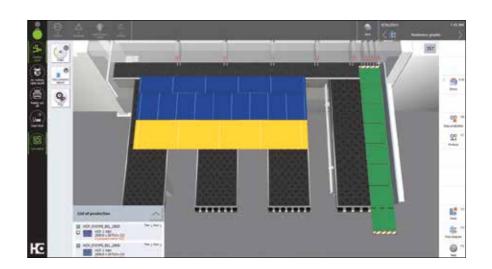
The way to transparency in your offcuts store is quick and simple. All you need to get there is:

- Cut Rite
- CADmatic 5 with the "storage location management for panels and offcuts" module
- The HOMAG storage system software integrated at the factory
- The "stock control" module for Cut Rite

# Plenty of potential for expansion

If you subsequently invest in a HOMAG storage system, the "storage location management for panels and offcuts" module can be directly integrated into the HOMAG storage software.

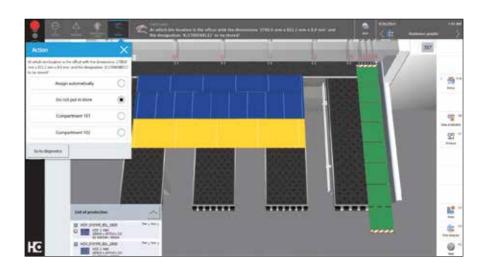
- You can adopt a customized storage strategy and sort panels and offcuts according to size, material or other criteria.
- How many panels and offcuts are there in the store? How many are moved in or out of the store on average per day? The integrated statistics provide the answers to these and other questions.
- Cut Rite groups cutting patterns together in a single run. In this way, all the panels and offcuts required can be shown at once and can be retrieved from the store before starting production.



# 2. The procedure - step-by-step

After installing the module, you must enter the length, depth and width of each shelf compartment. This is a quick and easy process thanks to the intuitive user interface.

- A label is automatically printed as soon as the offcut leaves the saw.
- The label indicates the compartment where the panel or offcut is to be stored. Alternatively, you can also manually determine the storage location via CADmatic.
- In either case, CADmatic recognizes the storage location and automatically synchronizes this information with the data in the storage system software and Cut Rite.
- If you then want to produce a new cutting pattern, there are two options available: either retrieve a cutting pattern that has already been optimized by Cut Rite via CADmatic, or create a pattern directly at the saw using the CADmatic "cutting pattern input"
- As soon as you start production, the process or assistance graphic will show you which panel or offcut you need to retrieve from which

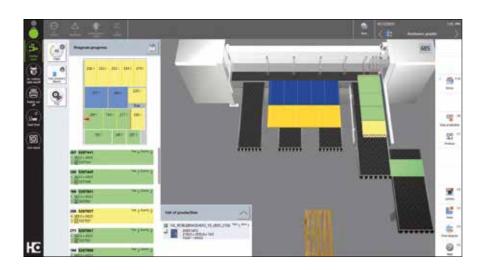




# 3. An extra for greater flexibility: the scanner package

If you do not use only your saw to process panels and offcuts, you can now benefit from the scanner package. The scanner will show whether a panel or offcut in the store is still available or already

- The operator scans the label using the scanner.
- If the panel or offcut has already been reserved for a cutting pattern, a red light comes on.
- If this is not the case, a green light comes on and the operator can take the panel or offcut – the software automatically adjusts the
- In exceptional cases, a blue light may come on and prompt the operator to enter more details.



Optimal use in combination with intelliGuide, Power Concept and the HuGo destacking carriage - fewer errors, more efficient processes and easy assignment

# Classic destacking module

Which component goes where? The answer to this question is supplied by the integrated destacking display. The single parts are color-coded in the cutting pattern and also in the assistance graphic, allowing the machine operator to clearly see which of the parts already produced have been allocated to which destacking stations.





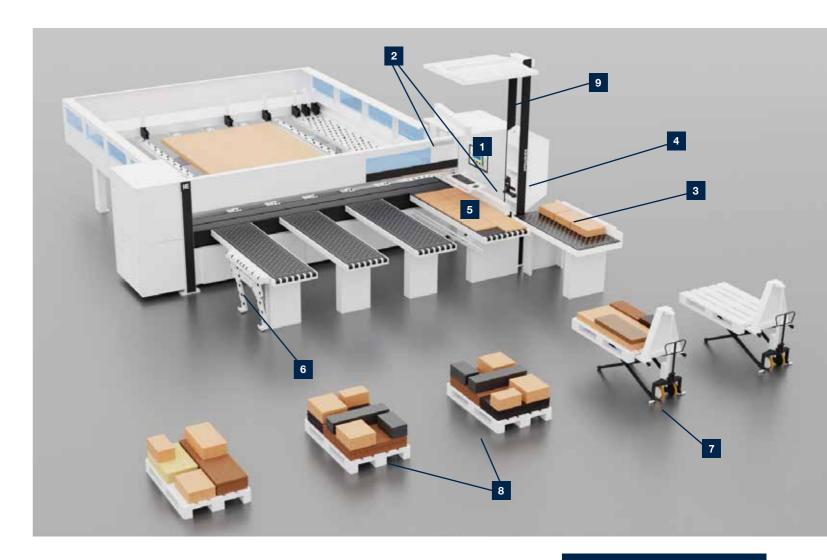
# Advanced destacking module

# An intelligent destacking concept that guides the operator

With the optional "Advanced destacking module," CADmatic 5 controls not only the cut, but also the process of destacking by the operator. The new powerTouch operating panel shows the operator exactly when and where each part is to be deposited via the monitor and on each label. This process is underpinned by an intelligent destacking concept designed to boost the efficiency of post-cutting processes enormously - for example, by creating stacks optimized for subsequent processing

# Reduces walking, space requirements and operator dependency

Thanks to the optional "Advanced destacking module," the program sequence and destacking strategy can be managed more precisely and tailored more effectively to requirements than ever before. You can specify whether stack formation is optimized for subsequent processing steps on the basis of the order or the material. These priorities can be combined with one another and weighted according to the primary objective. This process ensures clear operator guidance, reduces walking between the saw and destacking station, and ensures optimized pallet utilization with stable stack formation.



# Additional extras for intelligent destacking

- Visual operator guidance: An additional LED display indicates, at the same time as the monitor, when a cut part must be pushed onto or removed from the parts buffer.
- Parts buffering: The operator places the last-cut parts on the parts buffer until he has time to destack them. This means that the saw is not unnecessarily forced to slow down and the operator can work calmly. The parts buffer is also used to improve stack formation: The operator only places the part on the stack when doing so increases the stability of the stack. The operator is guided in this by information on the monitor and, optionally, also by an LED display at the parts buffer.
- Additional stability: To give the stacks more stability, waste parts are now also systematically used for stack formation.

- 1. Destacking software as add-on module for CADmatic 5
- 2. Label printing
- 3. Ergonomic parts buffer
- 4. Waste container
- 5. Chopping edge
- 6. Feeding and destacking aid
- 7. Scissor lift pallet truck "HuGo"
- 8. Intelligent stack formation
- 9. intelliGuide Tower (from intelliGuide Advanced)

# Optional feature: intelliGuide innovative smart operator guidance

intelliGuide is the first assistance system in the history of panel dividing technology to allow saws to respond flexibly and intelligently to the actions of the machine operator. The assistance system becomes more intelligent with each stage of expansion: from intelliGuide Classic, to Advanced, right through to Premium. So you get precisely your solution.



# MORE AT HOMAG.COM



intelliGuide

# General benefits of intelliGuide

- Intuitive machine operation
- Systematic means of avoiding errors
- Fast processes: operator and saw work in tandem and do not slow each other down
- The operator rarely needs to look at the monitor and so can concentrate on processing the cutting pattern
- Fluid, ergonomic processes for efficient and concentrated work
- Easy to change operator at any time

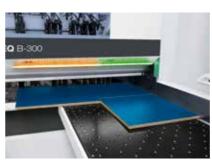




# The foundation:

# 1. CADmatic 5

intelliGuide is the result of a long period of technical evolution. It all started with the CADmatic saw control system - software that has since become indispensable. The new version of the software, CADmatic 5, is now more focused on the user than ever before. This is thanks to a new assistance graphic in CADmatic 5 that clearly shows the operator the next step they have to perform. Compared to the previous process graphic that showed all the work steps of the saw 1:1 (and can still be called up if required), this new graphic represents a 180-degree change in perspective!





# intelliGuide Classic:

# 1. CADmatic 5

# 2. LED strip at the cutting line

- Colored LED signals at the cutting line allow intuitive operation and a quicker, safer way of working
- Using the colored LED elements, machine operators can immediately see if a part has been fully processed, needs to be cut again or can be disposed of as a waste part
- Based on the LEDs that are lit up. the operator can determine whether the workpiece being processed meets the required specifications











# 1. CADmatic 5

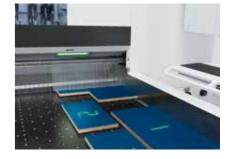
# 2. LED strip at the cutting line

# 3. Camera

- The system uses this camera to see which strip or part the operator has deposited and how it has been aligned
- If the intended part is not deposited, intelliGuide responds to the change of plan in a flexible manner
- If no further action is necessary, the saw starts working after brief confirmation. Otherwise, intelliGuide provides the operator with feedback and instructions

# 4. Illumination

- Enhances safety and quality by ensuring the workplace and workpieces are evenly lit
- Improves the appearance of the workplace and makes it even more ergonomic











# intelliGuide Premium:

1. CADmatic 5

2. LED strip at the cutting line

3. Camera

4. Illumination

# 5. Laser

- Proiects clear information regarding processing and handling directly onto the current workpiece
- Arrows, for example, indicate the direction in which a panel needs to be turned and how it needs to be positioned. An X means that the wrong part has been inserted. The trash can icon indicates waste parts
- In short: Thanks to the self-explanatory symbols, operators always know which step they need to perform next and can immediately take the appropriate action

Area	Function	CADmatic 5	available for
General			
	Display	24"	
	Resolution	1920 x 1080	
	Touchscreen	<b>v</b>	
	Machine keys	V	
	Machine controller	<b>V</b>	
Product	ion methods		
	Fixed position	v	only for saws that can be operated manua
	Cutting to length	V	only for saws that can be operated manua
	Single parts	V	only for saws that can be operated manua
	Cutting pattern input	·	, , , , , , , , , , , , , , , , , , , ,
	Pattern selection (cutting pattern management)	V	
	Pattern selection: estimation of production times	·	
Product	ion methods – optional features	•	
	Grooving program (automatic)	0	SAWTEQ B-300 to SAWTEQ B-600
	Grooving program (manual)	0	SAWTEQ B-130 to SAWTEQ B-600
	Turbo grooving	0	SAWTEQ B-300 to SAWTEQ B-600
	Cut-out and stress elimination cut	0	SAWTEQ B-200 to SAWTEQ B-600
	Stress elimination cut	0	SAWTEQ B-130
	Structure view program	0	From SAWTEQ B-200
	Angle cut program	0	Manual: SAWTEQ B-200 Automatic: SAWTEQ B-300 to SAWTEQ B-600
	PPC feedback	0	А
	Integrated camera monitoring	0	A
	Processing of finished parts	0	SAWTEQ B-200 to SAWTEQ B-400
	Special process for cutting laminate	0	From SAWTEQ B-200 single saws
	Barcode reader supported production start	0	SAWTEQ B-200 to SAWTEQ B-600
Storage	management		
	Storage control connection	0	SAWTEQ B-200 to SAWTEQ B-600
	Storage control connection in CADplan and cutting pattern input	<b>✓</b> *	
	Improved offcuts return system	<b>✓</b> *	
	Storage location management for panels and offcuts	0	A
	Storage location management for panels and offcuts (scanner option)	0	А

Area	Function	CADmatic 5	available for
Optimiz	ation		
	CADlink	0	A
	CADplan	0	A
	CADplan just in time	0	A
Process	s graphic/assistance graphic		
	Process graphic/assistance graphic	V	
	Display of part details in the cutting pattern	V	
	Process graphic/assistance graphic: preview and review feature	~	
Settings	s/parameters		
	Parameter management	V	
	Material-dependent parameters	0	From SAWTEQ B-200
	materialManager Advanced	0	From SAWTEQ B-300
	Automatic compensation of saw blade offset	V	
	Tool settings	•	
	Tool management	V	
Destack	king		
	Classic destacking module	0	For all single saws from SAWTEQ B-200 to SAV TEQ B-600
	Advanced destacking module (with operator guidance)	0	For all single saws from SAWTEQ B-200 to SAV TEQ B-600
	Destacking module systems	0	For all angular saw units from SAWTEQ B-300 t SAWTEQ B-600
Miscella	aneous		
	Alarms overview (graphically supported diagnostics)	V	
	Online data transmission	V	A
	WiFi data transmission	0	A
	Data transmission via USB	V	A
	HOMAG MMR basic	V	
	HOMAG MMR professional	0	A
	Run data evaluation with Cut Rite	0	A
Labeling	9		
	tapio ready	0	A
	Tracking of defective panel batches	0	In conjunction with HOMAG storage system
	Labeling program	0	A
	Labeling with parts graphic	0	A
	Label layout creation service	0	Α

- Standard
- Standard if the storage control connection option is enabled
- Optional
- All models

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languages

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Over 1,000 worldwide spare parts

Electronic documentation on over 150,000 machines, available in 28

We get things moving:

shipments each day

No one else has that:



Our Mission, Your Performance.

# HE LIFE CYCLE SERVICES

Improved performance, more efficient processes, faster help, assurance of availability and smarter workin

# **TEAM & COVERAGE**

Largest global service network in the industry with over 1,350 personnel.

# **INSTALLATION & COMMISSIONING**

For a smooth start, we only let proven experts manage your setup.

# **OPERATION & CONTROL**

After teaching your personnel the intuitive control system, our clever apps help to make the operator's life much easier.

# **MAINTENANCE & SERVICING**

To keep things running, we're happy to take a preventative approach. You decide how often and how intensively you want the support to be. As we all know, prevention is better than the cure.

# **eSHOP & ONLINE ADVANTAGE**

A few clicks and it's fixed. Receive exclusive advantages by ordering spare parts online, depending on market availability. shop.homag.com

# **HOTLINE & READINESS**

When there's an emergency, we're here. Direct by phone, digitally via app or video, or with on-site support. We are close to you with over 90 regional service organizations worldwide. With more than 35,000 spare parts immediately available, we can deliver 85% of your orders fast.

# **TRAINING & EDUCATION**

With classroom, live online or eLearning training, we offer flexible options to help you get knowledge. We conduct over 4,000 customer training courses every year, and we even have our own training centers in 19 countries

# **MODERNIZATION & IMPROVEMENT**

Our modernization program is tailored to your machines and processes. We can evaluate your data and situation and advise you on the next step.

# **ANALYSIS & SUSTAINABILITY**

On request, we analyze all your processes with proven tools and procedures (LeanSixSigma). We have a large, certified team of experts for this purpose.

# **FINANCING & CONSULTING**

We offer you tailor-made financing concepts worldwide. With more than 60 years of experience and a close partner network of prominent banks and insurance companies to help us to find the right solution for you, we're always transparent and reliable in processing.



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