

Operator Panel

- CADmatic control with assistance graphic
- With a 21.5-inch full HD multitouch display in widescreen format

External Control

In order to control the machine in robot mode, too
Feature Contains:

- Control panel outside the safety area
- Screen, keyboard and mouse
- Control Panel can only be used in robot mode and is deactivated during operator mode.

powerControl V2.1

Modern control system based on a Windows PC

Hardware:

- PLC control accord. to International Standard IEC 61131
- Modern PC with operating system Windows 7
- Backup manager and storage medium for comfortable data backup
- USB connection
- Digital drive technology
- Decentralized, digital field bus system
- Virus protection software
- Network compatible

Software:

- Equal HOMAG operating surface powerTouch
- Ergonomic touch operation with gestures such as zooming, scrolling and swiping
- Easy navigation for equal and intuitive operation of the machine
- Integrated tool management with acquisition of wear data
- Error diagnostics supported by true photos and video sequences

CADmatic 5 Control

(CutRite upgrade may be needed)

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 have actually been executed. The different coloring of the parts symbolizes the various processing states. It is therefore possible to identify all the information necessary for a smooth workflow quickly and easily at all times.

fixed position: The program fence is used as a fixed-position stop, with clamps either open or closed. Input lists can be saved. Easy trimming of edges.



cutting pattern input: The full range: This is where you enter all the data that your saw needs to complete complex rip and cross-cut patterns.



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 clamps 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 trims in the longitudinal and transverse directions separately. Depending on the number of required parts, 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 saw is equipped with a modem or an Internet connection (TeleServiceNet), technical support can rectify the majority of errors directly online. This feature saves time and increases your productivity.

cutting pattern management: Individual production sequences can be defined using the program sequence feature (including parts overview).



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. In order to do so, 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 blade. 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.

HOMAG powerTouch Operating Panel

The powerTouch operating panel comprises an extra-large widescreen monitor with touch function. Zoom, swipe, scroll-simple, smartphone-style movements are sufficient to utilize the control software's entire range of functions. CADmatic 5 also offers many further benefits.

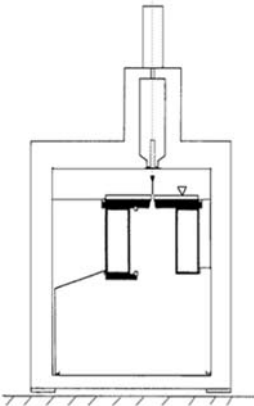
- Intelligent production readiness display
- Softkey buttons
- Standardized navigation: all content can be selected via a single window
- Uninterrupted operation thanks to software messages that briefly appear and automatically disappear using speech bubble technology
- MMR Basic for need-based maintenance and for recording key machine data

tapio Ready

- The machine is prepared for the connection to tapio Cloud
- The machine is delivered as "tapio ready"
- Please consider that the offers and services of the tapio platform only can be used when you register for this and when you activate the corresponding functionalities. Otherwise "tapio ready" functionality only establishes a connection to the tapio agency service which checks by means of the machine number if the corresponding machine is activated for using the tapio platform

Saw Carriage

- Solid steel construction for long working life.
- Main saw motor is fixed reducing the weight of raising the main saw blade, resulting in faster up/down time while reducing vibration at the blade, improving cutting speed and blade life.
- Saw carriage guided by chromed, hardened steel guide rods and hardened steel, precision V-groove rollers; HOMAG's unique "monorail" locked-in guidance system. Over the last 40 years, HOMAG's "monorail" saw carriage guide system has been proven world-wide to provide clean, accurate cuts in even the most difficult to cut, prefinished materials.
- Excellent saw blade life and cut quality due to the monorail guide system.
- Precision machining guarantees absolute parallel positioning of the guide ways in relationship to the surface of the machine bed, hence to the panels being cut, which prevents the scoring saw from running untrue.
- Saw carriage guides are positioned closer to the cutline than on any other saw, eliminating any effect that the drive system vibrations could have on the cut quality.
- Automatic cutting height adjustment provides optimal blade exposure.
- Automatic continuous cutting length control by sensor provides optimal saw carriage travel distance, regardless of strip width
- Cutting speed infinitely variable; adjustable from control panel.
- Rack and pinion driven via AC servo motor.
- Scoring saw adjustment from control panel during operation. Safe and fast for the operator.
- Extraction via sawdust channel.
- Tool tracking software sets the scoring blade to its last position minimizing adjustment.



Pressure Beam

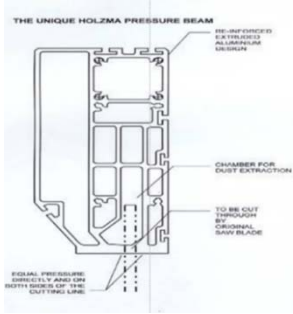
- Minimum opening for blade passage to exert pressure right at the cutting line, where it is needed.
- Guided equally on both sides by racks and pinions, which guarantee that the pressure beam remains parallel, even when cross cutting a single stack of narrow strips.
- Pressure applied equally on both sides of cutline resulting in superior cut quality.
- Optimum extraction of sawdust by means of an extraction outlet and a separate extraction channel.
- Pressure beam opening defined by book height, saving distance traveled and reducing time lost.

Automatic Side Pressure Device

- Integrated into saw carriage.
- Precisely positioned by the saw carriage to reduce cycle times.
- Pressure infinitely variable.
- Automatic positioning via sensor, no pre-adjustment required.
- Quick alignment for single strips.
- Double alignment for multiple strips
- Alignment width: Min. 0 mm -Max: complete cutting length of machine.
- Heavy steel right angle fence is part of the machine frame leg for consistent, square cuts.

Clamp-Equipped Program Fence

- AC servo drive electronically controls the program fence for quick, accurate positioning, with minimal wear and tear.
- The saw control constantly drives the program fence at the optimal speed of travel, regardless of distance traveled for short cycle time.
- Strongest clamping pressure, regardless of book height; clamp jaws feature parallel motion which keeps material in clamp for better position accuracy.
- HOMAG's unique clamp design keeps single panels or complete books of panels clamped and under control of the program fence until the rip or crosscut operation is completed.
- Upper clamp jaw is covered with a special, non-marring pad, preventing any possible damage to the surface of the panel material.
- Easy access to all pneumatic and electrical switches for easy maintenance.
- Magnetically based measuring system, completely independent from the drive system of the program fence with no wear, or even touching parts for long working life.
- +/- 0.1 mm/m positioning accuracy of the program fence (measurement does not apply to the cut parts)
- Tighter tolerance resolution, longer working life, less adjustment than with optical encoders





Machine Tables

- Rear support table consists of rails with narrow pitch rollers for friction-free panel movement and protection from scratches.
- Machine table is equipped with large wear resistant phenolic plates with precision machined slots for the clamps. Part of this machining is a T-cut profile that improves dust collection without additional CFM requirements
- Because of these plates; machine bed remains at full thickness and strength, providing maximum stability.
- Air tables at the front of the machine for easy material handling.
- dustEX System with air floatation valves produce air flow parallel to cut line in direction of right-angle fence. Assists in control and extraction of dust.
- Air floatation in machine bed to reduce drag on sensitive materials at the cut line.

General Information

Control circuit for a recommended Pneumatic Shut Off Gate for the Pressure Beam dust pipe is included. Customer to provide the blast gate.

- Minimum operating temperature +41f
- Maximum operating temperature +95f
- If the maximum operating temperature is exceeded, an optional cooling unit should be used

Shop floor requirements:

- Concrete grade C25/30
- Concrete thickness min 200 mm (8")
- Without covering layers e.g. parquet, bitumen etc.
- Customer is responsible for grouting all the machine legs with non-shrink machine grout after the assembly has been completed.
- For rear load models, maximum bundle height with machine on floor is 560 mm (22.04") or 29 sheets of 3/4" material. For taller bundles, customer is responsible for either pit or concrete risers.

Technical Specifications

panel size (maximum)		3800 mm x 3700 mm	149.61" x 145.67"
panel size (minimum)		50 mm x 50 mm	1.97" x 1.97"
cutting length		3800 mm	149.61"
working height		920 mm	36.22"
8 two finger clamps		75 mm	2.95"
		175 mm	6.89"
		275 mm	10.83"
		475 mm	18.70"
		1075 mm	42.32"
		1525 mm	60.04"
		2325 mm	91.54"
optional clamps available for		3125 mm	123.02"
		375 mm	14.76"
		675 mm	26.57"
		775 mm	30.51"
		2725 mm	107.28"
3 air tables		3625 mm	142.72"
total connected load	28.4 kW	operating voltage	480 volts
amperage (nominal)	45	recommended prefuse amps	45
air pressure required		7 bar	102 psi.
total air volume	based on 6 bar	140 NL/min.	4.94 cfm
extraction	minimum (velocity)	3800 m3/h (26 m/sec.)	2237 cfm 85 f/s
diameter of dust connectors	pressure beam	140 mm	5.51"
diameter of dust connectors	saw carriage	160 mm	6.30"
diameter of dust connectors	right angle fence	80 mm	3.15"
main saw blade	380 mm x 4.4 mm x 60 mm	diameter 380 mm (14.96")	
scoring saw blade	180 mm x 4.4-5.4 mm x 45 mm	diameter 180 mm (7.08")	

Additional Features Included in this Machine Proposal

Data Link to Storage System (Complex)

Complete communication interface between saw and stock control system according to logic "store controls saw". Off-cut communication for storing of reusable off-cuts within the storage system according to HOMAG data format definition. Data exchange through Ethernet-TCP/IP File- I/O communication and through potential-free I/Os.

Cut Rite or Cut Rite upgrade from customer's existing software will be needed

(Cut Rite or Cut Rite Upgrade not included in this scope of supply)