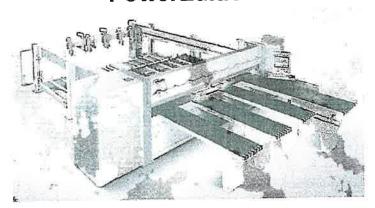


## Panel Cutter, Type HPL 500 PowerEdition

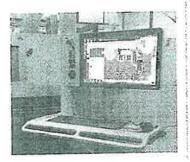


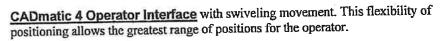
Holzma's HPL 5 series is the most innovative panel saw available in the industry with many patented and patent pending features:

- Sorb-Tech base is 3 ½ times more rigid than welded steel, making the HPL 5 series stronger than any saw built today. This strength allows for saw carriage speeds 50% faster than the machines it is replacing.
- Improved cut quality and blade life because the Sorb Tech material dampens vibration of the cutting tool 10 times better than steel frame machine. It is quieter; so, there is less operator fatigue and as a result higher productivity
- Holzma Central side aligner using the rack and pinion drive and servo system
  of the saw carriage to quickly square rips to the right angle fence right at the
  point of cutting
- Pivoting main saw motor simplifying and speeding up the up/down motion of the main saw blade for faster cutting with few moving parts improving speed and reliability
- Self-adjusting rollers on the saw carriage reducing maintenance and improving long term cut quality.

The CNC controlled machine multiple sheet cutting height coupled with the highest operating speeds available and powerful main saw motor make the HPL 5 series the machine to meet today's heavy production requirements. Equipped with main saw, scoring saw, and run by a single operator, the saw features an automatic feeding system from the rear that consists of a lift table and infeed system.

main saw motor		43 kw	58 hp
scoring saw motor		2.2 kw	3 hp
opening of clamps	max	170 mm	6.7"
main saw blade projection	max	170 mm	6.7"
saw carriage speed forward		0-150 m/min.	0-492 fpm
saw carriage speed reverse	constant	150 m/min.	492 fpm
speed of program fence	f/r	90 m/min.	295 fpm





### Hardware of the CADmatic 4

- Computer: Industrial PC, in accordance with IEC61131
- Intel i5 dual-core processor
- 4 GB RAM or higher (working memory)
- SATA 2 -250 GB hard drive or higher
- Intel HD graphics card
- 2 Ethernet interface 10/100
- Multi-touch widescreen 21" Display
- 6 USB ports
- 1 serial port
- ATI\DVI video port
- Keyboard connection
- Operating systems Windows 7 Pro Imbedded
- Homag powerTouch Control System



The CADmatic 4 is based on an industrial PC and is equipped with a Multi-touch widescreen 21" Display.

The PC provides real time machine control eliminating the need for a separate PLC. This allows the saw to operate quicker, optimize, and control all machine functions.

Holzma CADmatic 4 interface provides the most intelligent interface between the operator and the saw. The 3D graphics and intuitive menus make it easy for inexperienced people to learn how to be productive on the Holzma saw quickly, key board skills are at a minimum with the touch screen.

 Personalized control settings for each operator at log in. Each user's profile customizes such settings as language, measurement mode (decimal inch, fractional inch and millimeter) screen layouts and colors.

 The easy to understand menu gives the saw operator the tools necessary to perform the various jobs the panel saw can handle throughout the day.

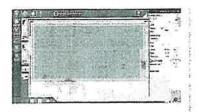
Single Part: Utilize this feature for quick and easy programming of a single part in a pattern

Fixed Position: The panel saw becomes an electronically controlled cut off saw. This can be used with fixtures for specialty cutting needs.

 Cut-to-Length: This handy capability will measure the panel during the pulled back and tells the operator how much is left after making each cut. Especially useful when processing strips.

 Edit pattern: A powerful graphic interface for manually entering complicated patterns. The graphic interface gives the operator a visual reference to his input, and eliminates the need for function codes.

Select patterns: Allows the operator to view and select patterns for cutting. The operator can select a complete job of a series of patterns or random patterns from different jobs, to tailor the sequence to specific production needs.





• New cutting patterns can be entered or down loaded while the machine is in the process of cutting a previously entered pattern.

• A large memory capacity hard drive for cutting patterns is virtually unlimited. It includes simple utilities to maintain files.

3-D Moving Graphics-the multi-touch widescreen 21" monitor displays the cutting sequence in real time. As the cutting of each part is finished, the monitor displays the actual part information as a graphic, as well as such textual information as part description, size, and edgebanding information. This clearly displayed information allows a truly paperless operation.

Parametrically controlled saw carriage speed for narrow front or rear trim cuts.
 This feature keeps the saw cutting at optimal speeds regardless of operator experience.

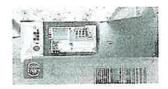
 Integrated tool tracking software – prompts operator when to change blades, and improving blade life

• The CADmatic speaks your language: multiple languages available: The control can be configured to have your language displayed when you log in.



Holzma's Cadmatic Control has extensive standard reporting features. The MMR records important production figures; such as, output of parts, time use per day, number of sheet cut, and travel length of rip saw. Maintenance display and tracking are standard. The machine prompts the Operator when the saw needs maintenance. The operator logs in that it has been performed; so, there is accountability. Errors are first displayed in plain text. The CADmatic 4 maintains a file of the last 15 errors to occur on the machine. This feature helps to track and fix small problems before they become serious. The ability to review in real time the actual status of inputs or outputs along with the status of the switches is available on the screen of the Cadmatic. Additional screens show the status of the counters. Counters show the programmed position of such moving components of the saw as the saw carriage or the program fence, which can be compared to the actual position. The onboard software allows for remote diagnostics from the technical support team to speed the troubleshooting process.





#### Homag powerTouch Control System

#### <u>Equal</u>

- Consistent control and design elements used across all Homag Group machines.
- The basic structure of the screen is the same for all machines
- The fact that users can transfer their knowledge about the operation of one machine onto other machines reduces training cost





#### Easy

- Important machine status and messages can be seen at a glance
- Color coded assistant shows whether the machine is production ready
- Intelligently designed icons and touch design makes it easier for less experience operators

#### **Ergonomic**

- Operating panel with Multi-touch widescreen 21.5 Display
- Ergonomic touch operating with gestures such as zoom in, scrolling and swiping
- Simple navigation for standardized and intuitive operation of the machine Evolutionary
- The blending of state of the art technologies and modern design provides premium operability of the machine control.
- Machine data capturing for operating analysis (e.g. number of pieces, production time, and basic maintenance)

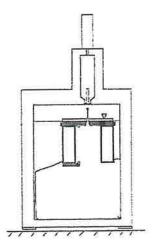
### Lift Feeding System

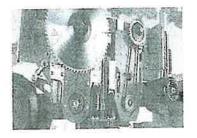
- Electro Hydraulic four column lift with a capacity of 7 tons.
- Lift is guided at four corners by solid steel columns. Accurate infeeding assured.
- Easily leveled since neither spindles nor chains are used.
- Lift platform is equipped with driven heavy-duty roller track running lengthwise.
   Center to center spacing of the rollers is 198 mm (7.75").
- Features forklift cutouts for feeding or unloading the lift from the rear.
- Enter the required number of panels per book and total number of panels required and the infeed system automatically controls the infeeding even when changing loads
- Infeeding executed with two (2) Holzma patented Micro-Infeeds. Each unit
  works independently and is equipped with an electronic measuring device to
  determine exact book height. They are located in front of the program fence; so,
  no reverse motion of the program fence is required.
- Micro-Infeeds are the best solution for thin and wavy bundles of material.
- Two-alignment devices set in the rear support table press the panel or book of panels into the clamp jaws for perfect aligning, permitting minimal trim cuts.

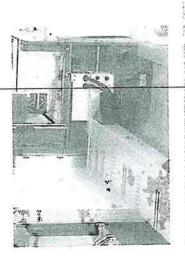
#### **Rear Machine Tables**

- Rear support tables consist of Holzma's high quality aluminum Combi-profile rail system.
- Equipped with narrow pitch rollers for friction free panel movement. Gentle material handling for panels with sensitive surfaces.









### Saw Carriage

- Heavy solid rigid steel construction.
- Lifetime resistance to deformation
- One-half ton of mass for long working life.
- Saw carriage guided by chromed, hardened-steel guide rods and hardened steel, precision V-groove rollers-Holzma's unique, "monorail" locked in guidance system.
- Over the last 40 years Holzma's "monorail" saw carriage guide system has been proven worldwide to provide clean accurate cuts in even the most difficult to cut pre-finished materials.
- Excellent saw blade life due to the Sorb Tech base and monorail guide system.
- Precision machining and Sorb Tech base guarantees absolute parallel positioning of the guide ways in machine bed, hence to the panels being cut and prevents the scoring saw from running untrue.
- Saw carriage guides positioned closer to the cutline than on any other saw coupled with the Sorb Tech base eliminates any effect drive system vibrations could have on cut quality.
- Main saw raises faster because the patented pivoting motor is not raised the motor, thus reducing the weight, and further reducing the overall cycle time.
- Automatic, continuous cutting height adjustment providing optimal blade exposure, regardless of book height.
- Automatic, continuous cutting length control providing minimal saw carriage travel distance, regardless of strip width.
- Cutting speed infinitely variable; adjustable from the control panel.
- Drive via AC servo-motor and rack and pinion drive
- Patented quick saw changing "Power Loc." system on both main saw and scoring saw. With high axial gripping power. Simple operation, working without compressed air.
- Scoring saw adjustment from the control panel during operation. Safe and fast for the operator.
- Extraction via saw dust channel
- Tool tracking software sets the scoring saw blade to its last position minimizing adjustment.

#### Pressure Beam

- Minimum opening for blade passage to exert needed pressure right at the cutting line, for perfect clamping of the boards to the machine table.
- Guided equally on both sides by racks and pinions, which guarantee that the pressure beam has the same contact pressure over the entire cutting area.
- Additional Linear guide system on both sides to improve the alignment of the pressure beam
- Pressure beam has opening for clamps so ripping narrow strips throughout the book is possible, improving yield.

#### Pressure Beam (continued)

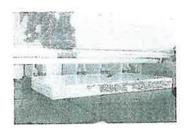
- Because the clamps control the book until the pressure beam takes over on the last cut, final part accuracy is perfect.
- Variable pressure beam control, controls opening of pressure beam depending on material/book thickness, thus reducing cycle time.
- Optimal extraction capacity due to twin engineered chambers in the beam. Each tapered chamber has an individual extraction port that to increase air velocity.

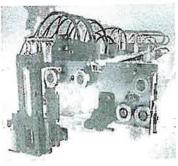


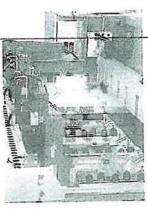
- Integrated into saw carriage.
- Precisely positioned by the saw carriage to reduce cycle times.
- Pressure infinitely variable.
- Automatic positioning via sensor, no pre-adjustment required.
- Quick alignment for single strips.
- · Double alignment for multiple strips
- Alignment width: Min. 0 mm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

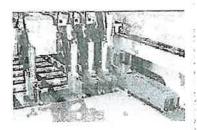
### Clamp Equipped Program Fence

- End guided rack and pinion driven. Racks mounted to solid I-beam for absolute parallel positioning and lifetime of accurate positioning.
- AC servo drive electronically controls the program fence for quick, accurate positioning with minimal wear and tear.
- Program fence reinforced, the additional strength enabling us to use aggressive ramps speeds, achieving faster cycle times.
- Program fence position, measured with a magnetically based measuring system.
   It is completely independent from the drive system of the program fence...
  - Positioning accuracy +/- .01mm/m
  - No touching parts hence no wear!
  - No maintenance needed!
- The saw control constantly drives the program fence at the optimal speed of travel, regardless of distance traveled. Shorting cycle times improving output.
- Strongest clamping pressure, regardless of book height; clamp jaws feature parallel motion.
- Holzma's short, solid clamp design keeps single panels or complete stacks clamped and under control of the program fence with no negative leverage.
- Holzma's clamp jaw pulls the material to the back of the clamp eliminating slippage.
- Integrated measuring system in clamp used to measure the book being cut presetting the pressure beam during the program fence positioning time further reducing cycle time.





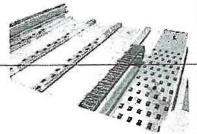






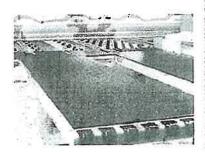
- Allows several strips with different cross cutting lengths to be cut together.
- e Performance increase up to 40%
- Considerably reduced cycle times
- Reduction of the per piece cost
- With separate drive, guidance, and measurement system.
  - One clamp (3 fingers), Power Concept can be positioned independently of the program fence.
  - Five clamps (2 fingers) with angled lifting element, positions 225/325/475/675/775 mm (8.85",12.79",18.7",26.57",30.51")
  - The standard clamps on position. 75/275/475 will be cancelled
- Moving device for second air table
- Synchronous locking (Power Concept and Program Fence)
- Strip width for power concept: max. 650 mm min. 175 mm





#### Machine Body

- Mineral cast design is 3 ½ times more rigid than a welded steel base resulting in a much stiffer cutting platform.
  - Better pressure distribution and improved cut quality.
  - Longer tool life
  - Saw carriage speeds are 50% faster, especially important on the return motion of the saw carriage to reduce cycle time.
  - 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 the 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 floatation in machine bed to reduce drag on sensitive materials at the cut line.
  - 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 tables at the front of the machine for easy material handling.



cutting length		3800 mm	149.6"
cutting width		3700 mm	145.6"
1 power clamp	not raisable	100 mm	3.93"
		225 mm	8.85"
		325 mm	12.79"
5 clamps with		475 mm	18.70"
lifting element		675 mm	26.75"
		775 mm	30.51"
4 clamps, each		1075 mm	42.32"
with 2 fingers		1525 mm	60.04"
		2325 mm	91.54"
		3125 mm	123.03"
optional -	can be located at:	175 mm	6.89"
additional 2-		375 mm	14.76"
finger clamps	1	2725 mm	107.28"
meder ommele		3625 mm	142.72"
3 air tables with	roller element	2160 x 800 mm	85"x 31.5"
lift capacity	3800 x1600 mm	149.6" x 63"	14,000 lb.
lift stack height	floor-mounted	680 mm	26,77"
International Paris	pit-mounted	880 mm	34.64"
total connected	load	55 kw	
air pressure	required	6 bar	86 lbs.
total air volume	based on 6 bar	240 ln/min.	8.47 cfm
extraction	minimum	6000 m3/h	3531 cfm
extraction	(velocity)	26 m/s	85 f/s
dust extraction	main body	1 x 200 mm	1 x 7.9"
Quat CAU ACTION	pressure beam	2 x 140 mm	2 x 5.5"
	right angular fence	1 x 100 mm	1 x 3.9"

#### **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

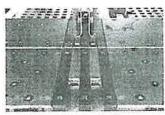
Maximum-operating-temperature-+95f-

If the maximum operating temperature is exceeded, a cooling unit should be used

#### Shop floor requirements:

- Concrete grade C25/30
- Concrete thickness min 200 mm (7.87")
- 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 is completed





### Additional Features included in this proposal

#### Pneumatic Closing Device for Saw Line

- Prevents edge trims from dropping into the cutline.
- Separately controlled.
- Approx. every 400 mm (15.75")

#### **Dust Curtain**

At the front and back side of the pressure beam. Advantages:

- Optimization of suction capacity
- Avoiding of dust interference
- Only Available for Profiline Machines

## Increase of Air Table Fan Capacity

by integrated Frequency control

#### Air Conditioning in the Switch Cabinet

#### Information Handling Package

- Includes USB transfer/ Downloading via network
- Cadmatic Label Printing Software
- Zebra Label Printer and Stand









## Automatic Base Board Outfeed from Lift- Crosswise

The program fence pushes the coverboard to the back onto the coverboard station. Consisting of:

- 2 outfeed cylinders at the program fence
- 1 coverboard station
  - Technical data: Stack height: max 200 mm
  - Manual unloading



## **Optional Equipment**

## Holzma Roller Track





1 Section Driven roller track, Type HER 3800 x 1600 mm (150" x 63") Includes protective safety fence and light barrier



### Technical Data:

Height of roller track	330 mm	13"
Diameter of rollers	108 mm	4.2"
Distance between rollers	397 mm	7.8"
Forward speed	V=12 m/min.	With gaps for forklifts
All roller tracks equipped	with anchor	bolts