

Panel Cutter, Type HPP-22

Holzma's HPP-22 is a flexible sawing center. This CNC controlled machine features fast, simple programming, and the highest speeds available in the market to meet today's varied production requirements. Designed for clean and accurate cutting of finished and unfinished panels. Equipped with main saw and scoring saw. Run by a single operator, the saw is capable of grooving, dadoing, rabbeting, and cutting angles, as well as conventional ripping and cross cutting.

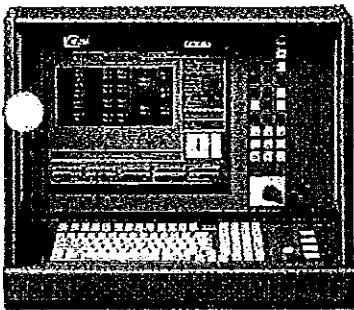
- The heavily built machine body provides a stable base for vibration free cutting.
- Holzma patented frame leg for the perfect alignment of the saw tables in reference to the material being cut.
- Positioning systems on both the saw carriage and the clamp equipped programmable fence are driven by brushless AC servo motors and solid state drives. This system is the best solution for the quick positioning and fast cutting required in today's manufacturing environment.
- The machine cuts left to right to the right angle fence.
- Saw dust collection for pressure beam and saw carriage on the right side of the machine.

Main saw motor		30 kw	40 hp
Scoring saw motor		2.2 kw	3 hp
Opening of clamps	Max.	135 mm	5.3"
Projection of main saw	Max.	140 mm	5.5"
Saw carriage speed forward		0-100 m/min	0-328 fpm
Saw carriage speed Reverse	Constant	100 m/min	328 fpm
Speed of program fence F/R		70 m/min	230 fpm

Cadmatic 3.0 Controller with double swiveling movement. This flexibility of positioning allows the greatest range of positioning for the operator.

Hardware of the Cadmatic 3 Control

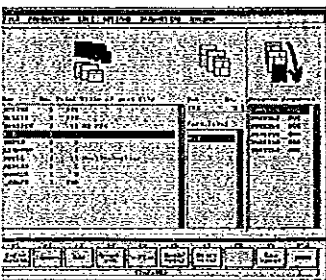
Computer: Industrial PC with Pentium 100 MHz processor
8 Mb RAM (working memory)
400 Mb Hard Drive
1.44 MB 3.5" Floppy Disk Drive
4 serial interfaces
1 parallel interface
1 Ethernet interface
1 PCMCIA slot
VGA monitor adapter
Color monitor 17"
Key board connection



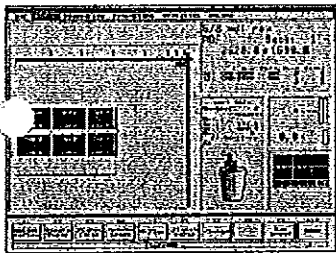
- The Cadmatic is based on an industrial PC computer system and is equipped with a 17" SVGA colored monitor and a 3.5" disk drive.
- The PLC provides real time machine control that optimizes and controls all functions of measuring and machine movement.
- PC based control provides an intelligent interface between the operator and the machine. Making it easy for inexperienced people to learn the operation quickly.
- Upon start-up of the machine, the monitor displays the sequence of operations in an operator friendly format.
- Cutting data can be entered as a single dimension, or generated by a graphic entering of cutting plans.

Job Summary

- All cutting data of jobs are stored in the memory of the Cadmatic. The display of the summary of jobs enables the operator to randomly select the sequence of cutting patterns or jobs to be cut next.
- Using a unique feature, Program Sequence, the operator can program a series of cutting patterns from the summary. The machine will follow the sequence of patterns, keeping up with the number of sheets and changing from pattern to pattern without any additional input by the operator. This keeps the operator free to handle material and offload the saw for higher production.



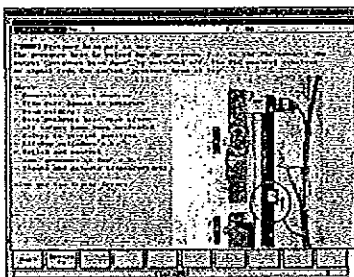
Characteristics of the Cadmatic



- New cutting patterns can be entered or down loaded while the machine is in the process of cutting a previously entered pattern.
- Memory capacity for approximately 20,000 cutting patterns. Includes simple utilities to maintain files making the operation easy for a non-computer operator.
- Moving Graphics-the 17" color monitor displays the cutting sequence in real time. As each part is finished cutting the monitor displays the actual part information as a graphic, as well text information such as part description, size, edgebanding information. This clearly displayed information allows a truly paperless operation.
- Parametrically controlled saw carriage speed for very narrow front or rear trim cuts. This feature keeps the saw cutting at optimal speeds regardless of operator experience.
- The Cadmatic speaks your language: 4 languages available: English, German, French, Spanish. Additional languages can be edited.
- Unique automatic measuring of strip length for multiple cross cutting.
- Fixed position working mode can be efficiently used to trim parts with bad edgebanding, make recuts in fewer steps, make simple cross cuts, or utilized with fixtures for angle cuts. .
- "Stressfite" - a patented Holzma advantage relieves internal stress from sheet stock material. Eliminates "banana bow", producing square components.
- Cutting patterns can be entered manually, using the quickly executed single sizing mode for simple patterns, or by entering a series of rip and cross cut dimensions. In this method, graphics assure that parts fit the sheet size.

Error Diagnostics

Holzma machines are extremely reliable but even they can have a problem. To help find problems on the machine, Holzma has incorporated a comprehensive error diagnostic system in the Cadmatic 3.0.



- Errors are first displayed in plain text.
- The Cadmatic 3.0 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.

- Supplement steps to correct the problem are displayed on the control monitor.
- Additional photo quality pictures show actual location of the errors.
- 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 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.

Automatic Grooving

- Locating the groove automatically with edge spacing.
- Allows grooving of ready cut work pieces against fixed position.
- Grooving depth programmable from control. Multiple depths can be selected during the same grooving program.

Saw Carriage

- Solid construction of fabricated steel.
- Saw blade assembly guided on both sides by precision, hardened steel guides and linear bearings; unaffected by dust and dirt, dry, no lubrication necessary.
- 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 25 years Holzma'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 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 and prevents the scoring saw from running untrue.
- Saw carriage guides are the positioned closer to the cutline than any other saw, eliminating any effect drive system vibrations could have on the cut quality.
- Automatic, continuous cutting height adjustment provides optimal blade exposure, regardless of book height.
- Automatic, continuous cutting length control, provides minimum saw carriage travel distance, regardless of strip width.
- Cutting speed infinitely variable; adjustable from the control panel

- Drive via AC motor and rack and pinion.
- Automatic adjustment of the scoring saw from the control panel. No set up times and absolutely safe for the operator.

Pressure Beam

- One piece, rigid extrusion. Extrusion manufactured with integral gussets to achieve maximum stiffness.
- Minimum opening for blade passage to exert pressure right at the cutting line, where it is needed.
- Equally guided on both sides by Racks and Pinions, which guarantee the pressure beam remains parallel, even when cross cutting a single stack of narrow strips.
- There are gaps for the positions of the clamps in the pressure beam.
- Dust protection curtain at the rear, and a combined dust protection and dust curtain at the front.

Side Pressure Device

- Located at the front and rear of the pressure beam.
- Automatic positioning via rodless cylinder, no motors to replace.
- Activated automatically during the cross cut cycle, moving towards the angular fence.
- Each device independently controlled via sensor.
- Alignment width 2200 mm (86.5").
- 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 for parallel positioning.
- 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.
- Strongest clamping pressure, regardless of book height. Clamp jaws feature parallel motion.
- Holzma's unique clamp design keeps single panels, or books of panels, clamped and under control of the program fence until the rip or crosscut operation is completed.

- Upper clamp jaws are covered with a special, non-marring pad, preventing any possible damage to the surface of the panel material.
- Magnetically-based measuring system, completely independent from the drive system of the program fence, operates without wear or even touching parts. Tighter tolerance resolution, longer working life, less adjustment than with optical encoders.

Machine Tables

- Rear support tables consist of Holzma's Combiprofile rail system equipped with narrow pitch rollers for friction free panel movement and protection from scratches.
- Machine bed is covered with phenolic, low friction plates with strips at clamp locations, to allow the clamps to cross the cutting line.
- Because of phenolic plates, machine bed remains full thickness and strength, providing maximum stability.
- Air tables at the front of the machine for easy material handling

3800 mm

Cutting length		3800 mm	149.6"
Cutting width		3800 mm	149.6"
6 clamps	clamp centers from right angle fence	80/380/880/1480/2330/3030 mm	3.2"/15"/34.6"/58.2"/91.7"/119.2"
3 air tables		2160x650 mm	85x25.5"
Total connected load		41 kw	47 hp
Air pressure required		6 bar	86 lb
Total air volume	Based on 6 bar	150 l/min	5.25 cfm
Extraction	min(max)	5000(8000) m3/h (26 m/sec)	2750 cfm(4719 cfm)