

Giben®

Giben®

Quality & Innovation

GIBEN PRESENTS THE INDUSTRIAL
PANEL SAW MODEL

Prisma 3000

SP
INDUSTRIAL LINE



This and every photograph is representative only and are not intended as a scope of supply. They are merely an aid memoir of the various innovations available for the type of machine under discussion and do not represent an offer of any kind.

MACHINE CONFIGURATION

STANDARD CONFIGURATION	
Maximum cutting length	3300 mm.
Pusher stroke	3350 mm.
Working height	950 mm.
Saw blade projection	105 mm.
Gripper opening	117 mm.
Gripper closing	1 mm.
Control software	G Drive ^{RT}
No. of grippers	5
Air Flotation tables operator side	3 @ 2000x510 mm.
Minimum thickness of boards for side alignment	10 mm.
Safety Norms	CE.
Voltage	415/50 Hz.
Optionals	/

1. Support area under the pusher equipped with no. 8 roller profiles.

2. Machine bed; the steel machine bed structure is welded by gas metal arc, and then milled and refined by CNC machines. The rigidity of the structure guarantees the optimal cut quality and high cutting speed, at the same time granting long life to the machine.

Saw blade projection	105 mm.
Main motor	11 kW. (50 Hz.)
Scoring motor	2.2 kW. (50 Hz.)
Main blade diameter	430 mm.
Scoring saw diameter	215 mm.
Saw carriage forward speed	1-130 m/min.
Saw carriage return speed	130 m/min.
Saw carriage traverse motor	Brushless
Bottom dust extraction point diameter (n.1 qty)	200 mm.
Top dust extraction point diameter (n. 1 qty)	115 mm.

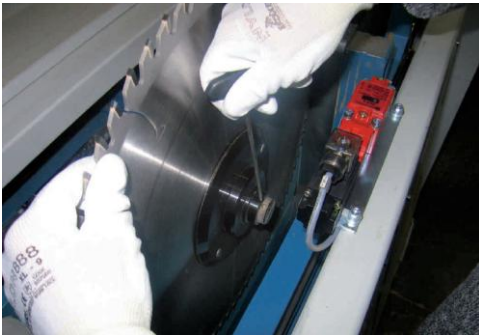


Saw carriage

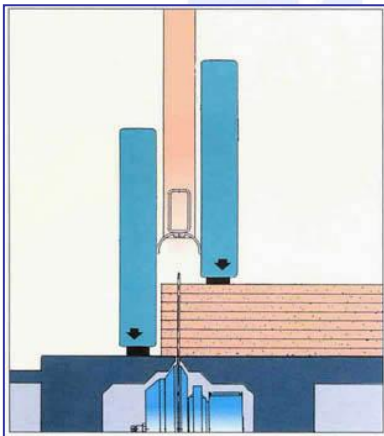
THE SYMETRIC DESIGN ATTRIBUTES OF THE STEEL MACHINE BED, the weights are distributed in the best possible manner, avoiding flexing and guaranteeing the perpendicular cut.

STEEL WORK BED WITH REPLACEABLE SECTION made from a synthetic material.

THE SAW CARRIAGE travels on the section two parallel cylindrical guide bars, positioned on a horizontal plane. Large diameter "V" rollers (86 mm), with spring loaded counter rollers, provide smooth linear travel of the saw carriage, providing optimal distribution of the loads and weights, very low contact pressure and is virtually free from wear.



Mechanical Blade change



Double pressure beam

The weight and loads acting on the saw carriage are equally distributed between all the saw carriage rollers. The saw carriage runs absolutely dry on its guide bars, and no lubrication or adjustment is required.

THE GUIDE BARS are external to the cutting line and located away from the cutting line where cutting debris accumulates. This maintains the guideways clean and free from debris and dust. The guide bars are 40 mm in diameter, the largest supporting bars for a saw carriage offered by the industry.

BLADE CHANGE is easy on both the main and the scoring saws. The flanges that secure the blades in place are mechanically locked and released. The entire process of changing blades is effortless and takes only a matter of seconds, thanks to the great accessibility of the saw carriage and the simplicity of the blade flanges.

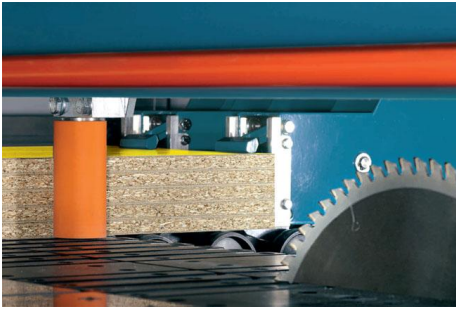
SIDE AND HEIGHT external scoring saw adjustment with blades in motion. The external adjustment avoids the requirement of opening to stop the saws rotation.

AUTOMATIC SAW BLADE HEIGHT ADJUSTMENT ensures that the proper cutting angle is achieved regardless of the height of the stack being cut. This feature eliminates the possibility of tear out on the surface of the top panel in the stack which can occur when less than a full stack is being processed.

DOUBLE PRESSURE BEAM independently acting on both sides of the cutting line. A feature that enables the continuous control of the book, even when positioning the book for the final trim cut. Furthermore, by creating an always closed channel around the entire length of the cutting line, it also makes dust collection highly efficient thereby reducing to the minimum, pollution in the vicinity of the operator, a high value safety feature.

3. Pusher for rip and cross cut operations, parallel to the cutting line equipped with centrally mounted brushless motor connected to the pinions with a torsion bar. The pinions drive the pusher on the precision ground rack mounted to the round guide on each side of the pusher bridge.

The pusher position is commanded and controlled via the Gdrive software with direct real time encoder feedback.



Single side aligner.



Example of air flotation tables

No. of grippers	5
Forward speed of pusher (according to CE rules)	1-25 m/min.
Return speed of pusher with opened grippers	85 m/min.
Brushless motor	Yes

4. Side Aligner motorised and automatic. Gdrive software controls the position via encoder and commands the downward and upward motion according to the part dimension and pusher position. The side aligner moves down automatically and aligns the book against the square fence with a full height 55 mm diameter roller. The downward motion is diagonal and does not contact the material until fully down.

When the cut cycle nears its end, the side aligner moves away and up automatically in a manner not to scratch the material edges. At the end of the cross cutting phase the side aligner moves up and away.

- Side aligner travel: 70-2200 mm.
- Minimum strip width, which can be aligned 70 mm.

5. Front side of the machine including the air flotation tables (operator side).

Air flotation tables makes material handling light and easy, which helps to keep the operator efficiency at the maximum. The air flotation tables are powered by one large capacity fan, located away from the operators area (behind the saw bed) allowing the easy handling of the parts on a single flotation table and at the same time reducing the noise and the energy consumption.

- Fan motor 2,2 KW
- No. 3 air flotation tables 2000x510 mm.

FRONT AND REAR SQUARE FENCE made of steel on the left side of the saw bed placed at 90° in respect to the cutting line.

ERGONOMIC AND EASILY ACCESSED CONTROL PANEL

The control panel and the programming unit are mounted on an adjustable support in such a manner to minimize the possibility of damage from activities such as material handling. The emergency button is also installed on the same adjustable unit.

G-Drive^{RT}



6. GIBEN G-DRIVE^{RT} overview G-Drive RT controls all the machine movements directly. The machine layout and cutting patterns are displayed, to scale, on the screen. During job execution or simulation mode, all machine operations, and panels and parts movements are displayed on the screen in real time. Direct control by G-Drive RT of all the machine functions facilitates the ultimate in diagnostic and troubleshooting, enabling fast and efficient problem solving. This is achieved, from the operators perspective, by a combination of detailed error message descriptions, suggested help solutions.

Furthermore, the Windows NT operating system allows the easy editing and/or upgrading of the diagnostic system library as necessary.

R.T.G. SYSTEM (REAL TIME GRAPHIC)

HARDWARE

Giben provides an embedded PC complete with operating system Windows XP® embedded, fit for industrial environment.

7. Safety devices of the complete system

The system described in this offer is constructed based upon the European standard "CE" including the perimeter protection fence. Any other special request for adapting the machine to any local/regional/national norm is at purchaser's costs.

- Trip bar to protect towards the lowering of the pressure beam.
- Segmented safety curtain, plastic material, to void access to the cutting line. The segmented safety curtain obstructs the cutting line during the cut cycle, furthermore benefiting the dust extraction whilst cutting.
- Saw cover opening for the blade change can be effected only when the blades are completely stopped.
- Saw carriage return can be performed only when the blades are lowered below the saw bed.

8. General Data

This equipment is manufactured by Giben International S.p.A., company with quality system certified ISO 9001.

- Voltage: Volt 415/50 Hz.
- Color stationary parts: Ral 7035 (*Giben White*)
Moving parts: Ral 5005 (*Giben Blue*).

