

Technical characteristics of the Giben Icon 1 panel saw

THE GIBEN ICON 1 "Z" is the latest production line that enriches our standard range of Giben saw centers. The GIBEN ICON 1 "Z" is a very robust cutting centre, and has been developed to meet the demands of companies with a view to maintaining a good quality of cutting and the value of the investment thanks to its incomparable performance and GIBEN reputation.

ICON 1 H 80

1. Panel saw with mecano-welded steel frame, Finished on CNC work centers. The rigidity of the frame guarantees a quality and speed of cutting, avoids all bends and guarantees perfect squareness.

THE ALIGNMENT OF THE STEEL FRAME and the optimal weight distribution ensure a perfect squareness of the cut to the table.

MAXIMUM ACCESSIBILITY to the main organs of the sawing center. The end run of the saw carriage is located outside the frame of the machine, which thus ensures maximum accessibility.

STEEL WORK TABLE, equipped with interchangeable plastic sections.

Cutting height main saw	80 mm.
Engine main saw	7.5 kW.50 Hz.
Scoring motor	1.5 Kw.
Diameter of the main saw	330 mm.
Scoring diameter	180 mm.
Saw carriage feed speed	1/150 m/min.
Saw carriage return speed	100/150 m/min.
Saw truck	Brushless
Bottom nozzle (Q.t. n. 1)	200 mm.
Top Extraction Nozzle (Q.t. n. 2)	75 mm.

PRINTER WITH UNIQUE STRUCTURE. The printer works on the entire length and thus gives a nicely distributed pressure on the plate pack.

The parallelism of the pusher for going up and down is guaranteed by means of an anti-torsion bar along the inside of the machine.

CLAMPING A SHEET METAL through the pneumatic pusher can even be done when making the first starting cut. Thanks to this unique system, the clamps only release the suit when the pressure bar has firmly clamped the suit to the saw table.

SAW CARRIAGE IN CAST ALUMINUM, it has a structural geometry, the guide system and the main saw form an ideal triangle between both guides and the top of the main saw, while the double guides are fixed at both ends of the base.

Unlike other more economical types of construction, our saw carriage does not run in transfer but is carried on two prism guides, which do not allow any bending of the saw carriage structure, due to the weight of the motor.

This conception of construction tested by GIBEN on all models of machine for more than 30 years guarantees the maximum of rigidity and stabilization of the structure in phase of sawing.

THE MOVEMENT OF THE SAW CARRIAGE is carried out by means of a chain. This system (used on very large angle centers) makes it possible to place the gear motor on the frame of the machine and not on the saw carriage. This reduces the weight and avoids the vibration transfer to the saw. This is EXTREMELY important for a splinter-free cut.

Important note:

The chain is already pre-tensioned, of special design with double link. The main advantage of this system is its SIMPLE FUNCTIONALITY and THE TOTAL ABSENCE OF MAINTENANCE COSTS AND WORRIES, as this type of machine has to perform heavy work in a dust-unfriendly environment. Every year, an average sawing carriage travels about 40 km, this 2/3 in the transverse zone with a cutting speed of 30-40 m/min and a return speed of 130 m/min. In order to save economically, most manufacturers install a gear wheel displacement. The choice of construction is negative with regard to the quality finish of the panels, because the motor is placed on the saw carriage, and negative with regard to the wear process, because 2/3 of the cogwheel will wear out sooner than the rest. Technical interventions are more difficult and expensive here. Also za/ dust are the biggest enemy here,

THE AUTOMATIC KOE-RS CONTROL of the saw carriage run according to the dimension of the panels to be cut. Once the saw cut ends, the saw sinks under the saw table and the saw carriage returns. The scorer that precedes the main saw guarantees a perfect sawing performance.

MAIN SAW AND SCORER are equipped with a quick change system. This tool is extremely reliable and secured. Disconnecting the saws is pneumatic and locking mechanically.

The operator does not need keys, the replacement of the saws is easy and very fast.AUTOMATIC HEIGHT ADJUSTMENT of the main saw above the workpiece according to package thickness

ADJUSTMENT OF THE SCORER is done from the outside with a wrench, The adjustment from the outside avoids the opening of the saw sump, which would force a standstill and thus a waste of time. This can also be done electronically as an option. HIGHLY EFFICIENT DUST EXTRACTION, thanks to the basic collector at the bottom of the saw carriage and the 2 nozzles at the top of the pusher.

Guide rods of the saw carriage	35 mm.
Guide roller in V, diameter	90 mm.
Diameter of the main saw	330 mm.
Saw shaft	50 mm,

2. Push bar of the new concept: driven by toothed belt and brushless motor. Y-axis guide system on 2 linear prism guides with ball screw bearings, which guarantee perfect parallelism of the cut. This is a perfectly balanced system that, thanks to a drive with a wide toothed belt, makes an extremely precise and silent movement. This system eliminates the use of the rack and gear. (patent pending)

OPTIMIZED PUSH MOVEMENT according to the panel dimensions in such a way that any unnecessary movement is excluded in order to save time.

Push bar price	4300 mm.
Number of floating terminals	6

Number of roller strips	10
Push bar feed speed	1-40 (CE 25) m/min.
Return speed with open terminals	80 m/min.
Motor push bar	Brushless

CLAMP WITH LOWER FLOATING BASE.

Clamps of the new concept without vertical obstacle, which hold the workpieces during the entire work cycle. During the final cut, the collets hold the package until the pressure bar completely connects the package during the cutting cycle.

Before the final cut, the clamps hold the package until the pressure bar clamps the package.

There is no mechanical limitation with the width of the attacker. Nevertheless, we always recommend a start cut in the solid sheet material.

3. Lateral pusher consisting of an independent pneumatically controlled 55mm rubber roller. This side pusher automatically presses the packages against the guide, in such a way that they are perfectly perpendicular to the cutting line.

The side pusher comes down diagonally, so it only touches the plates when it is at the very bottom. After the sawing cycle, it moves away diagonally and cannot touch the packages with it. This sidepusher can therefore work 25% faster than other sidepushers on the market.

- Side pusher heading: 70-1340 mm. - Minimum strip: 70 mm.

4. Front of the machine equipped with air cushion tables (operator side),

To load or unload the plates or packages without difficulty, the tables at the front are equipped with air cushions, fed by a central air generator. This is located behind the frame to prevent noise pollution.

- Engine air generator: 2.2 kW.
- No. 4 air cushion table 2000x510 mm,

ROBUST FRONT AND REAR GUIDE in steel over the entire left side of the machine. It guarantees perfect squareness and guidance of the packages during the cross-cuts,

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MAXIMUM ACCESSIBILITY AND ERGONOMICS OF THE OPERATION

The keyboard and screen are in a rotatable console on the left side of the machine, equipped with emergency stop.

5, Safety Precautions.

According to European standards CE».

Pneumatic flap protection to prohibit the access of the hands during the cutting cycle.

6. Technical data

Machine puts CE standard.

Standards for electric motors: IP 55. _ Electrical standards: IEC.

Air consumption: 30 l/min at 8 bar.

Air velocity extraction: 30-35 m/sec. approximately.

_ Color: Ral 7035 (light gray) fixed parts and Ral 5005 (blue) mobile parts. _ Voltage: 400V / 50Hz. _ control voltage: 24 Volt.

The quality of the cut depends on the type of material with its own specific properties, on its parallelism and on its coating.

In addition, the cutting tools must be of good quality. Their condition and maintenance can result in different cutting qualities.

The cutting speed and package height also depend on the type of material and its desired cutting quality.

The precision of the push bar is approx. 0,2 mm.

The table toppings have been designed in such a way as to leave as few scratches or marks as possible on the plates.

The speeds on this quotation are nominal values and can change depending on the conditions in which the work is carried out.

Control GIBEN G-VISION

Control software GIBEN installed on a PC Embedded of the latest generation.

Multitasking operating system Microsoft Windows XP for easy connection to a network.

Maximum automation, ease of programming, and user-friendliness.

MANUAL ENTRY OF CUTTING DIAGRAMS, via keyboard, and with the help of graphical indications and information: _ New diagrams can be created or imported even during a cutting cycle.

The cuts are graphically displayed on the screen.

G-VISION can provide graphical assistance to the operator with real-time sequences, with colours and drawings indicating how to position the panel.

The cutting speed is automatically controlled according to the specified parameters of plate thickness, starter cut and package height.

THE PROGRAM ALLOWS THE FOLLOWING INFORMATION TO BE CLEARLY DISPLAYED:

-Sequential Control on the saw diagrams, plate quantities and change of the sequence of the diagrams, without any intervention by the operator.

Parametric control of the speed of the saw carriage according to the height of the pack and the width of the pre-saw cut

Direct control of machine functions to diagnose and locate the panels.

Automatic calculation of the cutting of the first and last cut.

Introduction of diagrams with logical cuts.

Introduction of schemes with displaced cutting lines.

Introduction of end-grain planing.

Introduction of schemes with multiple cutting lines "Z" (third stage). Introduction of schemes with multiple cutting lines "W" (fourth stage).

HARDWARE

PC embedded, extremely suitable for industrial applications. Equipped with software G-Vision and Windows embedded.

Options:

ACCESS DOOR in the safety cage

N °2 EXTRA KLEM additional spanklem.

N °2 ADDITIONAL ROLL RAIL — 4400MM additional roll rail following the clamp,

MAIN ENGINE 13.2 KW - 18 HP for ICONI-Z SP 1-180

(All changes, mistakes in technical data, info and prices reserved)

(Alle Änderungen und Irrtümer in den technischen Daten, Angaben und Preisen vorbehalten! Keine Garantie auf gedruckte Daten!)