flexa 912
author 924

TWO MACHINES,
INFINITE SOLUTIONS

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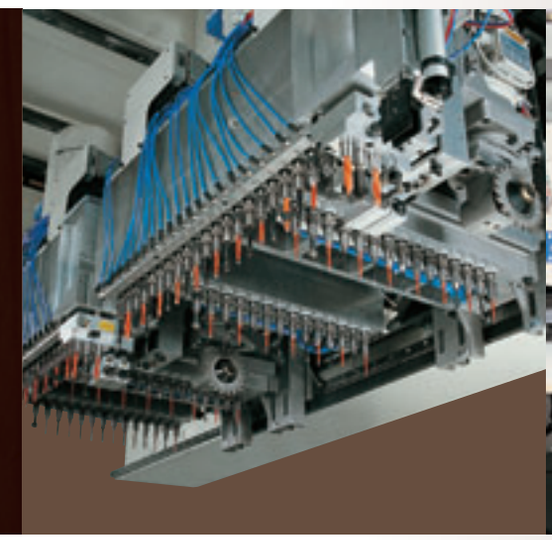
extraordinary flexibility

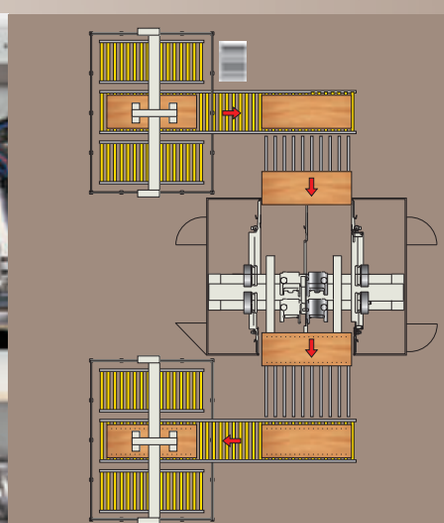


- High availability of independent spindles to resolve any drilling requirement:
  more than 180 for FLEXA 912
  more than 320 for AUTHOR 924

Modern technology for high level production

- Simultaneous machining of two panels together
  (Y = up to 650 mm – Flexa 912
  Y = up to 800 mm – Author 924)
- Reduced machining cycle time due to to the horizontal drilling phase performed in masked time whilst the vertical drilling phase is operating.
- Maximum optimisation of the drilling cycle time: the machining heads perform the machining simultaneously on one or two panels, thus reducing the cycle times.

easily integrated into high flexibility machining cells



- Integration in high capacity lines for the complete machining of the panels on all six sides in one single passage.

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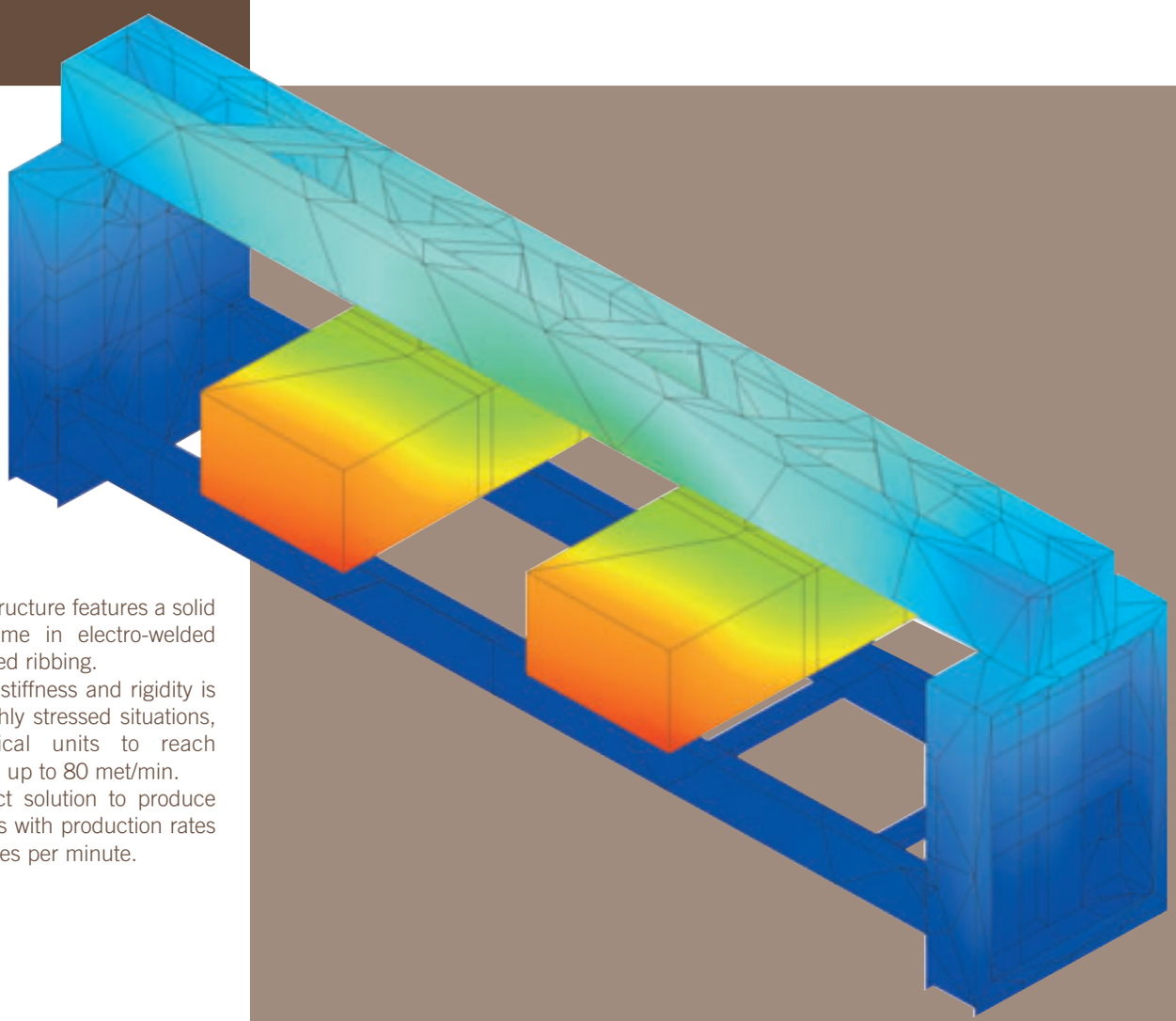
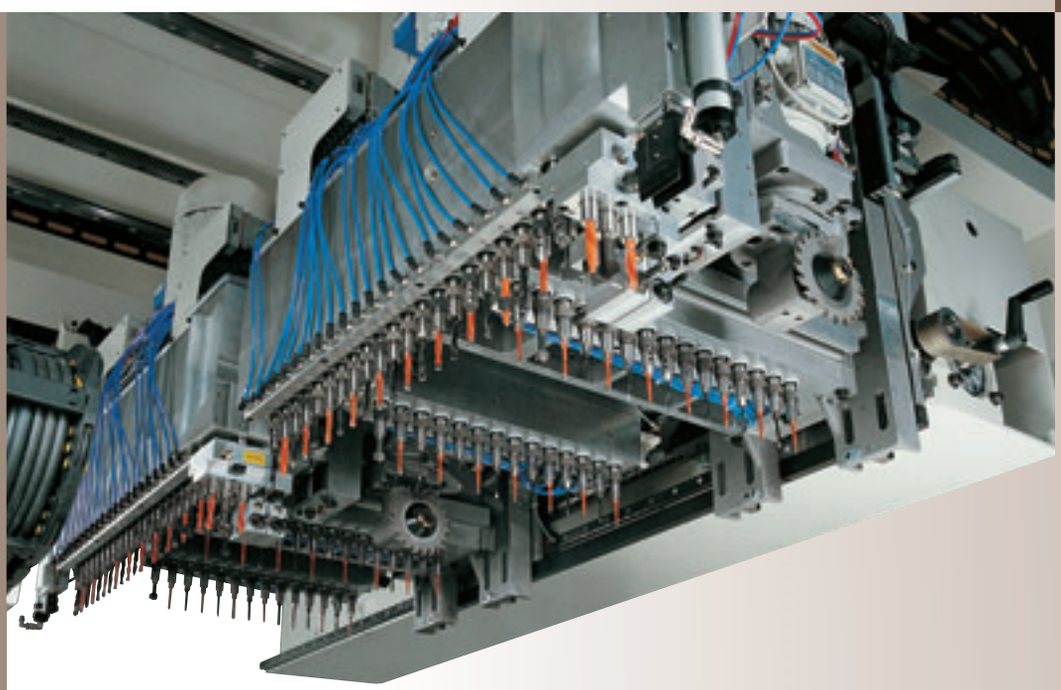
SOLID STRUCTURE DESIGNED TO GUARANTEE QUALITY, RELIABILITY AND PRECISION FOR A LONG TIME



The gantry type structure features a solid double beam frame in electro-welded steel with reinforced ribbing.
The considerable stiffness and rigidity is guaranteed in highly stressed situations, allows the vertical units to reach movement speeds up to 80 met/min.
This is the perfect solution to produce high quality panels with production rates up to 20 workpieces per minute.

The machining heads move along X driven by Brushless motors utilising a rack and pinion system on 30mm prismatic guides.
The machining heads move along Y driven by Brushless motors and highly precise ground recirculating ball screws.
The movement stability is guaranteed by two prismatic guides located along the external sides of the unit.

GREAT CARE IN PANEL HANDLING



The vertical units (2 for FLEXA and 4 for AUTHOR 924) are mirroring each other. They have an independent stroke along the X, Y and Z axes and they are able to optimise the drilling, to reduce the panel machining times to a minimum.

Each unit can be fitted with:
- 36 independent vertical spindles (15 + 21);
- a mobile unit in Y with 14 independent vertical spindles for the drilling of “fittings”;
- 8 horizontal spindles (4 + 4) to drill along Y;
- 1 auxiliary drilling unit with 5 vertical spindles or 1 auxiliary unit for hinges;
- 2 optional units, such as vertical electro-spindles and/or saw blades.

The four horizontal units can each be fitted with 21 independent spindles: their considerable stroke in Y and Z offers high flexibility when drilling horizontally, also with 32 mm out of step holes, without any manual intervention.

Displacement of the work tables managed by the numeric control. With the vertical unit a device picks up each single table and positions it at the desired quota, in a total time that can vary between 15” and 45”.

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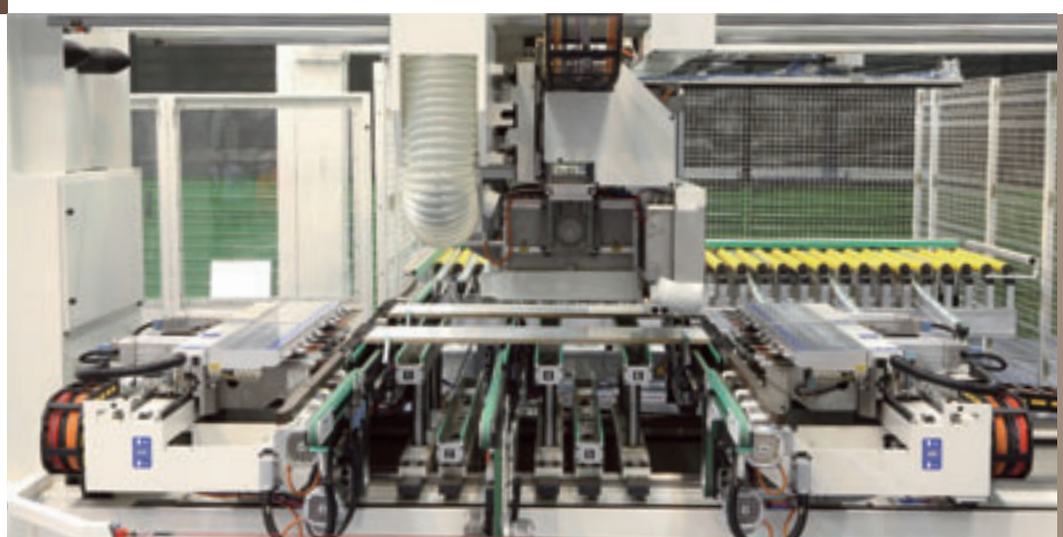
WORK TABLES:
SIMPLE, FUNCTIONAL AND PRECISE



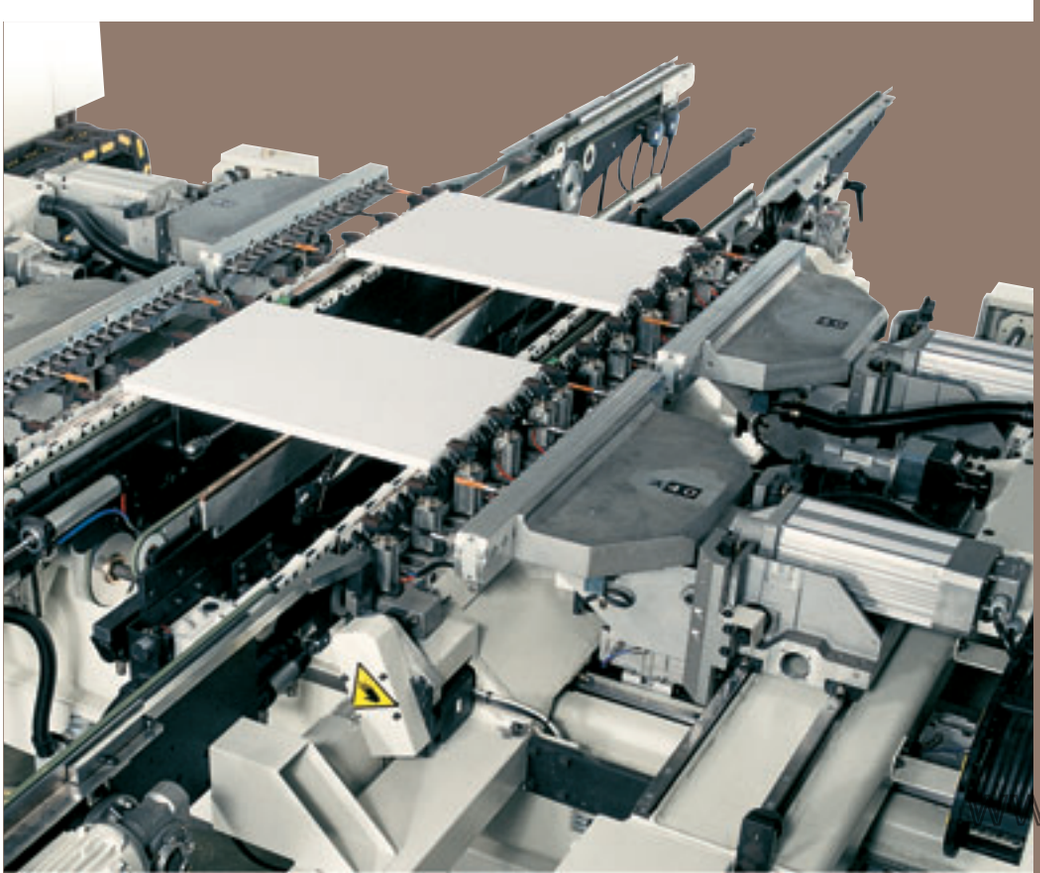
Retractable work tables, managed by CN with independent movement along the X axis, have been designed to ensure total flexibility when machining two panels simultaneously. They include:

- 1 fixed left support;
- 1 right mobile support along X managed by the numeric control to adapt the table dimensions to the different panel lengths;
- 5 retractable supports mobile along X to support the panels being machined;
- 4 end stops located in fixed positions, 2 on the right and 2 on the left;
- 40 pressers to mechanically hold-down the workpiece, 20 on the left support and 20 on the right mobile support;
- 4 front aligners (2 right support, 2 left support) to align the panels to the stops.

The movement of the panels is managed by a system of conveyors divided in:

- 1 fixed left conveyor system supported by the fixed left unit;
- 1 central conveyor system, power driven, along X;
- 1 right mobile conveyor system integrated with the right mobile unit.

The infeed speed can be altered up to 80met/min via the inverter, to adapt it to the different types, weights and dimensions of the panels.



The work table, designed to machine two panels simultaneously, includes:

- 1 fixed left support;
- 1 right unit mobile along X with power driven movement and managed by the numeric control to adapt the table dimensions to the different lengths of the panels;
- 4 end stops (2 for each unit) managed by the numeric control;
- 40 aligners (20 for each unit) to align the panels to the end stops independently of their dimensions;
- 28 pressers (14 for each unit) to vertically hold-down the panels;
- 6 supports mobile along X to support the panels being machined.

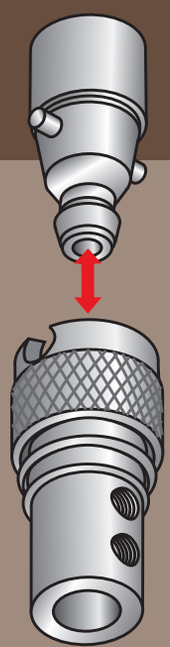
The movement of the panels is managed by a system of conveyors at the infeed and outfeed divided in:

- 1 fixed left conveyor system, supported by the fixed left unit;
- 1 central conveyor system, power driven, along X;
- 1 right mobile conveyor system, integrated with the right mobile unit.

The infeed speed can be altered up to 120 met/min via the inverter, to adapt it to the different types, weights and dimensions of the panels.

REDUCED MACHINE SET-UP TIMES FOR GREATER SYSTEM EFFICIENCY

Extremely easy tool replacement operations for sharpening tools. The machine structure and the quick release spindles allow tool changes with a short interruption of the production cycle.



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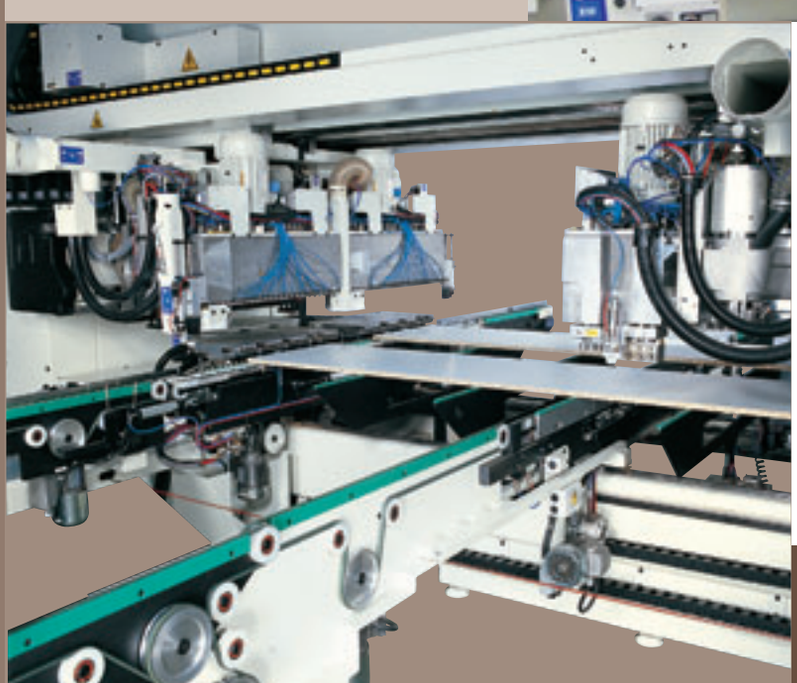
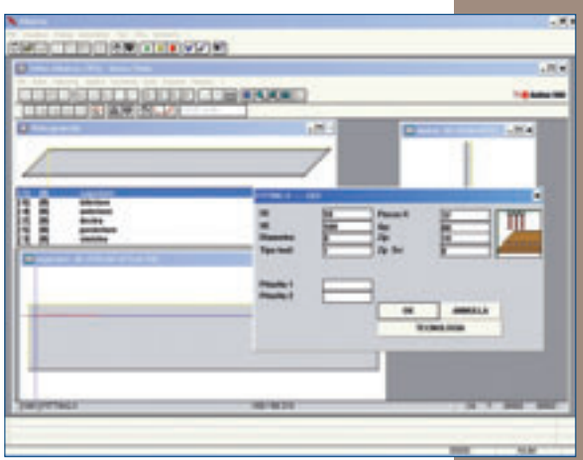


The panel conveyor continually adapts itself to the dimensions and the weight of the workpieces, thanks to an inverter that manages the speed up to 120 m/min.

POWERFUL SOFTWARE, SIMPLE AND INTUITIVE TO USE

Easy to use and fast processing speed in an innovative and powerful numeric control, to guarantee fast and effective programming.



The advanced software of the numeric control ensures that even users that are not familiar with computers will be able to program quickly and directly.
An innovative drilling optimiser guides the execution of every drilling diagram, with the least number of downstrokes of the drilling units into the panels.
Simply enter the panel dimension and the drilling to be performed as per instructions and the optimiser selects which tools to use based upon the machine specification.
The economic benefits of this function consist of a double saving in time, both during workpiece machining and during programming.

Main hardware specifications

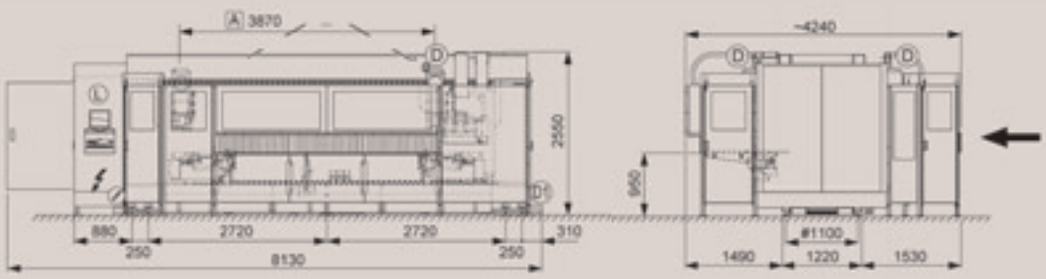
- Intel processor (2.4 GHz or greater);
- 15/17" Colour monitors;
- Keyboard and mouse;
- Hard disk da 80 Gb hard disk (or greater);
- 3·1/2 floppy disk drive unit (1.44 Mb);
- CD ROM unit (48x);
- 256 Mb RAM memory (or greater);
- 2 serial ports, 1 parallel port, 4 USB ports (to connect any type of peripheral device: barcode reader, modem, printer, scanner, etc...);
- Network interface card (opt.);
- Remote control device for the main machine operations

Main software specifications

- Operating environment with basic instructions derived from the Windows XP operating system: copy, paste, change, delete, properties, drop down menu, quick menu with the right click of the mouse, multiple opening of various windows etc.;
- Fixturing management with tool display and graphic support to avoid data entry errors;
- DXF format files imported directly;
- Graphic and syntactic help to speed up the drilling and routing operations;
- Self-diagnosis and warning of any errors or possible failures through alarm messages in the user language, to quickly understand and resolve any issues;
- Graphic assistance for the positioning of the work supports to prevent collisions with the tools in case of through drilling and/or routing as well as eliminating the observed tests directly on the machine;
- Program execution through barcode and supervisor.

TECHNICAL SPECIFICATIONS

flexa 912
author 924



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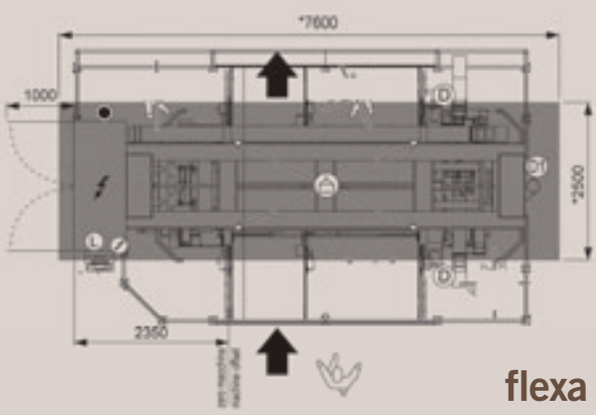

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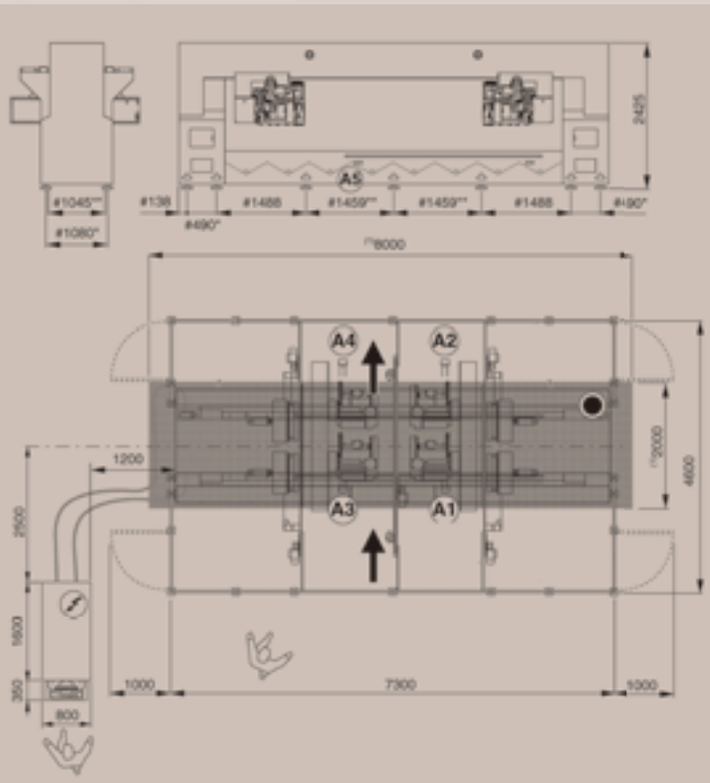
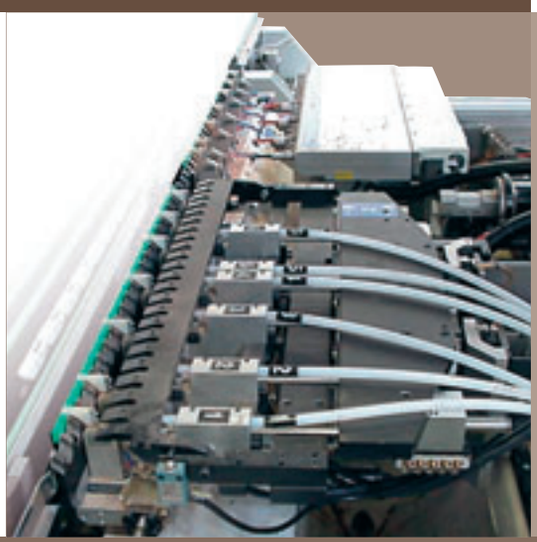


		Flexa 912	Author 924
Work area X - min/max	mm	250/3000	250/3100
Work area Y - min/max (1 panel at a time)	mm	100-150/1350	100-150/1600
Work area Y - min/max (2 panels at a time)	mm	100-150/650	100-150/800
Panel passage	mm	12/50*	12/50*
X/Y/X stroke	mm	3660/896/115	2972/980/115
Vertical drilling unit motor	kW	1,5+1,1	4
Horizontal drilling unit motor	kW	1,5	1,5
Saw blade unit	kW	2,2	2,2
Electro-spindle unit	kW	6,6	6,6
Installed power	kW	48÷75	48÷75
Voltage / Frequency		380 V - 50 Hz	380 V - 50 Hz
Compressed air consumption	Nl/min	1000	1000
Intake air outlet diameter	mm	3x200	4x150
Intake air consumption	m³/h	10100÷17000	3800÷10100
Machine weight	Kg	11000÷13000	14000÷16000

flexa 912
author 924

MAXIMUM FLEXIBILITY
EVEN WHEN INSERTING



All the drilling and dowelling operations can be performed quickly, automatically and flexibly thanks to the modularity of the Flexa 912 and Author 924.
The vertical drilling units, the two drilling heads with 21 horizontal spindles and the dowelling units with 2 to 6 independent injectors can manage the drilling/dowelling cycle in a single positioning of the workpiece on the same machine.
The powerful numeric control optimises the machining (number and position of the dowels, insertion depth, quantity of glue to deliver, etc.) in order to minimise the drilling cycle and maximise productivity.

The software processes the best optimisation of the drilling downstrokes for the highest machine productivity reducing to minimum the movement of the axes and the units.

Unprecedented productivity and flexibility are guaranteed by a production line consisting of a drilling machine and inserter, controlled by a single software station.

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