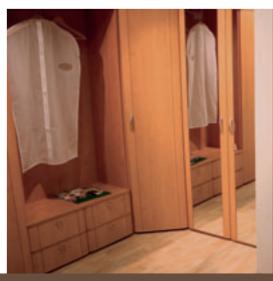
# DRILLING MACHINING CENTRES

Increased productivity and flexibility



# HIGH CUSTOMISATION AND MAXIMUM PRODUCTIVITY







excellent drilling capacity



eliminates machine set-up times



simple and practical to use



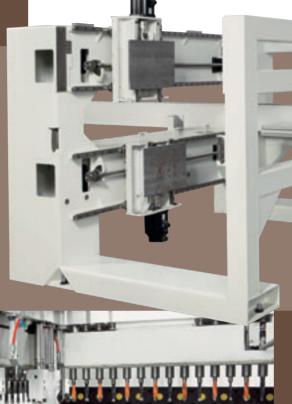
- Opposed machining heads (LOWER and UPPER) up to 132 independent spindles.
- ◆ All operations completed, with the possibility of routing, blade cutting in both X and Y, and insertion of any type of hardware.
- Dedicated and powerful software for increased optimisation of the machining phases.
- ◆ The highest levels of productivity achieved with the minimum number of spindle downstrokes.





### QUALITY AND PRECISION FOR THE DEMANDING PROFESSIONAL

Arc-welded O-frame closed structure guarantees maximum rigidity of the machining heads in order to achieve the best quality finish of the workpiece



Drilling head produced in a single aluminium alloy fusion machined from a solid for the best drilling precision (+/- 0.1mm): up to 66 independent spindles: 48 vertical and 18 horizontal.

The new tempered steel spindles and the patented integrated ceramic bearings ensure rotation speeds of 6000 rpm.

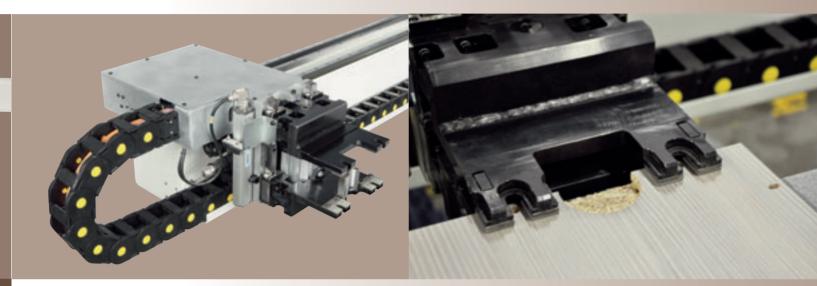
The new-concept work table is designed to perform all machining operations in the spaces between the supports.

The supports, consisting of rollers in a scratch resistant material, guarantee the careful movements of the panels to ensure that the panel surfaces are not scratched.

Rigid pressers at the infeed and outfeed to the work area, guarantee the quality of any type of machining by clamping the panels automatically and precisely.



The new panel hold-down grippers feature a revised geometry and independent movement to also allow drilling operations in positions inside the gripper area, for an improved optimisation of the machining of the workpiece and a reduction in the cycle times.

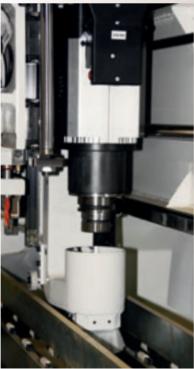


The two THK guides and the Brushless motors combined with the rack and pinion kinematic mechanism, offer rigid movement and precise positioning (+/- 0.005) with positioning speeds up to 100 met/min.

The digital gauge, with centesimal resolution fitted directly on the main gripper, can be used to perform immediate tests on the thickness of the panels being machined.

The new workpiece transport gripper has been designed to also drill and router inside its geometry, thus avoiding its anti-collision repositioning and drastically reducing the cycle times.







- Integrated saw blade unit fixed in the X direction with tool Ø 120mm

  Automatic saw blade unit 0/90° with tool Ø 160mm

  7.5KW electro-spindle (S6) with HSK 63 tool holder

  Integrated drilling unit for hinges

#### TWO CONFIGURATIONS TO MEET ANY PRODUCTION REQUIREMENT

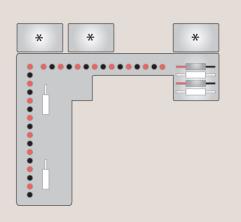
#### **UNIFLEX S**

Essential and complete equipment to cover all requirements:

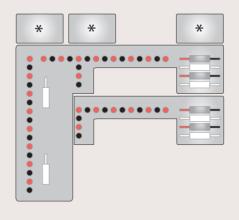
• up to 31 + 31 independent horizontal spindles

- horizontal spindles
- up to 3 + 3 positions for:
- Fixed integrated saw blade unit

- Integrated unit for hinges Dowelling unit



\* Slots available for additional equipment"



\* Slots available for additional equipment

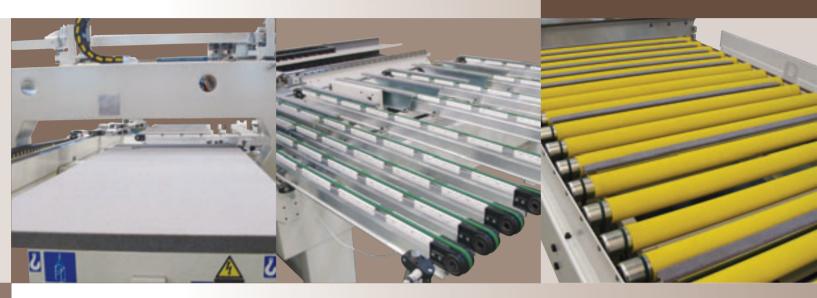
#### **UNIFLEX HP**

- up to 48 + 48 independent
- up to 18 + 18 independent horizontal spindles
  up to 3 + 3 positions for:
  Fixed integrated saw blade unit
  Automatic saw blade unit 0/90 deg
  Powerful electro-spindle
  Integrated unit for hinges
  Dowelling unit

#### **UNIFLEX HP**

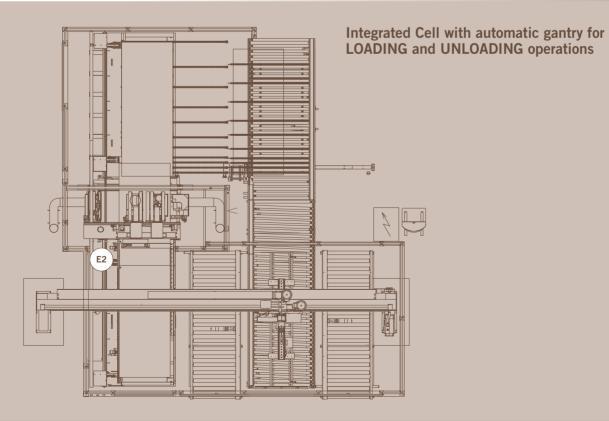
Y direction, indicated for drilling shelves.

### GREAT CARE IN PANEL HANDLING



Highest versatility according to the customer's requirements, with various types of loading and unloading systems available for the UNIFLEX, when used as a stand-alone machine or inserted in production cells:

- FLOTEX table for manual loading
- longitudinal and transversal roller conveyors for automatic loading and unloading
- automatic loading and unloading devices (robot).





#### POWERFUL AND EASY TO USE

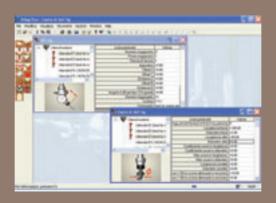
Powerful 'new-concept' Numerical Control, for Drilling-Routing Machining Centres with Personal Computer interface.

Office PC: very familiar and easy to use by the operator for all the machine's operations, with the latest hardware specifications. The Windows environment forms the basis of the Morbidelli software.

Simple and effective, it has been designed by taking the exact requirements of the end-users, whether expert operators or users new to machining centres, through graphic help prompts and specific MACRO.







#### Main software features

Fixturing management with tool display and graphic support to avoid the possibility of

files in DXF format imported immediately and

dynamic optimised drilling; graphic and syntactic help to speed up the data entry operations;

parametric programming, to automatically update the program when the dimensions of the workpiece being machined are altered, to avoid writing a new program;

self-diagnosis and warning of any errors or the user language, with an online manual to

- graphic help for the work support positioning to avoid collisions with the tools in the case of through drilling and/or routing as well as to eliminate the empirical tests directly on the machine;
  program execution with barcodes.

# TECHNICAL SPECIFICATIONS

Work area (X-Y)	591	mm	3000 x 1300
Max machining thickness		mm	80
Drilling heads		n°	2
Drilling unit main motor		kW	3
Electro-spindle unit		kW	7,5 (S6)
Integrated optional units (max on each head)		n°	2
Independent vertical spindles (max on each head)		n°	48
Independent horizontal spindles (max on each head)		n°	18
Min. distance for shelf drilling (with drilling unit in control)		mm	192
Max. distance for shelf drilling (with drilling unit in control)		mm	512
Machine weight		Kg	2800

#### LAY-OUT

