DIVISIO Depaneling Systems

Semi-automatic Depaneling System   **DIVISIO** 2000 Series

DIVISIO 2000/2100/2300

Description

All systems of the DIVISIO 2000 Series can optionally be equipped with a robot interface. This interface allows the semi-automatic systems to be loaded and unloaded fully automatically.

The **DIVISIO 2000** is a semi-automatic system for stress-free depaneling of PCBs. The X- and Y-axes are both equipped with highly dynamic linear motor technology, the Z-axis is servo-driven. Already existing product carrier adapters can easily be used with this machine. The vacuum system is optimized with the help of the Tornado-Effect.

The system offers a cost-efficient solution for customers who wish to depanel stress-free but who do not produce such a high volume to justify the acquisition of an inline machine.

By positioning the routing axis either above or below the electrically driven rotary table the **DIVISIO 2100** has the flexibility to represent a verified production process. It can therefore be used without any restrictions as back-up for the inline production. The **DIVISIO 2300** commands the largest working area within the entire DIVISIO depaneling systems.

Features

_ Linear motors for highest dynamics and accuracy
_ Rotary-table with two working areas
_ Touch screen monitor
_ SIMPLEX HMI offers comfortable operation
_ Ionization unit
_ Automatic tool change with 2 routers per magazine
_ Complete tool management
    + Breakage control
    + Length verification
    + Diameter check
    + Life span monitoring
    + Dynamic utilization of full router bit
_ Automatic maintenance schedule

Options

_ Routing module (from top/bottom) or sawing unit (from top)
_ Robot interface
_ ASYCAM CAD data conversion
_ Camerasystem
    + Fiducial recognition
    + Cut inspection
    + Teach function
    + Correction function
    + Bad mark recognition
    + Code read
_ Dust extraction
_ Manual suction unit
_ Low pressure control
_ Adapter technology
    + Product-specific adapters
    + Magnetic pin placement
    + Adapter coding for up to 255 adapters
_ Upgrade of automated router bit change to 8 bits
_ Traceability function
_ MES interface
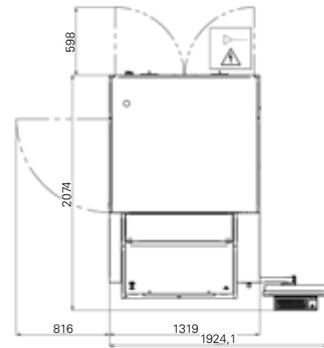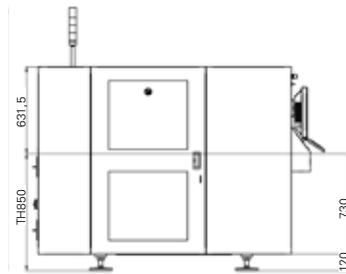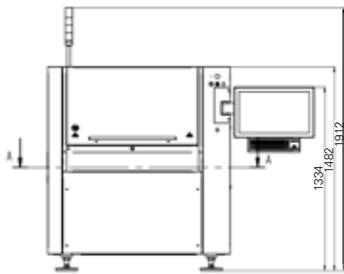
DIVISIO 2000/2100/2300

	DIVISIO 2000	DIVISIO 2100	DIVISIO 2300
	Routing	Routing and/or Sawing	Routing
Machine Configuration			
Transport height	850mm ±50mm	850mm ±50mm	850mm ±50mm
Operating side	Front of the machine	Front of the machine	Front of the machine
Panel (max. LxB)	460 x 360mm	460 x 460mm	720 x 500mm
Routing from top	460 x 360mm	460 x 460mm	720 x 500mm
Routing from bottom	-	460 x 460mm	-
Sawing from top in X or Y	-	460 x 460mm (Option)	-
Sawing from top in X and Y	-	460 x 360mm (Option)	-
NC-Axis	X/Y/Z-axis		
Panel Dimensions			
Panel length	50 to 460mm	50 to 460mm (508mm)	50 to 720mm
Panel width	50 to 360mm	50 to 460mm	50 to 500mm
Panel thickness	0.5 to 4.5mm		
Panel weight max.	4.5kg		
Component height, spindle-side	8mm; partial 18mm (other height on request)		
Component height, adapter-side	40mm; partial 70mm (depending of fixing pins)		
Installation Requirements			
Power supply	400V, 208V 50/60Hz, ±10%		
Power supply system	3L + N + PE		
Fuse protection	3x C32 A		
Connection type	Fixed connection		
Power consumption (without suction)	0.4kW	0.5kW	0.7kW
Air supply	6bar		
Air consumption	120Nl/min		
Machine Description			
Length x Width x Height	1320 x 1970 x 1480mm	1620 x 2270 x 1480mm	1880 x 2796 x 1522mm
Weight	1150kg (standard equipped)		
Axis speed max.	X,Y= 2000mm/s, Z= 1000mm/s		
Axis acceleration max.	X,Y= 20m/s^2, Z= 15m/s^2		
Positioning	≤ ±0.01mm (20°C ±1°C)		
Repeatability	≤ ±0.005mm (20°C ±1°C)		
Depaneling accuracy	±0.08mm with Vision System (20°C ±1°C) ±0.12mm without Vision System (20°C ±1°C)		
Noise	< 75dB(A) (possible deviations due to material mix of the panel)		

ASYS GROUP