DIVISIO Depaneling Systems
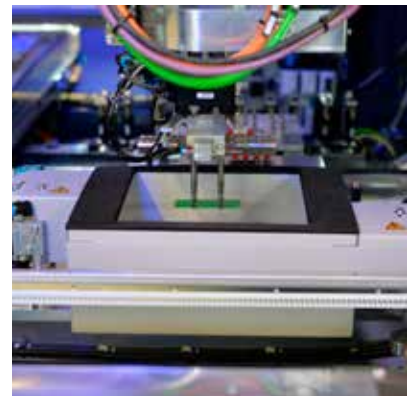
Automatic Depaneling System **DIVISIO** 5000 Series

DIVISIO 5100

Description

The machine works autonomously and under constant self-monitoring. This increases the production time by four hours per week and it can be produced in 20.5 shifts. Thus, up to 150,000 more pieces can be produced annually. All operating resources are checked for correctness before production starts in order to increase process reliability. Thanks to an automatic product change, the autonomous time of the depaneling unit is increased. This is another milestone on the way to a smart factory. Open interfaces enable connections to other plants and (control) systems, e.g. via OPC UA. User-configurable dashboards display all important parameters on the SIMPLEX HMI.
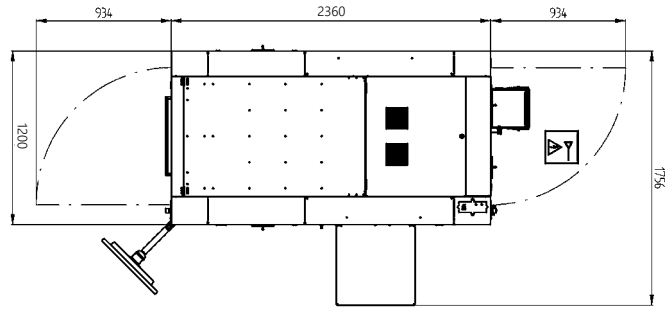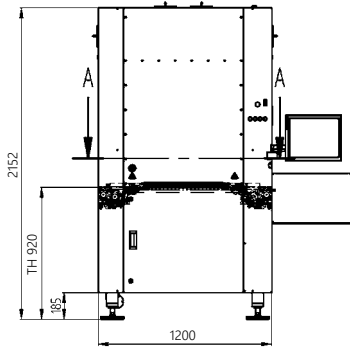
Cycle times of less than two seconds per individual switching effortlessly meet any benchmark. The handling system made of carbon fiber with linear motor drive sets standards in positioning accuracy and dynamics. Thanks to the soft-stop function, the workpiece is positioned stress-free and gently in the machining area. All discharge variants such as shuttle systems, carriers circulation, full-surface belts, etc. can be integrated modularly and operate the subsequent process. Thanks to the modular design and BUS technology, further options can also be retrofitted very easily at a later date. The decentralized integrated switch cabinet ensures a small foot-print and best accessibility.

Features

_ 500 Watt spindle
_ Linear motors for highest dynamics and accuracy
_ El. width adjustment of the 3 segments conveyor belt
_ Camera system incl. fiducial recognition
_ Automatic router-bit change with ejection function
_ Vacuum monitoring of the suction flow
_ Operating resources management
_ Consumables management
_ Autonomous time calculator

Options

_ Offline programming
_ ASYCAM CAD data conversion
_ Cleaning box
_ Automatic gripper change
_ Dust extraction
_ RGB lighting for camera
_ Camerasystem
        + Cut inspection
        + Teach function
        + Correction function
        + Bad mark recognition
_ MES interface
_ Customized transport modules

DIVISIO 5100

	Routing

Machine Configuration

Transport height	920mm ±50mm
Max. transport width	460mm
Interface	SMEMA, Hermes, Siemens
Transfer direction	Left to right or right to left
Operating side	Front of the machine
Fixed rail	Front of the machine

Panel Dimensions

Panel length	70 to 460mm
Panel width	50 to 460mm
Panel thickness	0.5 to 5.0mm
Max. Panel weight	3kg*
Max. PCB weight	1.5kg
Component height, spindle-side	8mm; partial 18mm (other height on request)
Component height, gripper-side	40mm
Trays on lane 2	600 x 400mm

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)	0.8kW
Air supply	6bar
Air consumption	120Nl/min

Machine Description

Length x Width x Height	1200 x 2360 x 2152mm
Weight	1800kg (standard equipped)
Speed	X,Y= 2000mm/s, Z= 1500mm/s
Acceleration	X,Y= 20m/s^2, Z= 15m/s^2
Positioning	±0.02mm (20°C ±1°C)
Repeatability	±0.005mm (20°C ±1°C)
Cut-Accuracy	±0.08mm (20°C ±1°C)
Noise Level	< 75dB(A) (possible deviations due to material mix of the panel)

* Higher weight on request

ASYS GROUP