

Series LOW 4233

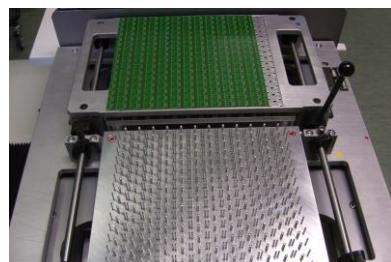
Semi-automatic and Stress-free Depaneling Basic Machine with Parallel Shuttle

The highly dynamic depaneling machine LOW 4322 is **in particular** suited for **medium to high product volumes** and masters growing demands in the production process. PCB panels made of different materials will be depanelled by means of highly dust- and stress-reduced **sawing and routing technology**, providing utmost product flexibility, precision and throughput. Highly dynamic linear motor axes, tools and grippers meet highest demands in quality and guarantee a long lifecycle and reliability of the depaneling machine.



- ✓ Rigid welded steel frame
- ✓ Highly dynamic linear motor axes
- ✓ Quick product changes possible
- ✓ Flexible PCB fixation system
- ✓ Depaneling procedure with discs and/or shank tools
- ✓ Depanel any PCB material
- ✓ Laser measurement of axes
- ✓ Customized special sizes possible

LOW 4233 with combined shank and disc module, parallel shuttle



Multi PCB panel feeding



Disc depaneling module with vision system

Semi-automatic depaneling – customized solutions

The depaneling machine LOW 4322 enables **quick product changes** respecting at the same time short depaneling and handling times. Feeding is executed by the shuttle, the intake and fixation by the pin clamping fixture and, if required, in combination with vacuum suction unit.

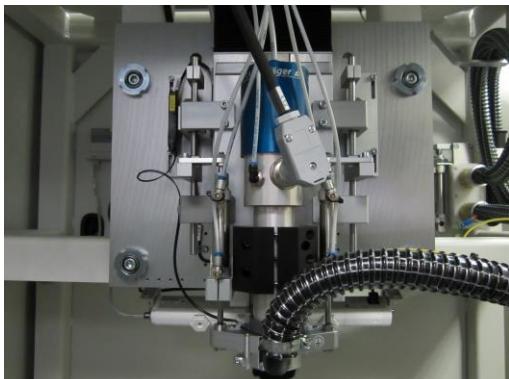
The high performance of the depaneling machine with standard cutting or routing module, fully automated cutting-edge processing, image-assisted teach-in camera system and two fixtures for PCB placement on work carrier can be extended by many customized adaptations and optional equipment (e.g. camera vision system). Precise laser measurement of the axes before putting the machine into operation is part of our individual customer service for all in-line and stand-alone depaneling systems of Systemtechnik Hölzer.

Printed Circuit Board Feeding & Fixation

Printed circuit board feeding via parallel shuttle.
Fixation centering pins and vacuum suction unit.
Stabilization with retainer brush from above.
Cap or mask or product-specific design.
Painted circuit board torsion max. 1% of length or width.
respectively

Dust extraction

External dust ignition proof suction unit, H filter,
automatic cyclical dedusting, and vacuum monitoring.
Optional connection to central suction unit.



Routing unit

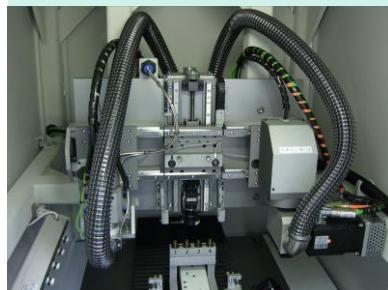
Multi axes system control

IPC control DIN program 66025,
Windows 7 professional, 12" Touch-screen Monitor
Path control (cutting/routing/drilling)

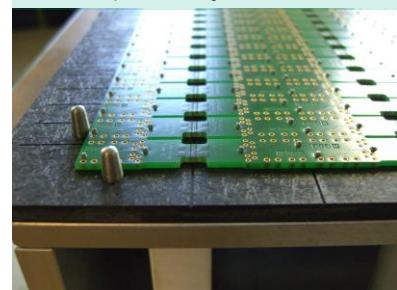
Optional equipment details:

- PCB vacuum preparation
- Additional depaelling module combined in one machine (shank or disc tool)
- Broken Tool Control
- Automatic tool exchange (4 stations, extendable)
- Ionization
- Adaptor encoding
- Printed circuit board suction and vacuum systems
- Code scanner
- Recognition of good and bad parts
- Traceability interface according to requirements specifications
- Customized data connection
- DXF conversion to executable DIN milling program
- Remote service
- **Camera Vision System** can, among other things, be equipped with teach-in function, repositioning, bar code, 2D code recognition, automated object recognition, fixture recognition and repositioning, color recognition (up to 10 colors)

Two-rail system



Multi PCB panel feeding



TECHNICAL SPECIFICATION: LOW 4233 D / 4233 R

Machine

W x D x H	1.040 x 1.870 x 1,550 mm
Working height	930 – 1,050 mm
Weight	approx. 560 kg
Voltage	400 V / 50/60 Hz / 16 A
Compressed air	0.6 mPa (6bar), oil-free, filtered, dry
Consumption	approx. 70l/min on average
Ambient temperature	+18°C - +30°C
Color	RAL 9002 / customized

Tools

Shank tools	> 0.8 – 3.175 mm /(1/8")
Rpm	> 60,000 rpm
Disc tools	0.3 – 0.8 mm
Disc tool	> 10,000 rpm

Depaelling Speed

Shank tools	> 80 mm / sec.
Disc tools	> 250 mm / sec.
Positioning speed (x-y-z)	> 700 mm / sec

Work Space

Standard	420 x 330 mm
Mounting height top side max.	15 mm
bottom side max	40 mm

Customized special sizes upon request

Accuracy

Positioning	± 0.01 mm
Repeatability	± 0.01 mm
Depaelling	< ± 0.10 mm
Depaelling for full cut	< ± 0.10 mm

The machines are in accordance with viable rating of local safety regulations, conform to CE, EMV, ESD, UVV noise level <= 72 db (A),
technical availability >98%, proof of machine capability: Standard