Systemtechnik Hölzer GmbH

Series LOW 4233

Semi-automatic and Stress-free Depanelling

Basic Machine with Parallel Shuttle

The highly dynamic depanelling 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 depanelling machine.

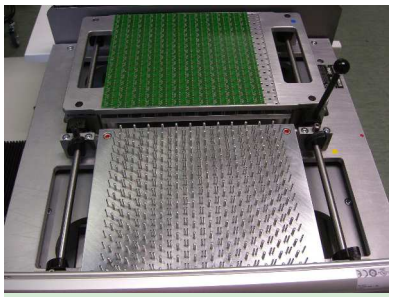
LOW 4233 with combined shank and disc module, parallel shuttle

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

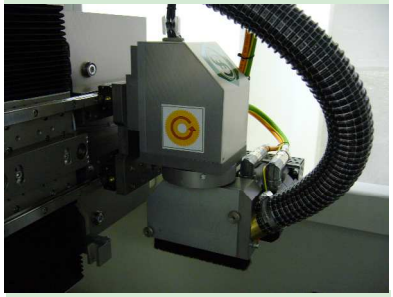
Semi-automatic depanelling – customized solutions

The depanelling machine LOW 4322 enables **quick product changes** respecting at the same time short depanelling 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 depanelling 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 depanelling systems of Systemtechnik Hölzer.



Multi PCB panel feeding



Disc depanelling module with vision system

Mechanical Engineering • Tool Manufacture • Air Bearing Technology

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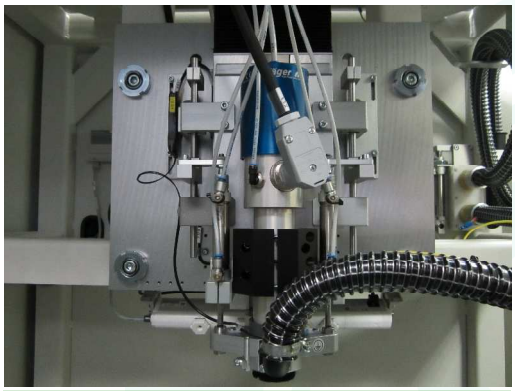
Printed Circuit Board Feeding & Fixation

Printed circuit board feeding via parallel shuttle.
Fixation centering pins and vacuum suction unit.
Stabilization with retainer brush from above/below,
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

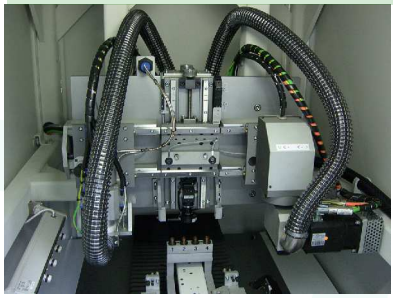
Multi axes system control

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

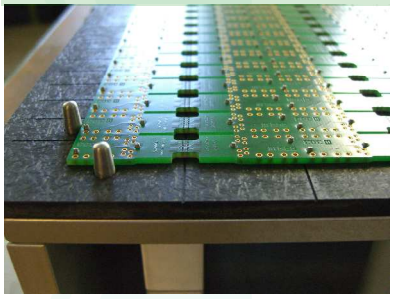
Optional equipment details:

- PCB vacuum preparation
- Additional depanelling module combined in one machine (shank or disc tool)
- Broken Tool Control
- Automatic tool exchange (4 stations, extendible)
- 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	1,000 x 1,850 x 1,550 mm
Working height	930 – 1,050 mm
Weight	approx. 400 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

Work Space

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

Customized special sizes upon request

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

Depanelling Speed

Shank tools	> 80 mm / sec.
Disc tools	> 250 mm / sec.
Positioning speed (x-y-z)	> 500 mm / sec

Accuracy

Positioning	± 0.01 mm
Repeatability	± 0.01 mm
Depanelling	< ± 0.10 mm
Depanelling 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

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