



# ULTRASPEED • MONO

## Hightech micro-drilling and routing for mass production



# MONO

COMBI TECHNOLOGY PRODUCTIVITY INCREASE

- High productivity up to 500 holes/min (e.g. in Brass, diameter 500µm, depth 1200µm)
- Process stability (running time >20 hours)
- Easy machine maintainability
- Routing and drilling process
- Palletization of template up to 250 plates per loading or 2 sheets with a plate size of 560x350 mm
- Workpiece format Area 710x560 mm
- High speed air bearing spindle up to 200'000 rpm (vibration reduction)
- High speed ball bearing spindle up to 60'000 rpm (high stiffness for routing)
- Cooling process (depending on application):
  - by cold air nozzle
  - or lubrication by microjet (mixture air-oil)
- Dry machining technology
- Pressure pad with suction for extracting waste chips

Accurate, flexible and reliable solution for drilling and routing

#### **Applications**



- Machining of non-ferrous metals and materials like: aluminum, brass, polymers
- Machining of ferrous metals like: titanium, stainless steel
- Medical industry
- Aerospace industry





#### **Z**-mapping

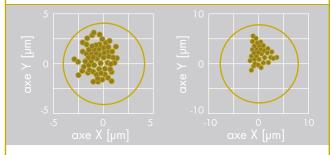


#### **Machine characteristics**

- Software based on QNX, entirely developed by Posalux
- Spindle speed range from 5.000 up to 200.000 rpm

- Automation up to 8 levels
- Z-mapping available for all template

### PCB drilling characteristics



#### Mono – accuracy, productivity and reliability

- Designed for flexible and mass production:
- High productivity: up to 500 holes/min (e.g. in Brass, diameter 500µm, depth 1200µm)
- Drilling accuracy X/Y: ± 4 µm
  Milling accuracy X/Y: ± 6 µm
  Milling accuracy Z: ± 10 µm

- Posalux CNC 3000
- Linear axis system allowing high dynamic and accurate motions



Changeable template: for customized part clamping



Removable: allows part handling out of the machine, e.g. with loader

Left side: sheet raw material

Right side: piece by piece production

Custom devices and support



Release 2001

# ULTRASPEED

High tech micro-drilling and routing

Founded in 1943, Posalux is a leading manufacturer of micro-technology machines intended for mass production. From our headquarters in Biel, Switzerland, we engineer and produce world-renowned system solutions.

Our clients are distinguished companies leading the automotive, electronic, watch, and medical industries. Thanks to our global network of Posalux branches and agents, we are able to provide reliable services and support to our customers worldwide.

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