

## Microlution

# 5100-S

**Three- or five-axis micromachining platform optimized for small parts**

- Specifically designed for high precision small part applications
- Micron level positional accuracy and sub-micron level repeatability
- High speed, high precision and high stability



5100-S

# A revolution in micromachining

The 5100-S high-speed micro milling platform is robust enough for high volume production, and its flexibility and ease of use make it ideal for prototyping and small runs. The 5100-S is built on a platform of precision ground natural granite, for outstanding thermal and vibrational stability.

## Proven combination

The system's proprietary Microlution motion platform delivers positional accuracy of  $\pm 1\mu\text{m}$  (0.00004") while high-speed linear motors deliver over 2 g acceleration.

## Customize your machine

Integrate any of several metrology options, including a work piece touch probe, optical camera, and laser displacement confocal sensor for real time positional feedback and part characterization and validation.

## Precision machining

A natural granite base and granite-mounted stage provides high thermal stability and motion control over extended production to get highest part quality.

## Reach your expectations

The resulting versatile production solution increases part quality while decreasing cycle times. The 5100-S has a 50,000 rpm spindle and can be configured as a three- or five- axis mill. It uses standard G and M code programming, features a 24-pocket automatic tool changer with integrated tool monitoring, flood and optional mist coolant, and a thermal management system.



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## Technical data

## 5100-S

Machine dimension *	mm (in)	1687 x 1080 x 2093 (66.42 x 42.52 x 82.4)
Machine weight (machine only)	kg (lbs)	2500 (5511)
Travel X/Y/Z 3Ax/5Ax	mm (in)	179 x 179 x 140 / 100 x 100 x 100 (7.04 x 7.04 x 5.51 / 3.94 x 3.94 x 3.94)
Rotary 4/5 axis **	°	A +155°-45° / C 360°
Spindle speeds	rpm	50,000

\* Width x depth x height \*\* Option