



## Press Information

### The new MICROMECHA PROXIMA 100

A revolution in EBSD analysis

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The MICROMECHA PROXIMA is setting new standards in ergonomics and optical performance for mechanical testing during EBSD analysis with its unbeatable distance sample to screen, while performing tensile, compression, 3 or 4 point bending or biaxial testing.

Unlike the traditional testing devices with its two columns located on each side of the testing sample, the new PROXIMA relocates this mechanism on the axis of the sample. This opens the area on one side of the sample, resulting in considerable technical benefits. There's more room for the EBSD detector, allowing a sample-to-screen distance down to 12mm. The main progress in this innovation is that the machine no longer needs to be tilted entirely but can be held in its initial position while tilting the sample.

A newly developed transmission system greatly improves the interaction with the EBSD detector and prevents early collisions. The upper clamping part, often composed of several parts has been designed into one part, reducing the occupied space all without sacrificing performance, ease of use or speed. Requiring just 2 screws to hold the testing sample, it is far more easy to use than conventional systems using 4 screws.

The extremely light weight of just 1650g and its adaptable dovetail makes it compatible with a huge range of scanning electron microscopes.

In addition to the considerable improvement in EBSD application, the engineers worked to maintain the ISO norms for mechanical testing. Unlike some tendency where the transmission system is moved out of the sample plan, PROXIMA kept it inside this plan. This makes it possible to follow international standards. This is especially important for pure tensile tests, as well as the quality of the obtained results.

The PROXIMA is unique in the world's market for this combination of product advantages.



## Technical data for MICROMECHA PROXIMA 100

Tests	Tensile, Compression, Bending, Biaxial	
Max. Load Capacity	3,5 kN	(787 lbf.)
Max. Travel Distance	15 mm	(0,6 in.)
Dimensions Length x Width x Height	185 x 86 x 56 mm	(7,3 x 3,4 x 2,4 in.)
Weight	1,7 kg	(3,6 lb.)
Standard Sample Size Tensile	50 x 10 x 1	(2,0 x 0,4 x 0,04 in.)
Standard Sample Size Bending	40 x 5 x 5	(1,6 x 0,2 x 0,2 in.)
Standard Sample Size Biaxial	30 x 30 x 1	(1,2 x 1,2 x 0,04 in.)
Maximum Speed Test	3,000 mm/min.	(0,118 in./min.)
Minimum Speed Test	0,060 mm/min.	(0,002 in./min.)
Displacement sensor accuracy	20 nm	

EBS D Compatibility	Yes	
Working distance	12 mm	(0,5 in.)
Screen to sample distance	Camera centered on sample	12 mm (0,5 in.)
	Camera scanning the sample	18 mm (0,7 in.)

### Accessories (included):

Electrical cables vacuum-side, electrical cables air-side, tensile clamping system, controller, software

### Accessories (optional):

Optional clamping systems, heating and cooling devices, dovetail

### Press Contact

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### MICROMECHA

Headquartered in Metz (France) since its creation in 2012, MICROMECHA has transformed itself into an international engineering company. As a result of its considerable know-how and its effective policy of innovation, MICROMECHA is today one of the few companies capable of designing and supplying a full range of technological solutions for the microtesting sector. A special focus lies on the design of uniaxial, as well as multiaxial testing devices, incorporating the very latest state-of-the art technologies. Our portfolio also extends to prototyping testing devices for special requirements