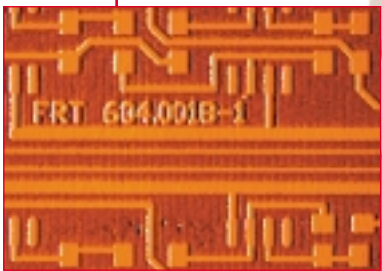


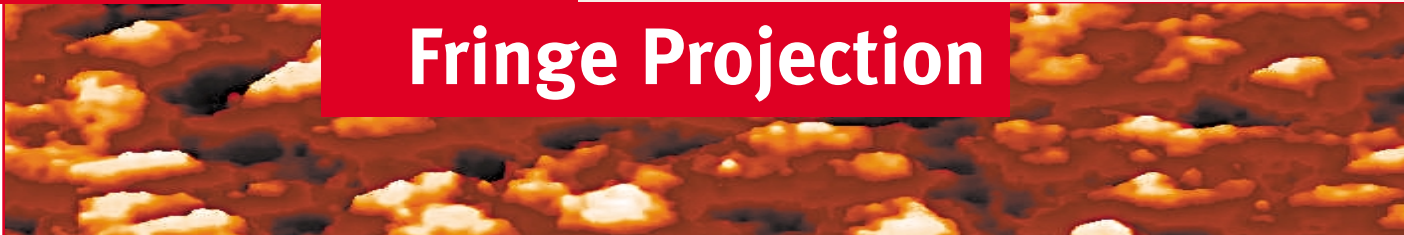


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The MicroSpy[®]

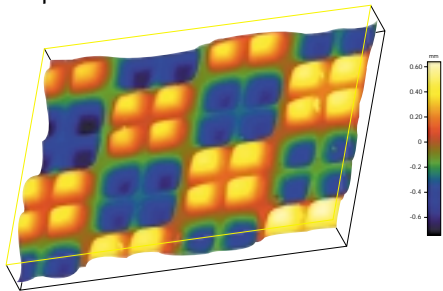
Fringe Projection



MicroSpy® Fringe Projection Extremely fast – extremely good

The most cost-effective version of the FRT instruments line is the MicroSpy® Fringe Projection. The instrument can be applied for very fast, precise and high-resolution topography measurements.

The MicroSpy® allows the complete topography of a surface to be acquired during one single measurement within a few seconds. A scanning of the sensor or the sample is not required.



Measurement of an embossed plastic structure
(Measuring range 4 mm x 3 mm)

MicroSpy® Stripes for structures

The measuring method of the MicroSpy® is based on the principle of fringe projection. From the distortion of a striped pattern being projected on the sample, the sensor investigates the height of each measuring point.



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To achieve a fringe projection, a digital micro mirror array is integrated into the MicroSpy®. Compared to similar methods, this procedure allows good light efficiency, very high fringe contrast as well as a distortion-free projection which contributes to high-precision and high-resolution surface measurements. From the measured topography data, waviness, roughness, radius of curvature as well as contours etc. can be determined.

MicroSpy® Shot and goal

With this instrument, it is always the same fixed measuring range which is acquired during one single measurement. The standard range is 2 mm x 1.5 mm or 4 mm x 3 mm. The measured z-range is 0.5 mm resp. 1 mm. Herein all topography data are measured and can be used for a complete analysis.

	MicroSpy® SL 1	MicroSpy® SL 2
 Measuring range xy	approx. 2 x 1.5 mm ²	approx. 4 x 3 mm ²
Measuring range z	approx. 0.5 mm	approx. 1 mm
Measuring time	approx. 3-5 sec.	approx. 3-5 sec.
Resolution xy	approx. 2 µm	approx. 3 µm
Resolution z	approx. 0.1 µm	approx. 0.1 µm

subject to change

the art of metrology™

