

## Klocke Nanotechnik presented by Acutance Scientific – Nanorobotics, from in-SEM/FIB Nanoworkbench to nano-precise Micro Production Systems

With advancing technology, it is possible to manufacture ever-smaller components on a larger scale. With conventional systems, which are designed for high throughput, however, there is a lack of accuracy and precision. Many processes and applications would greatly benefit from higher accuracy.

Systems from Klocke Nanotechnik provide a combination of elements of Klocke Nanotechnik's Nanoworkbench and Micro-production Systems. This way, micro parts can be manufactured with nanometre resolution

The Nanoworkbench provides a fully automated tool set for electron microscopes. This allows even inexperienced users to perform complex applications in electron microscopes quickly and safely. These include mechanical manipulation, electrical measurements, force measurements, indent trials and much more.

The Klocke Nanotechnik Micro-production Systems enable the production of customised micro-components. This way, loads of several kilograms can be transported over distances of several centimetres' with nanometre resolution.

The nanorobotic components used, including the software, can be freely transferred between the Nanoworkbench and the Microproduction System. This creates the unique opportunity to optimise processes and applications with nanometre scale and accuracy. These processes can then be performed by the Microproduction System with high throughput.

