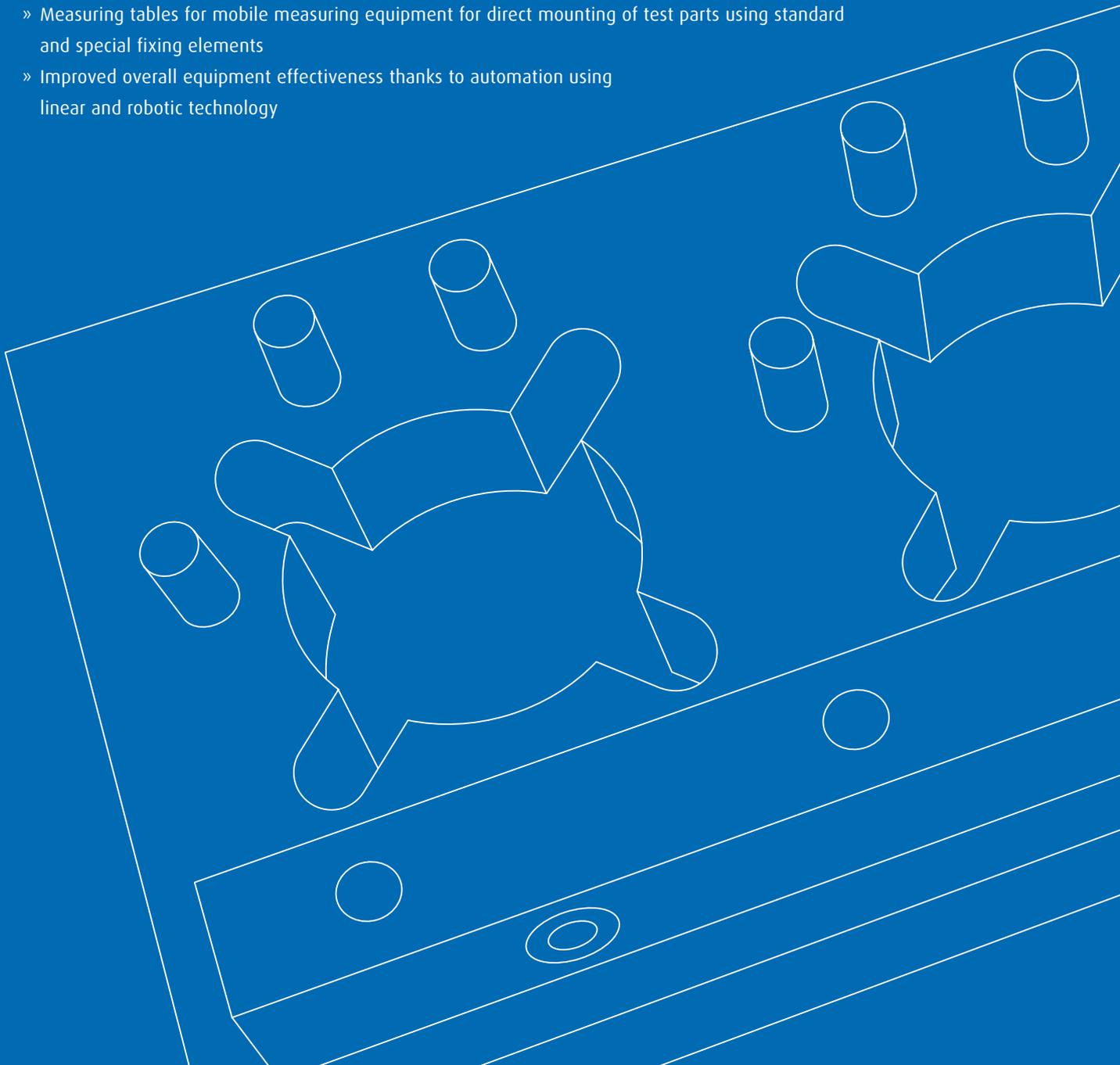


SPEZIALFIX

Customer-specific clamping fixtures

- » We develop, design and manufacture special clamping devices according to your specifications
- » Testing and measuring fixtures, analysis stations, inspection and test gauges
- » Simple or complex multi-clamping systems with mechanical, pneumatic, electromechanical or combined fixturing, clamping and handling components
- » Economical solutions using components from the dk standard ranges
- » Measuring tables for mobile measuring equipment for direct mounting of test parts using standard and special fixing elements
- » Improved overall equipment effectiveness thanks to automation using linear and robotic technology



Special solutions



Clamping and measuring equipment connection for batteries

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Multi-clamping for milled, turned and punched parts

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Multi-clamping for turned parts

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Multi-clamping for round deep drawn parts

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Vacuum multi-clamping device

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Multi-clamping for optical measuring

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Multi-clamping for optical and tactile measuring

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Precision module system Q-Line

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Motor-driven tailstock configuration

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Measuring tables for mobile measuring equipment for direct mounting of fixturing systems

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Automation: set-up and loading systems with linear and robotic technology

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Clamping and measuring equipment connection for batteries

- Designed for one-hand operation
- Colour coding to prevent incorrect operation: red anodised jaw at positive pole
- Spring-loaded fixture for secure electrical contact
- Stepped supports that can be adjusted without tools for different battery sizes for central positioning on the poles
- Stroke and clamping force can be preset without tools
- Covered and protected cable guide in the guide columns
- Completely new design in line with customer requirements

Application example

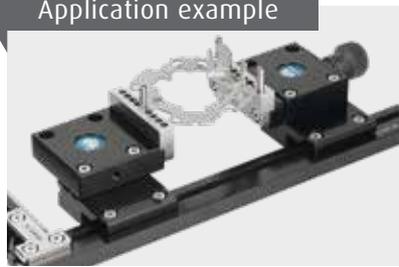


Multi-clamping for milled, turned and punched parts

- Multiple fixturing system for any number of parts as a combination of standard modules on special plates or frames
- Fixed and movable jaws separately positionable for a wide clamping range
- Jaws can be mounted vertically or horizontally
- Interchangeable jaws from the module range or as a custom-made product for part-specific fixation
- Force strength, force direction and travel of the movable jaw are freely adjustable, limitable and reproducible
- For optical or tactile measuring machines

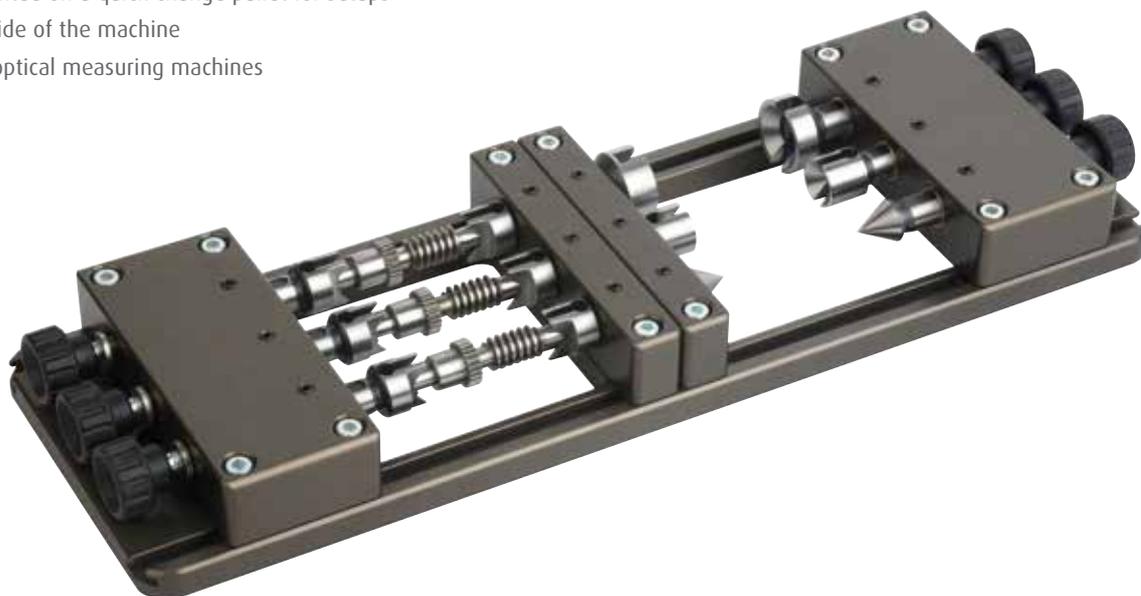


Application example



Multi-clamping for turned parts

- 6x tailstocks for turned parts
- Held using spring-loaded, stepped female centres from the Schienenfix range
- Mounted on a quick-change pallet for setups outside of the machine
- For optical measuring machines



Multi-clamping for round deep drawn parts

- 4x pallet construction; easy handling through low weight and grips
- Positioning in Z axis using exchangeable pins
- Centric fixturing using hand-operated three-jaw chuck from the standard range
- Mounted on a quick-change pallet for setups outside of the machine
- For tactile measuring machines



Vacuum multi-clamping device

- 12x clamping for disc-shaped ceramic test pieces
- Each clamping point can be actuated individually
- Maximum equipment configuration for given measuring volume
- For tactile measuring machines



Multi-clamping for optical measuring

- 20x clamping fixture for small plastic parts for medical technology
- With insertion aid
- Individual clamping
- For optical measuring instruments



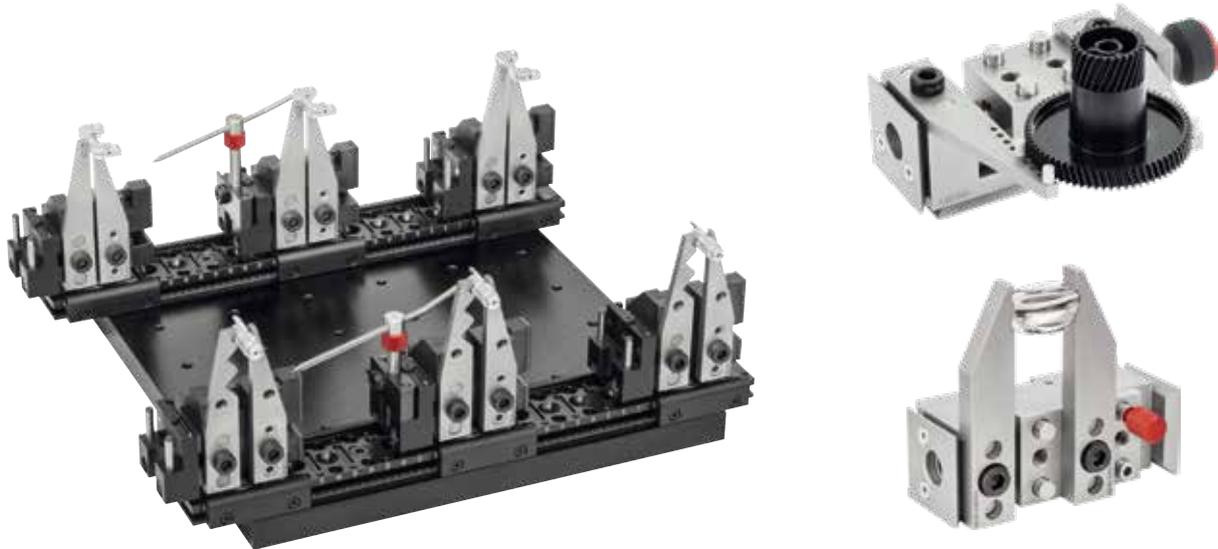
Multi-clamping for optical and tactile measuring

- 4x clamping fixture for sheet metal parts
- Individual clamping
- For multi-sensorial measuring equipment



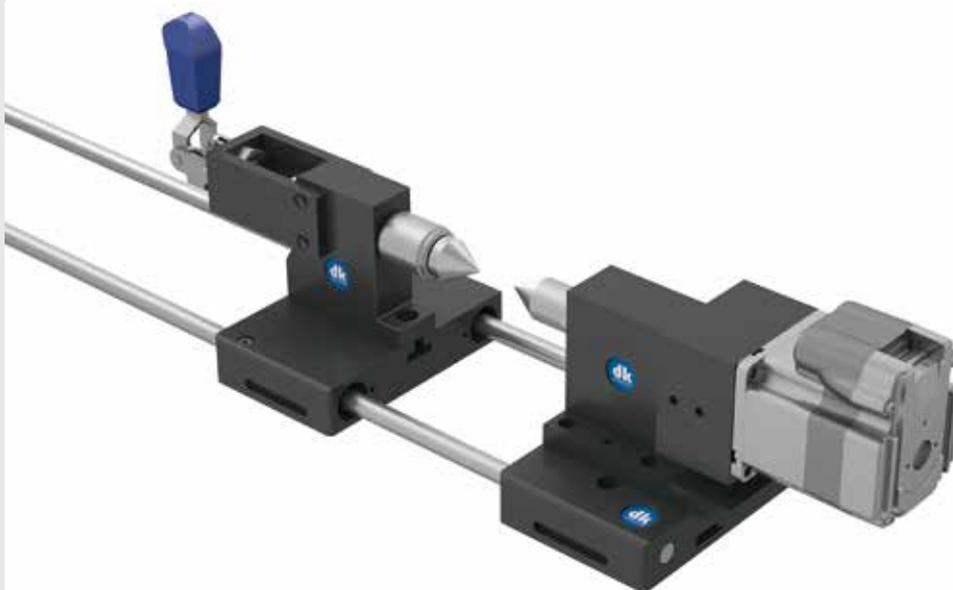
Precision module system Q-Line

- Vice and spring-loaded vice system for special and multi-clamping using standard parts
- High precision even for the smallest workpieces
- Jaws positioned for easy implementation of even highly part-specific geometries
- System rails for positioning elements in precise increments
- Fully compatible with the SWA 39 product range



Motor-driven tailstock configuration

- Tailstock with movable centre for holding
- For testing the entire circumference of parts or in controllable rotated positions
- For dimension and surface inspection



Tables for mobile equipment for direct mounting of fixturing systems

- For CMM, white light, laser and combi systems
- System plates for direct mounting of clamping systems:
 - > For example, drilling plate for use with the *SPANNFIX ECO* range
 - > Customer-specific grid holes with or without threaded bushings
- Customer, part and process-specific bench sizes and frame design
- Material: hard-coated aluminium plate on a stable aluminium profile frame
- Frame with fixed height, fixed and variable adjustment or freely adjustable
- Levelling feet to accommodate uneven floors
- Can be moved with a forklift and includes positioning aids for the forks
- Also available with freely positionable adapter plates for measuring equipment
- Standard height of 900 mm
- Standard depth of 800
- Standard widths of 800, 1200, 1600 and 2000 mm
- Available in all manner of part and process-specific versions
- Many versions of below table draws or hinged door cabinets optionally available



Automation: set-up and loading systems with linear and robotic technology

- Process-specific systems for moving setup processes outside of the measuring machine
- Direct automatic equipping of measuring machines with individual test parts or with mounting plates already equipped with several test parts
- Significantly reduced downtime on costly measuring equipment and improved overall equipment effectiveness
- Possible applications:
 - Simple manual systems for situation-dependent positioning of palletised test parts
 - Efficient and compact linear systems made from standard industry modules
 - Flexible, highly functional and non-application-specific robot systems
- Pallet station in front of the actual loading system to ensure efficient processing with high-throughput; modular assembly, manual or automatic transport, measuring equipment-specific dimensions
- Integrated parts clamping fixtures from the dk standard ranges or as a custom-made product

