### Press release Reutlingen, March 2022

**Innovation offensive after two years without CONTROL**

**The innovations in clamping technology for the metrology sector**

**Unique innovations and systematic expansion of the modular system**

At Control 2022, dk FIXIERSYSTEME GmbH & Co. KG will be showing users and partners from the world of measuring and testing technology all the new developments since the last event of this kind.

The 34th Control is the ideal platform for demonstrating the extensive innovations in measuring fixation systems:

* Digital positioning systems   
  As practicable and economical additions for dividing heads
* SWA39 SURF   
  The most comprehensive fixating programme for surface and contour measurements
* Machine Vision   
  Maximum variable positioning system for all cameras, illumination and sensors
* New individual products  
  For example, pendulum jaws and torque wrenches for manual chucks, or vices with auto contour-adapting jaws based on the "pincushion" principle

**Efficient measuring processes via motorised parts rotation**

For optical or tactile measurements, rotationally symmetrical parts must be rotated through the entire circumference or to specific angular positions. Both the mechanical rotary movement and the assignment of the rotation angle to the associated measuring value can be greatly simplified by using a motor drive with encoder. At CONTROL, dk presents a standard solution for the regulated drive of different types and sizes of chucks, collets and tailstock centres - with and without a mating support.

The benefits: Time/cost savings and high process reliability.



Image 1

**Digital positioning systems**

**Perfected dk module system for surface and contour measurement technology**

The reliability of the measurement results and the level of the process costs are decisively influenced by how precise, secure and fast the test specimens can be fixated. So It was high time to make the many adjustment and clamping elements of the dk standard programme applicable to the requirements of surface finish and contour measurement. Adaptations to all conceivable machine tables and existing fixtures have been developed as standards to fit on any existing system in the metrology room. Via the standard interfaces that have been so developed, all catalogue products - and often dk fixtures already available to dimensional metrology users - can be applied directly. Quick, tool-free and repetitive precision due to multiple zero point clamping. Maximum investment security through multiple use throughout the entire metrology room on all tactile and optical machines.



Image 2

**Clamping system for surface and contour measurement technology**

**Machine vision, IBV, AI...here it is not the test parts that are fixated, but the cameras, illumination and sensors that are brought into position, aligned and permanently secured.**

When the positioning of the hardware for automated optical inspection of workpieces and processes becomes demanding, the principle of conventional device holders becomes more expensive and involves risks: a special construction milled from the solid becomes cost-intensive and cannot be subsequently aligned precisely enough, let alone completely re-aligned. Flexible solutions from other domains usually do not meet the requirements in terms of permanent stability under operating conditions.  
The dk "Articulated Systems" range includes five separate programmes of 3D-flexible articulated joints for all requirements for the positioning of machine vision components:

* StrongLine – For simple applications such as the positioning of lighting
* VarioLine – Higher stability for demanding support tasks
* TurnStopLine – After tool-less manual locking of the central joint, holds as if welded
* ChromLine – Generously dimensioned with a radius up to 800 mm for where the camera may have to be positioned far away from the mounting location
* HygienicLine – Partial or full stainless steel range for sterile zones and clean rooms as well as for adverse aggressive ambient conditions

Image 3

**Machine Vision**

**Born from the practice of metrology rooms: special tools that did not previously exist in the field of measurement fixating systems**

What can be done when test parts are so delicate and sensitive that even the best smooth-running manual chucks run the risk of applying too much force to the workpiece or of imparting a different force to the part with each new clamping, so that the measurement result is not reliable?

Two new solutions from dk:

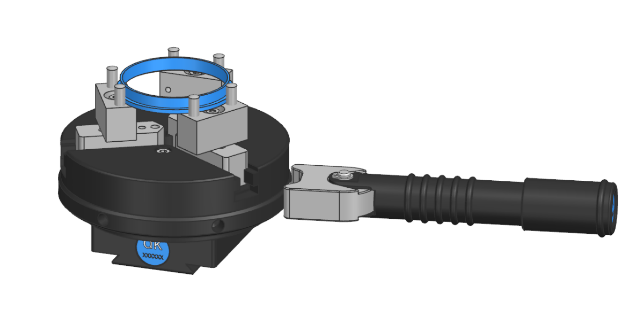
* Pendulum jaws on manual chucks double the contact or clamping points on deformation-sensitive parts and reduce the force required per contact point for secure holding; the compensating pendulum movement of the jaws further reduces the risk of polygon formation
* The problem of different users or even the same user always tightening the chuck with different forces by successive clampings has been solved by dk with the development of a special torque wrench for manual chucks: the optimum clamping force for the respective test part can be accessed with repeat accuracy on the torque wrench and the entire process becomes as safe as possible.

Image 4

**Metrology tools**

These and other innovations for the qualitative and cost-related improvement of measuring and testing processes by means of intelligent fixation systems can be seen at the exhibition stand of dk FIXIERSYSTEME GmbH & Co. KG in **Hall 3 | Booth 3407** at the CONTROL in Stuttgart.

**Number of characters**

Total: 5,218 characters

Words: 794

**A short profile of dk FIXIERSYSTEME GmbH & Co. KG**

The core expertise of dk FIXIERSYSTEME is in modular clamping specially for measuring technology, but also for laser technology, metering technology, mounting technology, micro technology and parts handling.

Intelligent solutions for machine vision and sensor technology complete the range and make dk a one-stop shop for fixation systems for parts and devices.

After 50 years of continuous development, the product range today comprises approx. 1,000 freely combinable products that form a comprehensive modular system. Countless process and product-specific special constructions are also in use. Users who work with dk technology regularly confirm that the flexible combination of modules and the durability of the elements ensure precise measurements while maintaining a perfect and thus cost-optimised workflow.

*dk Fixiersysteme: modular. simple. better.*

dk FIXIERSYSTEME GmbH & Co. KG

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