

Press release

Kistler at Stanztec 2024 offers new solutions for process and quality control

Debut of the new analog controller KCA 400 / Touch for the stamping industry

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If you want to minimize waste in the production of stamped parts and ensure a smooth production process, you need to reliably monitor processes and control finished parts, even at high cycle times. [Kistler](#) will be presenting two solutions designed precisely for this purpose at this year's Stanztec in Pforzheim at booth A-48 in hall GS. The KCA 400 / Touch analog controller will be on display for the first time, accompanied by the KVC 621 SE optical test system. The KCA 400 / Touch features a new, larger color touch screen. The KVC 621 SE is characterized by its compact design and high inspection process reliability with cycle times of up to 4,000 parts per minute.

The revised KCA 400 / Touch analog controller enables the use of up to four inductive sensors for double-sheet control. The sensors connected to the controller are placed in the punching tool. Two diagonally arranged sensors suffice to detect tilting of the spring-loaded guide plate, for example due to built-up punching waste.

The controller is equipped with a large touchscreen and displays detailed information in color. It can now also display status and error messages in other languages including Chinese. The KCA 400 / Touch is designed as a subsystem and only requires a digital connection to function as a link between sensors and machine control in standard tool and process monitoring systems. This allows older systems to be retrofitted.

Manufacturers also benefit from the auto-set function during setup. Once all sensors have been set, the analog controller copies and saves these values as setpoints using AUTOSET. The desired tolerances can be adjusted individually for each sensor and can be changed at any time. This allows the sensors to start monitoring the tool quickly after an uncomplicated installation process. If one or more of the measured values is outside the defined tolerance range, the tool monitoring system stops the press and prevents the production of further NOK parts.

KVC 621 SE: high-performance optical inspection system checks every single stamped part

The latest member of Kistler's optical inspection system family will also be on display at Stanztec. The modular KVC 621 SE is built in a 600-millimeter-wide housing and its modular design allows fast availability. The system is constructed for the mass production of stamped parts and manages the optical inspection of up to 4,000 test parts per minute. Integrated camera stations record each individual part. The image processing software KiVision 6.0, which has been further developed by Kistler, then evaluates the images and detects dimensional and contour deviations as well as surface defects such as scratches or dents. The new version of KiVision offers users the option of creating their own command macros via drag & drop, even without programming knowledge. This considerably simplifies quality assurance. The increased performance of the software means that inspection tasks are carried out more quickly. Thanks to close PLC monitoring, the machine ensures that every single part is tested.

Anomaly detection based on artificial intelligence can also be integrated for test parts and requirements of a suitable nature. It also finds previously unknown or frequently changing surface defects.

Cooperation with Nidec Sys: new standalone solution guarantees flawless OK parts

In addition, stamping technology expert Nidec Sys and Kistler present their first joint solution for the stamping industry. In the Inline Vision & Weld (IVWS) quality assurance system, they combine optical quality control, precise separation, and welding in a single system. The cutting tool automatically and precisely separates out any bad parts detected by the KVC 621 SE. In the next step, the system welds the strip back together, ensuring that only OK parts are wound onto the spool – thus meeting the high quality requirements of the automotive industry. Visitors can experience the quality testing, separating, and welding processes live and see for themselves how seamlessly the fully integrated system works.

Image material (please name the Kistler Group as picture source)

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The KCA 400 / Touch analog controller enables users to use up to four sensors in the double sheet control and displays detailed status and error information.



The new KVC 621 SE punching part inspection cell is characterized by its slim housing, high availability and achievable cycle times of up to 4,000 parts per minute.

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About the Kistler Group

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