

Media release

Motek 2017:

Kistler demonstrates the potential of process-integrated quality control at the Motek 2017

Winterthur, 31 August 2017 – The Kistler Group will showcase the entire spectrum of its integrated quality assurance solutions for quality control at the Motek 2017 in Stuttgart from 9 to 12 October. Highlights include electromechanical joining systems, portable bolting test technology and a comprehensive range of piezoelectric force and torque sensors. And what's more: Kistler will premiere a groundbreaking innovation that marks a new milestone in the Group's Industry 4.0 portfolio.

Modern production environments depend on transparent processes to boost quality and enhance efficiency through networked and optimized production. The goal: to manufacture maximum-quality products faster – but with less effort and fewer resources. Integrated quality assurance systems play a crucial part in this competitive race. They achieve the desired effects while the production process is still taking place – and they also provide the basis for data evaluation and analysis.

Electromechanical joining: efficiency for every level of complexity

Press-fit processes join components together with positive, friction-locked connections. Kistler offers a portfolio of seven electromechanical joining systems that cover various force and displacement ranges for these processes. Our Motek 2017 fair stand will feature two familiar systems: NCFE and NCFR. NCFE delivers an exceptionally cost-efficient solution for simple joining processes in the 10 to 80 kN force range, while the NCFR system features hollow-shaft motors for challenging applications where a rotary movement is required in addition to the press-fit process.

Another exhibit on the stand will be Kistler's retrofit set for manual and pneumatic presses. Equipment of this sort that is still used on many manual workstations can now be brought into the I4.0 era with this retrofit package. Thanks to the piezoelectric force sensor and the linked maXYmos BL evaluation unit, non-destructive in-process quality control is now a reality. The wear-free press force sensor is already preloaded, calibrated and ready to measure immediately; it features excellent overload protection and a wide force measurement range from 0 to 60 kN.

maXYmos: force (and displacement) monitoring for the digital era

maXYmos: the brand name for evaluation systems that offer virtually every option for recording and monitoring quasi-static and highly dynamic force processes on machinery and plant. Combined with Kistler's piezoelectric sensors, they ensure exceptionally robust and accurate measurements of process and quality data – even when ambient conditions are difficult, where installation space is severely limited or if the forces are very small.

Kistler is launching maXYmos 1.5 at the Motek 2017 – an update that simplifies process optimization and enables added machine availability. Users can now import CSV files to parameterize the system

offline – and with ten times more memory size for up to 5,000 measurement curves, maXYmos 1.5 ensures that the plant will operate optimally even during lengthy network outages. Another benefit: a handheld scanner can be used with maXYmos 1.5 to allow automatic adaptation to the product being manufactured thanks to barcode identification.

Flexible bolted joint testing and tool calibration

Kistler now offers the mobile INSPECTpro and combiTEST systems from Schatz. With these flexible testing systems, manufacturers can benefit from efficient control and quality assurance for bolted joints. Available for the first time with wireless data transmission at Motek 2017, the portable INSPECTpro testing instrument offers convenient testing of torque and rotation angle on bolted joints. The mobile combiTEST system is the ideal choice for calibrating and certifying torque tools, and for testing the process capability of automated bolting systems. Both these solutions are geared to compliance with standards; they offer wide-ranging options for data management, networking and analysis. In short – Schatz systems bring bolting technology into the Industry 4.0 era.

Digital is better: an innovation in measurement technology unveiled at the Motek 2017

Just in time for the world's leading trade fair for the sector, Kistler will unveil the first digital charge amplifier – a breakthrough in industrial measurement technology. For the first time, machinery and plant manufacturers can now integrate any desired piezoelectric sensors into their Ethernet environment so that settings can be made directly via the control. Kistler's digital charge amplifier offers a vast range of measuring functions, and will be compliant with the three main Ethernet standards – fully in line with end-to-end digitization for Industry 4.0.

Kistler at the Motek 2017: hall 4, stand 4508



Figure 1



Figure 2

960-862e-10.17



Figure 3

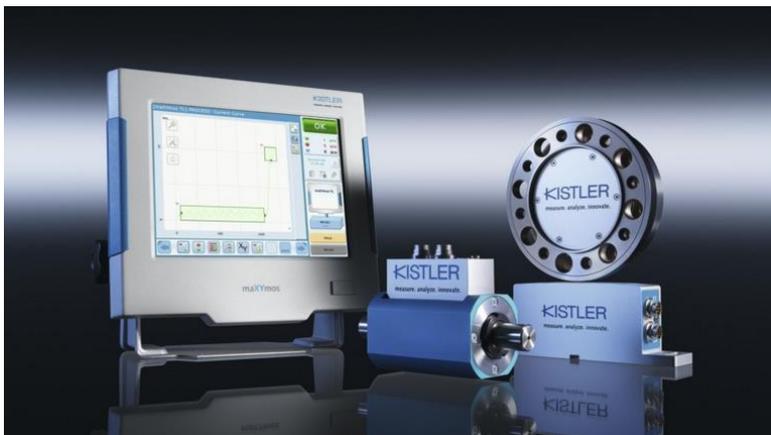


Figure 4



Figure 5



Figure 6



Figure 7

960-862e-10.17

Captions

Figure 1: The NCFR joining module combines maximum flexibility for special press-fit processes with partial rotation, thanks to integrated force-displacement / torque-rotation angle sensors in a compact design.

Figure 2: As compared to hydraulic or pneumatic units, the impressive NCFE module (the 'E' stands for Economy) offers low energy consumption, easy handling and fast commissioning.

Figure 3: Retrofit set for manual presses. This package (Type 9819A) includes the new press force sensor and the maXYmos BL XY monitor. Also included: mounting pin for the force sensor, displacement sensor, cable and attachment fittings.

Figure 4: Thanks to their uniform operating philosophy, products in the maXYmos family are user-friendly and intuitive to operate. These features make commissioning simple and fast.

Figure 5: INSPECTpro, the portable measuring instrument from Schatz, opens up new possibilities for random sample testing during assembly – in terms of hardware as well as software.

Figure 6: For the first time, the combiTEST mobile test center from Schatz enables accurate, on-the-spot testing of all tools used in assembly, in compliance with the standards.

Figure 7: Kistler's digital industrial charge amplifier (Type 5074A) is the world's only amplifier for quasi-static measurement processes with piezoelectric sensors on real time-capable Industrial Ethernet. It allows direct integration of any desired sensors with charge signals, and settings on the measurement amplifier can be made via the machine control.

About the Kistler Group

Kistler, the originator of piezoelectric measuring technology, is the global leader in dynamic pressure, force, torque and acceleration measurement. Cutting-edge technologies provide the basis for Kistler's modular systems and services.

Customers in industry, research and development benefit from Kistler's experience as a development partner, enabling them to optimize their products and processes so as to secure sustainable competitive edge. This owner-managed Swiss corporation plays a key part in the evolution of automobile production and industrial automation, and its innovative sensor technology also helps foster the development of many newly emerging sectors. Drawing on our extensive application expertise, and always with an absolute commitment to quality, Kistler drives innovations ahead in lightweight construction, vehicle safety, emission reduction and Industry 4.0.

Over 1,600 employees at 58 facilities across the globe are dedicated to the development of new measurement solutions, and they offer individual application-specific support at the local level. Ever since it was founded in 1959, the Kistler Group has grown hand-in-hand with its customers and in 2016, it posted sales of CHF 358 million. About 10% of this figure is reinvested in innovation and research – with the aim of delivering better results for every customer.

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