

Press release

Digitally optimized injection molding from one single source

The new AkvisIO software from Kistler offers synchronous, cross-system data analysis

Winterthur, October 2023

With the new AkvisIO IME (Injection Molding Edition) data analysis software, Kistler is helping its customers take a further step towards the digitalization of injection molding: all of the data from machines and process monitoring systems like ComoNeo and ComoScout can now be visualized and analyzed synchronously and across processes.

In addition to suitable machines and tools, high-performance and transparent injection molding processes often require more in-depth optimization with sensors and continuous production monitoring. Moreover, when it comes to designing processes that are optimal over the long term, data management and data analysis play a decisive role: they are the missing, often underutilized, link in the value chain of modern plastics processing.

AkvisIO IME from Kistler bridges this gap and enables customers to manage and analyze data across devices and processes. The data analysis software for recording, storing and analyzing high-frequency sensor and machine signals during injection molding is intended for use by both process engineers and data scientists. It replaces the previous ComoDataCenter (CDC) data management solution from Kistler and provides a comprehensive analysis function including automatic data synchronization with all connected systems.

Complete digital solution for process engineers and data scientists

AkvisIO IME simplifies the setting up and configuration of the connected injection molding machines and process monitoring systems from Kistler such as ComoNeo and ComoScout. Thanks to seamless synchronization, digital assets like tool configuration, reference curves and monitoring objects can be easily transferred and consistently managed – both on the master computer (AkvisIO) and directly on the machine. All data is saved on a cyclical basis and can be compared and analyzed across cycles, giving customers a single source of truth for all their plastics processing product data. Furthermore, the cross-machine and cross-device monitoring of all injection molding processes simplifies the creation of customized reports for quality assurance.

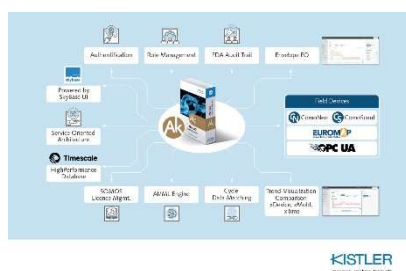
As a modular, scalable software solution, AkvisIO already comes equipped with a number of analysis features that are being continually expanded. These are the well-known monitoring functions of ComoScout and ComoNeo (known as evaluation objects or EOs) as well as working with reference curves. Other features include cross-cycle trend analysis and statistical process control (SPC) with output of characteristic values for process capability and stability such as C_p , C_{pk} , mean value and standard deviation. All of the analysis data obtained can be visualized and integrated into various reports.

Customizable, modular and scalable

Starting in September, the AkvisIO IME data analysis software will be available for the process monitoring system ComoScout. This entry-level solution from Kistler analyzes all available machine signals and is ideal as a retrofit for the digital connection of injection molding machines that are not yet equipped with mold sensors or which have sensors that are used for the analysis of temperature signals at voltage inputs. Starting in January 2024, the data analysis software will also be available for use with the process monitoring system ComoNeo, which monitors the injection molding process with the help of cavity pressure and temperature sensors.

Customers can individually determine the scope of AkvisIO IME based on their requirements. Additional modules such as trend monitoring with artificial intelligence will be released over time. Users of the previous database solution CDC can simply upgrade to AkvisIO, which will be the standard software for ComoNeo and ComoScout as of 2024. Thanks to integrated user management and rights management via lightweight directory access protocol (LDAP), AkvisIO also leaves nothing to be desired in terms of auditing, data security and traceability.

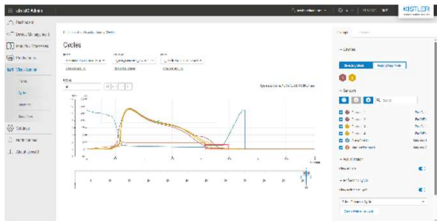
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The new AkvisIO IME (Injection Molding Edition) data analysis software offers a variety of new features and functions for the digital optimization of injection molding.



In the trend visualization, recorded characteristic values of the machine and sensors can be compared across cycles with regard to their intervention limits, similar to statistical process control (SPC).



AkvisIO IME enables cross-system and cross-cycle data analysis during the injection molding process and ideally complements process monitoring with Kistler.

Media contact

Angelica Zeolla
Marketing Campaign Manager
Phone: +41 52 2241 606
Email: angelica.zeolla@kistler.com

About the Kistler Group

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