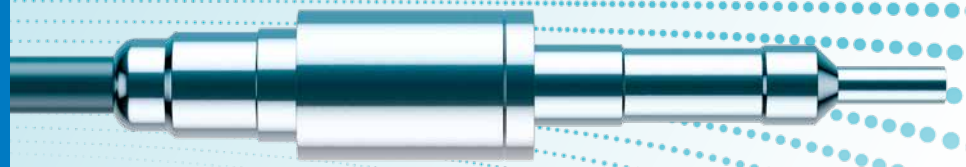
Talk to our medical experts and set out on your path to RTRT.

We support you every step of the way, from first pilot to implementation across lines, plants, and sites. Contact us today, using the QR code below.

KISTLER
measure. analyze. innovate.

962-205e-10.26 © 2026 Kistler Group

It's time to make it real



Real-Time Release Testing for medical injection molding.

KISTLER
measure. analyze. innovate.

From statistical sampling to per-part release confidence

In medical plastic injection molding, quality release has traditionally relied on Statistical Process Control (SPC). While this provides a basis for quality assessment, it only evaluates a sample of the parts produced.

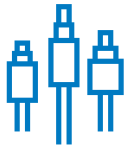
As regulatory requirements on quality evidence and traceability rise, it is clear that sampling alone will no longer be enough. This is where Real-Time Release Testing (RTRT) comes in. Already established in the pharmaceutical industry, RTRT enables manufacturers to assess quality during production and build auditable evidence for every part, moving beyond the limitations of SPC.

Introducing the Kistler MedRelease Suite

The Kistler MedRelease Suite makes this transition practical. It brings together cavity pressure measurement, quality determination, validation, documentation, and implementation support. All with the objective of helping OEMs and CMOs bring RTRT into production and scale it with confidence.

The five building blocks of the Kistler MedRelease Suite

Measuring quality-relevant process values in each cavity
with high-precision cavity pressure sensors



Assessing quality in real time
with process monitoring and quality prediction models



Documenting the evidence
with documentation and data analysis software



Optimizing across molds, lines and sites
with OEM-level data management and reporting tools



Implementing RTRT step-by-step
with expert guidance and dedicated support



The journey has already begun

We are already working with medical OEMs and CMOs around the world in transitioning from SPC to RTRT, supported by our sensors, predictive technology and hands-on implementation expertise.

Main benefits for medical CMOs

+ Faster release readiness through in-process quality control
+ Scalable process repeatability
+ Stronger OEM confidence
+ Guided implementation support

Main benefits for medical OEMs

+ Release confidence for every part
+ Auditable per-part quality release
+ Supplier quality visibility
+ Guided implementation across supplier network