

# COLD CHAIN TRACKING BY UHLMANN

Temperature monitoring of active ingredients and process chain tracking – from production, packaging and logistics – right down to the patient

Whether cold chain, frozen chain, or ultra-cold chain – in all cases it is crucial to strictly observe the defined temperature ranges and keep any process-related interruptions within the tolerance range. This makes it all the more important to establish efficient cold chain tracking. A Track & Trace by Uhlmann solution provides a complete package of field-proven hardware and software for monitoring the temperature of active ingredients and tracking the entire process chain.



## RECORDING AND STORAGE OF TEMPERATURE DATA

Even in the container; the data can be read out later



## CONTACTLESS COMMUNICATION VIA RFID OR NFC

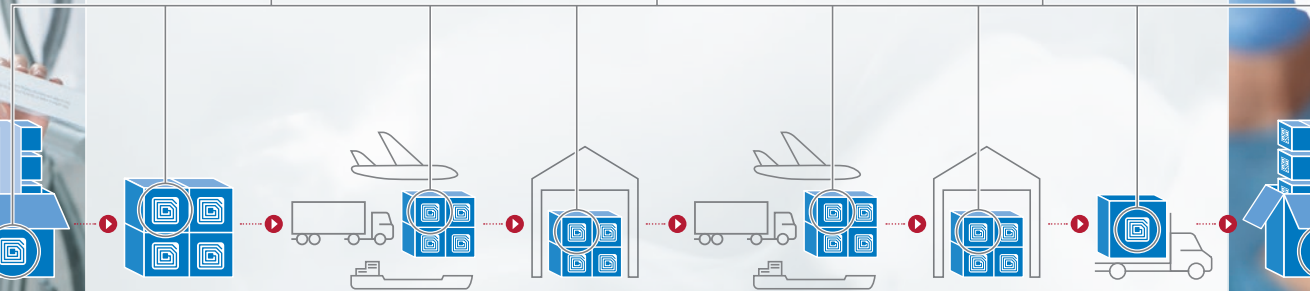
Established standards, compatible with multiple applications



RFID/NFC

## CLOUD BASED APPLICATIONS

Tracking of all process data through remote monitoring



**END-TO-END TRACKING FROM PRODUCTION ...**

**... RIGHT DOWN TO THE PATIENT**

# SAFETY AND ADDED VALUE FOR YOUR PROCESSES.



**YOUR PARTNER FOR THE BEST PACKAGING SOLUTIONS: UHLMANN**

**SAFE, ECONOMIC AND FLEXIBLE PARENTERAL PACKAGING**



**SEAMLESS, COMPREHENSIVE, SAFE: TRACK & TRACE BY UHLMANN**

**HIGH-END CONTROL: MEDICAL DEVICE TRACKING WITH KOCH PAC-SYSTEME**

For more than 70 years, we have been serving the needs of pharmaceutical companies in a constantly changing world, providing pioneering technologies and future-proof solutions for today's and tomorrow's production needs. With innovative packaging lines, comprehensive services and digital solutions, we set new standards in quality, efficiency and availability.



Parenteral products in syringes, ampoules or vials are highly sensitive. As a reliable partner for secondary parenteral packaging, we ensure maximum product protection and high productivity. With special blister lines and cartoners, also designed to ensure flexibility in processing different product and packaging formats.



[www.uhlmann.de](http://www.uhlmann.de)

[www.parenteral-packaging.com](http://www.parenteral-packaging.com)

Track & Trace by Uhlmann: our expertise in anti-counterfeiting protection, product and process safety. From our modular portfolio of machines components, software, consultation and services, we create the ideal solution. Geared to your requirements, this complies with regulatory specifications for the tracking of medicines and marking of medical devices (UDI).



[www.track-trace-by-uhlmann.com](http://www.track-trace-by-uhlmann.com)

Marking and inspection, data acquisition and management in compliance with UDI: When it comes to medical device tracking, we rely on KOCH's long-standing experience. A member of the Uhlmann Group, KOCH specializes in customized packaging machines. The KOCH medplus brand stands for in-depth expertise in medical technology applications.



[www.koch-pac-systeme.com](http://www.koch-pac-systeme.com)

**Contact:**  
 Georg Schick  
 Global Product Manager Track & Trace  
 Phone +49 7392 702-8590  
 Mobile +49 162 288 4942  
[schick.g@uhlmann.de](mailto:schick.g@uhlmann.de)

