# KRAUTKRÄMER ROWATMUX SETTING THE BAR HIGHER

# Elevating the market standard for PAUT bar and wire inspection

- Phased array ultrasonic testing solution for the inspection of cracks, inclusions and surfaces of diverse bar and wire materials
- Easy-to-use solution that meets the demands of aerospace, automotive, engineering and other industries
- Combines proven hardware with advanced software for increased profitability, precision and performance



# High uptime, low operation expense

Built on the Krautkrämer legacy of more than 200 installations worldwide, ROWA™ Ux is one of the leading ultrasonic phased array inspection solutions. Thanks to its advanced capabilities, the Krautkrämer ROWA<sup>™</sup> Ux is the preferred inspection system of the most renowned bar manufacturers around the globe.

With the new generation of Krautkrämer's premium USIP|xs ultrasonic instrument and an enhanced user interface, the Krautkrämer ROWA™ Ux system

provides an easy-to-use solution for the inspection of cracks or inclusions within the full volume, as well as on the surface of metal bars for the automotive, aerospace and mechanical engineering industries.

With its compact design, the system can be integrated into inspection lines in a space-saving and cost-effective manner. And with the fully automated reference bar manipulator, excellent calibration repeatability can be achieved with minimal operator intervention.

## Inspection efficiency at all levels



#### Ease of operation

The fully refreshed software is in accordance with the latest usability standards. Simply follow the workflow process (setup - calibrate - inspect analyze) to accelerate your setups and make them more consistent.



#### **Performance capability**

The latest generation modular design includes fast optical data transmission and ensures the system's robustness that an industrial environment demands.

The integrated diagnostic features and remote connectivity ease the day to day use of the equipment.

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#### Expert support

Our team of field-trained experts will give you the kind of assistance you need, from simple troubleshooting to full application consulting on your new test requirements. You'll have trusted support every step of the way with the 24/7support from our global and regional support services.



## Meets industry standard

The instrument fully complies with ISO 18563 to meet the upcoming certification requirements of your end customers and guarantees your investment is future proof.

#### Low cost of ownership

Krautkrämer ROWA™ Ux features a simplified test mechanics with Phased Array probes mounted to just a solid stainless-steel body.

Without any moving parts or complex swivel mechanisms immersed in polluted water, maintenance efforts are significantly reduced to provide a maximum of uptime at low operation expense.

Exchanging probes can be done by a single operator, without the need of a crane or any special tools, so that the material flow of your plant is not affected.

# Krautkrämer ROWA™ Ux Software: **Driving Advanced Plant Productivity**

Our Krautkrämer ROWA™ Ux software and optional software extensions transform ultrasonic testing into a strategic asset for bar stock inspection - optimizing your entire production process, by improving system availability, probability of detection, and providing data-driven insights for continuous improvement.

## **ANALYTICS**

#### Maximizing Profitability through Data-Driven Insights

Advanced analytics and highresolution visualizations allow users to detect flaws early, reduce scrap and rework, and improve first-time yield.

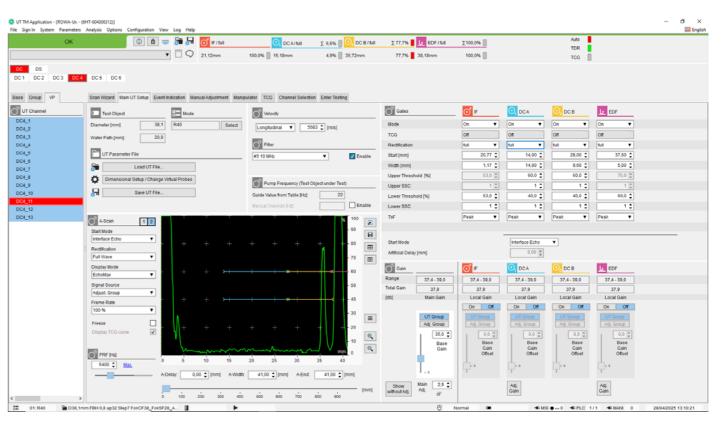
By identifying the root cause of defects, you can implement targeted process improvements - maximizing both quality and profitability.

### PRECISION

#### **Ensuring Uncompromising** Quality with Advanced Detection

Uncovering hidden defects, maintaining high quality standards and enhancing the Probability of Detection (PoD).

With a refreshed, user-friendly interface and guided workflows, you accelerate setup and ensure consistent, high-reliability inspections - reducing customer complaints and raising confidence.







#### PERFORMANCE

An automated setup, intuitive wizards, and real-time system

**Boosting Uptime and Output** 

with Intelligent Automation

health monitoring reduce downtime and validation delays to maximize productivity.

This intelligent extension boosts output by streamlining workflows and keeping your production moving with minimal interruptions.

# **Technical data**

#### Krautkrämer ROWA<sup>™</sup> Ux

Test objects: Test diameter range:	<ul> <li>Metal bars</li> <li>Round D 6-260mm</li> <li>Square and hexagonal up to w=50mm</li> </ul>	Transmitter:	<ul> <li>25 V to 180 V supply voltage adjustable in 5 V steps</li> <li>Max. PRF 20 KHz</li> </ul>
		Receiver:	• 0.5 – 15 MHz bandwidth
Test speed:	• Up to 120m/min		<ul> <li>0 - 96 dB dynamic range per channel</li> </ul>
Detection s capability:	<ul> <li>Flat bottom hole D≥0.7mm</li> <li>Side drilled hole D≥0.3mm</li> </ul>	Digitizer:	<ul><li>Sampling frequency of 50 MHz</li><li>Up sampling to 400 MHz</li></ul>
	<ul> <li>Surface notch t≥0.1mm</li> <li>Untested ends down to 30mm</li> <li>Deviating requirements on requests</li> </ul>		<ul> <li>2 parallel phased array probes – supported by 128 elements each – both of which can connect to</li> </ul>

#### Options

- · Pre-wetting and cleaning system
- · Reference standard manipulator for fully automated sensitivity adjustment
- · Reference standards

## **Compliant to quality standards**

- AMS2154, class AA
- NADCAP
- EN ISO 18563-1
- · All leading automotive and aero end-user specifications

#### Contact us to learn more about how we can make our platform work for your needs!

You can contact your sales professional, reach out to our customer care team at uttm.service@bakerhughes.com or find contact information specific to your global location at waygate-tech.com.

#### **USIP**|xs Phased Array Instrument

	<ul> <li>0.5 – 15 MHz bandwidth</li> </ul>
Receiver:	<ul> <li>0 - 96 dB dynamic range per channel</li> </ul>
Digitizer:	<ul><li>Sampling frequency of 50 MHz</li><li>Up sampling to 400 MHz</li></ul>
Phased Array capability:	<ul> <li>2 parallel phased array probes – supported by 128 elements each – both of which can connect to the instrument for a maximum of 256 elements.</li> </ul>
	<ul> <li>Up to 4 parallel apertures, sized from 1 to 32 elements, for each phased array probe</li> </ul>



