



**Waygate
Technologies™**
a Baker Hughes business

OIL & GAS INSPECTION STARTS WITH US.

Krautkrämer Ultrasonic Inspection Portfolio

ULTRASOUND SOLUTIONS FOR OIL & GAS

From one of the world's major players in the Oil & Gas industry

At Waygate Technologies, we combine over 75 years of Krautkrämer ultrasonic innovation with the strength and global footprint of **Baker Hughes**, a leading Oil & Gas company.

Being at the heart of the sector, we can draw on in-depth industry knowledge. From the Baker Hughes Drill Rig Count – a widely recognized indicator of Oil & Gas market health – to decades of on-the-ground expertise, we have a comprehensive understanding of the industry.

This unique positioning enables us to design and deliver ultrasonic inspection solutions that not only meet but often exceed the most demanding requirements in safety, reliability, and performance for upstream, midstream, and downstream operations.

Whether it's for pipeline integrity, OCTG manufacturing, or critical asset reliability, our ultrasonic portfolio is engineered for the realities of Oil & Gas – challenging environments, high stakes, and zero tolerance for failure.

Our Ultrasonic Oil & Gas Portfolio:

1. Krautkrämer SNUP – Inspection of Submerged Arc Welded pipes
2. Krautkrämer ROWA WT – Full-Body Inspection for Tube Wall Thickness and Laminations
3. Krautkrämer ROT – Full Body Inspection of Tubes with Rotating Probe System
4. Krautkrämer GRP Gantry – Advanced Phased Array (PA) Technology for Seamless Tube Inspection
5. Krautkrämer BPE – Robust Inspection for Plate and Coil Testing (SAW & ERW)





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WHY CHOOSE OUR SOLUTIONS?

- Proven Krautkrämer heritage with decades of industry leadership
- State-of-the-art UT technology for superior detection capability
- Robust, field-ready designs for harsh Oil & Gas environments, leveraging our extensive industry expertise
- Global service and training support to maximize uptime

TRUST THE LEGACY. 

Krautkrämer

Ultrasound Solutions



Hundreds of partners around the globe trust our industrial inspection solutions and expertise to improve reliability and boost productivity.

We're helping customers drive their digital transformation by applying state-of-the-art data and analytics to reveal groundbreaking insights and solve business challenges.

And as a Baker Hughes business, with its decades at the heart of the Oil & Gas industry, we bring extensive expertise to pipe quality assurance.

INSPECTION STARTS WITH US.



KRAUTKRÄMER SNUP

Ultrasonic Inspection Systems for Submerged Arc Welded (SAW) Pipes

The Krautkrämer SNUP system helps you meet API and premium customer specifications, reduce rework, and protect your reputation, even at the highest production speeds.

Key Applications

- Weld seam inspection for LSAW (Longitudinal) and HSAW (Helical) pipes
- Detection of longitudinal, transverse, and oblique flaws in weld seams
- Detection of laminations in the heat affected zone (HAZ)
- Optional pipe-end testing
- In-process monitoring directly after welding

Main Benefits

- Flexible technology – supports both PA and conventional UT

- Higher productivity – PA reduces changeover and calibration time
- Higher repeatability, optimized beam control, lower false call rates, and higher Signal-to-Noise Ratio (SNR)
- Fast setup – motorized probe adjustment
- Advanced visualization – real-time strip chart recording
- Automated laser-guided weld seam tracking for both weld cap edges
- Stable coupling – controlled water gap with hardened wear shoes

Standards Compliance

- API 5L / ISO 3183
- DNV-OS-F101
- Shell DEP-31.40.20.37-Gen.
- Chevron, Aramco, IOGP S-616

TYPICAL SPECIMEN DIMENSIONS

	SNUP-LO	SNUP-SP
Pipe Diameter	> 355 mm / > 13.9"	
Wall Thickness	≤ 80 mm / ≤ 3.15"	≤ 25.4 mm / ≤ 1"
Pipe Length	min. 5 m / 16' (typically 12 – 18 m / 39' – 59')	min. 5 m / 16' (typically to 24 m / 79' or continuous feed)
Weld Seam Width	≤ 150 mm / 5.9"	≤ 35 mm / 1.4"
Other values available upon request		

KRAUTKRÄMER ROWA-WT

Contactless Full-Body Ultrasonic Inspection for OCTG Pipes

Built with a solid stainless-steel body and no mechanically moving parts, Krautkrämer ROWA-WT ensures reliable, low-maintenance operation with high uptime. Using advanced PA technology, it provides 100% coverage of the pipe circumference and delivers detailed measurements of wall thickness, laminations, and geometry.

Key Applications

- Wall thickness and eccentricity measurement on seamless and ERW OCTG
- Flaw inspection for lamination and inner wall deformations
- Dimensional geometry measurement (ID, OD, ovality)
- Testing at high throughput with up to 132 m/min and 433'/min test speed

Main Benefits

- Contactless design eliminates wear and coupling issues on rough or scaled surfaces
- No moving parts, resulting in robust, maintenance-friendly operation
- Electronic probe adjustment enables fast changeovers without mechanical realignment
- Compact footprint and high throughput support efficient integration into production lines
- Detailed flaw and geometry data output
- Field-proven reliability on heavy OCTG diameters and wall thickness

Standards Compliance

- DIN EN ISO 10893
- API 5CT
- API 5C2



TUBE DIAMETER RANGE

ROWA Mechanics	Diameter Range (mm)	Diameter Range (inch)
ROWA-WT-240/6	30 - 177.8 mm	1.18" - 7"
ROWA-WT-240/12	30 - 177.8 mm	1.18" - 7"
ROWA-WT-360/8	60.3 - 273 mm	2.37" - 10.75"
ROWA-WT-560/12	127 - 406.4 mm	5" - 16"

KRAUTKRÄMER ROT

Full-Body Ultrasonic Inspection of Tubes with Rotating Probe System

Krautkrämer ROT series provides ultrasonic full-body inspection of seamless and electrically welded (ERW) tubes using a rotating probe system. The system is designed for compact integration into production lines, ensuring reliable flaw detection at high speeds.

Key Applications

- Longitudinal, transverse and oblique flaw detection
- Flaw inspection for lamination and inner wall deformations
- Wall thickness and eccentricity measurement
- Dimensional geometry measurement including inside diameter (ID), outside diameter (OD), and ovality
- Single tube and continuous end-to-end testing modes to increase productivity

Main Benefits

- High-speed linear tube transport with testing speeds
- Contactless rotating probe system reduces wear and maintenance
- Advanced ultrasonic electronics with dynamic noise suppression for precise flaw evaluation
- Real-time visualization and recording of test data
- Compact and robust design suitable for production line integration
- Wall-thickness measurement accuracy $\pm 0.03 \text{ mm} / 0.001''$

Standards Compliance

- EN ISO 10893 – 8, -10, -12
- API 5 CT, API 5 L, API 5 D, API 5 C2
- Further specifications on request

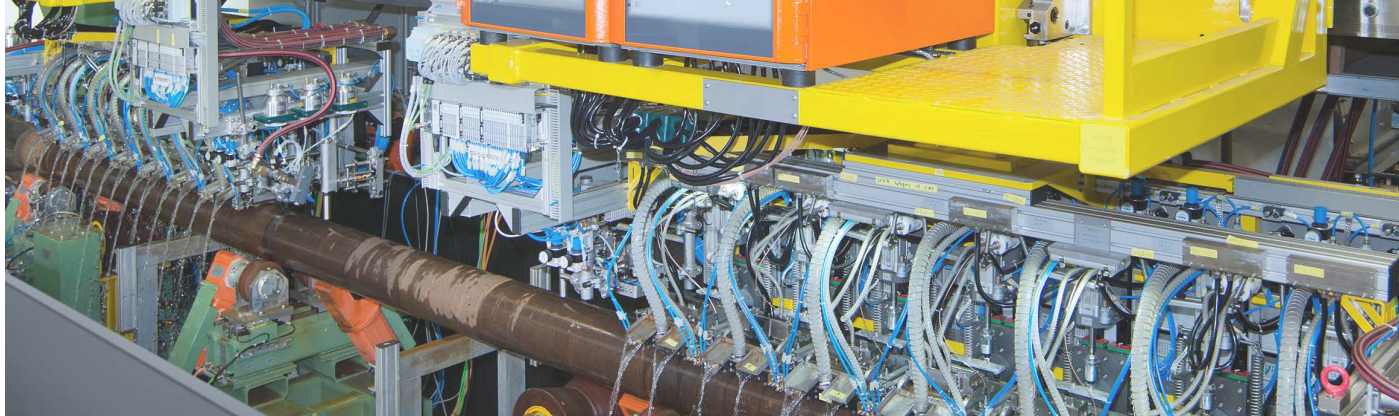


TYPICAL DATA

ROT	Typical Diameter (mm / inch)	Typical Feeding Speed (m/min, feet/min)
65	10 – 90 / 0.39" – 3.5"	30 – 120 / 98.42' – 393.7'
180	20 – 177.8 / 0.78" – 7"	30 – 120 / 98.42' – 393.7'
250	40 – 244.5 / 1.57" – 9.6"	30 – 96 / 98.42' – 314.96'
350	60 – 323.9 / 2.36" – 12.7"	30 – 80 / 98.42' – 262.47'

MOVING ULTRASONIC INSPECTION FORWARD.





KRAUTKRÄMER GRP GANTRY

Advanced PA Ultrasonic Testing for Seamless Pipe Inspection

The Krautkrämer GRP Gantry integrates seamlessly into your mill, providing complete, reliable inspection of every pipe so you can deliver consistent, high-quality products that meet the toughest Oil & Gas specifications without slowing your production.

Key Applications

- Tubing, casing, and line pipe inspection for Oil & Gas production
- Seamless pipe quality control in manufacturing mills
- Early detection of critical defects to ensure compliance and reduce operational risk

Main Benefits

- Detects longitudinal, transverse,

lamination, and oblique flaws (up to $\pm 30^\circ$ in the standard configuration, up to $\pm 67^\circ$ in the high-performance version), plus wall-thickness and eccentricity measurements

- Fast inspection speeds without compromising accuracy
- Compact Gantry Design – Bridge-style architecture allows for crosswise pipe transport and minimal footprint
- Robust Construction – Built to withstand heavy-duty conditions in large-diameter pipe manufacturing

Standards Compliance

- Meets API standards and the specifications of major oilfield service companies

TECHNICAL DATA

	Data in mm & m	Data in inch & feet
Diameter Range	• Standard: 114 – 508 mm • Extended: 60 – 114 mm & 508 – 610 mm	• Standard: 4.49" – 20" • Extended: 2.36" – 4.49" & 20" – 24"
Wall Thickness	4 mm – 40 mm	0.16" – 1.57"
S/D	up to 0.18	
Length	6 m – 15 m	20' – 49'
Feed	60 – 120 mm/rev	2.36" – 4.72"/rev
Inspection Time	90 – 180 sec/pipe	

Robust Ultrasonic Inspection for Plate and Coil Testing (SAW & ERW)

With its robust design and no moving parts, Krautkrämer BPE offers high inspection speeds at the lowest operating costs – so you can rely on the integrity of your pipes, reduce downtime, and save costs in the long term.

Key Applications

- Plates (> 50.8 mm / 2") – LSAW pipes (longitudinal submerged arc welded)
- Mainly O&G midstream transport – offshore (LSAW) and onshore (HSAW) pipelines

Main Benefits

- Ultrasonic conventional inspection with stationary probes (two overlapping probe lines)
- Directly installed in pipe mill production flow (moving plate or coil)
- No moving parts: maximum inspection speed, lowest operating cost, highest uptime
- Reduced mechanical complexity for unmatched robustness and lowest maintenance
- Scalable: covers all SAW inspection needs with one system
- Seamless synergies: Spare parts, training and operator know-how (identical software and concept across systems), maintenance, data insights, interfaces and archiving



TECHNICAL DATA

	Data in mm & m Data in inch & feet
Width	3 – 5 m 9.84' – 16.4'
Wall thickness	6 – 50 mm 0.24" – 1.97"
Flaw size	FBH 3 – 6 mm / 0.12" – 0.24"
Body test	2 overlapping probe lines
Edge test	Left & Right
Service station	Optional

CROSS-COMPARISON TABLE

	Krautkrämer SNUP	Krautkrämer ROWA-WT	
Inspection Type	Weld seam inspection for LSAW and HSAW pipes	Full-Body Ultrasonic Inspection	
Applications	Detection of longitudinal, transverse, and optional oblique flaws in weld seams	Wall-thickness, outside and inside diameter measurement; Testing for Lamination and Inner Wall Deformation on OCTG	
Pipe Diameter Range	> 355 mm > 13.9"	30 - 406.4 mm 1.18" - 16"	
Wall Thickness Capabilities	≤ 80 mm or ≤ 25.4 mm ≤ 3.15" or ≤ 1"	Up to 40 mm Up to 1.57"	
Inspection Speed	Up to 30 m/min Up to 98.4'/min	Up to 132 m/min 433'/min	
Integration	Inline/Offline	Compact inline or offline with linear tube transportation	
Main Benefits	Flexible technology (PA and conventional), fast setup, In-process monitoring directly after welding	Contactless design eliminates wear and coupling issues on rough or scaled surfaces	



	Krautkrämer ROT	Krautkrämer GRP Gantry	Krautkrämer BPE
	Full-body ultrasonic inspection of seamless & ERW tubes with rotating probe system	Phased array ultrasonic inspection of medium to large seamless pipes (gantry system)	Conventional ultrasonic inspection of plates for LSAW and coils for HSAW
	Longitudinal, transverse & oblique flaw detection, lamination, wall thickness, geometry (ID/OD/ovality)	Tubing, casing & line pipe for O&G production; comprehensive defect detection in mills	Plate and coil inspection for SAW pipe production; mainly O&G midstream transport
	10 – 323.9 mm 0.39" – 12.7" (depending on configuration)	Standard: 114 – 508 mm 4.49" – 20" Extended: 60 – 610 mm 2.36" – 24"	Not applicable (plate/coil stage before pipe forming)
	Accurate to ± 0.03 mm Accurate to ± 0.001 "	Up to 40 mm Up to 1.57"	6 – 50 mm 0.24" – 1.97"
	Up to 120 m/min 394'/min	60 – 120 m/min 197' – 394'/min	15 – 25 m/min 49' – 82'/min
	Compact, inline with linear tube transport	Gantry bridge design for crosswise pipe transport	Inline installation in pipe mill production flow
	High-speed inspection; contactless rotating probe system; real-time visualization; robust compact design	Comprehensive defect coverage incl. oblique flaws; robust for large-diameter; API & premium compliance	Max. uptime and lowest operating cost; robust design, no moving parts; seamless synergy across SAW



CONTACT US!

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**.



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