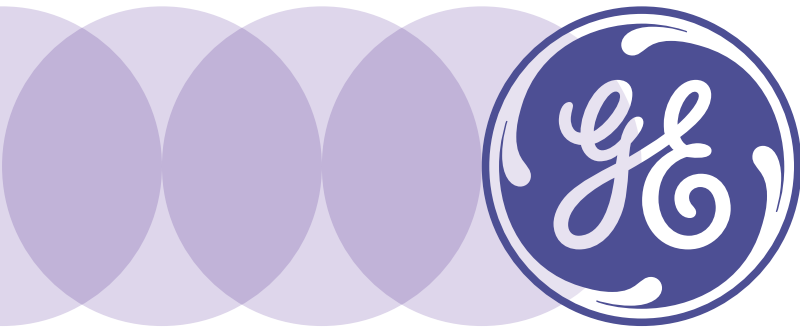


GE Krautkramer Tanks

Modular Immersion System
for Industrial Applications



Flexibility to grow with your current and future inspection needs

The GE Krautkramer Tank family provides the optimum balance of functionality, performance and cost. Available in three standard tank sizes with a variety of field upgradeable application options, GE Krautkramer Tanks can be configured for your immediate needs and then easily adapt to your future inspection requirements by incorporating other standard, drop-in application modules.

The GE's Krautkramer modular tank series consist of a multi-axis, motion-controlled probe manipulating system, an immersion tank, a multi-channel ultrasonic inspection platform, a PC containing the motion control and imaging software and image display consoles. A Joystick allows for precise manual probe positioning and all of the results can be analyzed with a printer connected to the PC.

GE Krautkramer Modular Tank Applications

Areas of application include the steel and specialty metals sector of non-ferrous metals, and the aviation and automotive industries. This range of applications extends from bar and tube to plate and disk. The system has unique features making it ideally suited for cleanliness rate inspections of bearing steels or area analysis of the bond quality for sputtering target plates.

Specific applications include:

- Rod: cleanliness test of bearing steels (as per ASTM E588 or SEP1927)
- Ring: internal defects testing of bearing rings
- Plate: internal defects and bonding area inspection of sputtering targets



GE Krautkramer Modular Tank Tooling Options



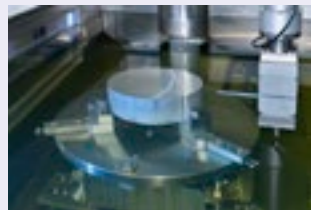
Test Platform

- 700 mm x 300 mm, with maximum load of 200 kg
- Adjustable leveling feet
- Maximum of three platforms per single tank



Horizontal Roller

- Accommodates cylindrical parts from 150 - 300 mm in diameter and 300 - 800 mm long
- Maximum load: 500 kg



Vertical Turntable

- Accommodates parts 100 - 400 mm long and 50 - 350 mm in diameter
- Maximum load: 200 kg

Horizontal Chuck

- Accommodates cylindrical parts from 10 - 100 mm in diameter and 100 - 600 mm long
- Maximum load: 60 kg



GE Krautkramer Modular Tank Probe Manipulator Options



Motorized 2-axis

- Probe holder turns around its vertical axis
- Probe beam angle adjustable to different geometries and curved surfaces

Two Channel

- Fitted for 2 probes connections for increased productivity
- Sound beam angle adjustable to $\pm 20^\circ$

Through Transmission

- Combines an additional manual probe holder for mounting a single transducer

Single Channel

- Manual vertical adjustment allowing high accuracy angle beam setting
- Vertical setting up to 40°

GE Krautkramer Modular Tank Delivers

- Robust industrial design with global service and support structure
- A suite of drop in application tooling with configurations for nearly all inspection needs
- Up to 7 axis of precision automated motion for 2D scanning
- Outstanding, high dynamic range ultrasonic testing performance
- Simple operation by a single operator
- Advanced software tools for inspection analysis and automated report generation



Ultrasonic Inspection Platform

The field proven USIP 40 ultrasonic flaw detector from GE is the heart of the system. It provides the ultrasonic pulse transmit and receive functionality, in up to 10 ultrasonic channels, at a pulse repetition frequency of up to 20 kHz. It uses a Windows 7 operating environment and integrates seamlessly with GE's K-scan software to provide high-speed defect evaluation and sizing.

Application Development and Validation Support

Proper development and validation of the ultrasonic application for a given part is critical to the success of any complex part inspection. To support our customers, GE has invested in full sized Krautkramer modular tanks installed in its Technology Support Centers in the USA, Germany, Brazil, and China. These Centers are open to our customers for application development, inspection validation, and hands on training on advanced non-destructive testing topics.



Advanced Application Software

GE's K-Scan data acquisition and analysis software is the central hub that controls the entire ultrasonic inspection process providing the following functions.

- Control of scan trajectories
- Real time acquisition and mapping of ultrasonic data for individual parts or collection of parts in a single scan
- Manual and Assisted Defect Recognition and automated inspection report generation

Imagination at work

www.gemeasurement.com