

Registration

Registration

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I would like to participate as follows:

Kuala Lumpur

14th May

Name

Company

Department, Position

Street, Number

Postcode, City

Telephone

Fax

Email

Place, Date

Signature

Participation is free of charge

Please include the following topics:

Venue



IMPIANA KLCC HOTEL,
13, Jalan Pinang, 50450 Kuala Lumpur, Tel.: +60 3-2147 1111

Contact

KROHNE (M) Sdn Bhd

No.F-2, Block 46, 2nd Floor, Mentari Business Park,
Jalan PJS 8/2, Bandar Sunway,
46150 Petaling Jaya, Selangor
Malaysia

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www.krohne.com/oilandgas

New technologies:

- Multiphase metering using magnetic resonance
- Ultrasonic flow metering using advanced signal processing

KROHNE

► achieve more

KROHNE Flow Seminar

Advances in Flowmetering
with special emphasis on ultrasonics for liquids,
and multiphase metering

14th May, Impiana Hotel, Kuala Lumpur



Achieving the next big step in ultrasonic custody-transfer flowmetering for liquids

As pioneer, KROHNE introduced the multi-beam ultrasonic flow technology for custody transfer. This technology has been continuously developed to a complete product portfolio of sensors used in a wide variety of applications such as refined products, crudes, high viscosity and LNG applications.

The ALTOSONIC product range has become an established technology compliant with API and accepted by notified bodies all over the world.

As its popularity grew, new user demands were recently placed on ultrasonics.

Based on the outcome of the continuous research on flow measurement and advanced signal processing now a new meter has been designed meeting the new user demands and the expanded applications.

We invite you to this seminar where developers from Europe explain the underlying theory and technologies.

This technical seminar will cover:

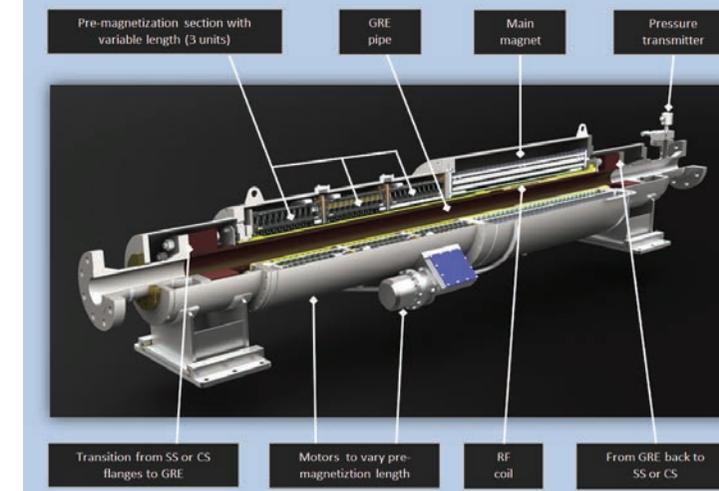
- How ultrasonic flow meters are liquid independent
- How performance with unfavourable upstream configurations are met
- How to incorporate diagnostics for more flexible maintenance, including full-pipe detection
- How to prove ultrasonic flowmeters with small volume provers

... and numerous other advances.

Presentations

Agenda

09:00 – 09:15	Welcome and introduction
09:15 – 09:45	Current State of the art of ultrasonic flowmetering
09:45 – 10:45	<ul style="list-style-type: none"> • Feature sets requested by users since the introduction of custody-transfer ultrasonic flowmeters for liquids and which technological changes are needed to answer these demands • Reducing inlet length and flow conditioning • Facilitate retrofitting and revamping • Liquid independency • Proving with small volume provers to minimise downtime
10:45 – 11:00	Coffee Break
11:00 – 12:30	Feature sets (continued) <ul style="list-style-type: none"> • Gas detection to avoid mismeasurement • Diagnostics • Fingerprinting and tracking of software and hardware upgrades • Logging of data, and interoperability with existing SCADA systems
12:30 – 13:30	Lunch
13:30 – 14:15	Magnetic Resonance - Fundamentals of a new technology in oil and gas <ul style="list-style-type: none"> • Introduction to multi-phase flow • Introduction to magnetic resonance • Qualification of multi-phase components • Quantification of multi-phase components
14:15 – 15:00	<ul style="list-style-type: none"> • Flow measurement using magnetic resonance • Velocity measurement • Oil-water ratio measurement • Gas fraction measurement • Imaging
15:00 – 15:15	Coffee break
15:15 – 16:00	<ul style="list-style-type: none"> • Mechanical design of a magnetic resonance flowmeter • Test results • Performance
16:00 – 16:30	Practical aspects of magnetic resonance <ul style="list-style-type: none"> • Engineering • Operational aspects • Performance aspects
16:30 – 17:00	Conclusions and Resumé Questions and Answers to be answered by the experts subsequent to the seminar.
17:00	End of seminar



Magnetic Resonance A revolution technology in oil and gas for multi-phase measurement

Multi-phase measurement has previously been the domain of a mechanical separation with all its drawbacks. There was a need for:

- Speed
- Better accuracy and reliability
- Non-invasive, non-radioactive
- In-line, but with no pressure drop

KROHNE now introduces a technology never used in the oil and gas industry before. A single technology that detects the components on a molecular level, can distinguish between gaseous and liquid hydrocarbons and water, providing results that you rely upon - independent of the aggregate state.

Easier planning, engineering, operation are features that make this technology the most exciting new discovery seen over the past decades.

Our key developers and scientists from Europe are presenting at this seminar to give you first-hand knowledge on magnetic resonance for multi-phase wellhead measurement.

Jason Yew
Director Oil & Gas Division for South East Asia