IK TRAX

Non-Intrusive
Pig Signallers

About

Originally established as Online Electronics in 1996, IK Trax is now an independent company, part of IK Group Worldwide, an engineering powerhouse that delivers brilliant engineering for the most complex challenges in the oil & gas industry.

With over 25 years of expertise and a successful history, IK Trax have a proven track record in designing and manufacturing pipeline pig locating and signalling equipment, as well as advanced pipeline data logging and testing systems, guaranteeing our clients total assurance in their operations.

Our Non-Intrusive signallers offer several levels of hazardous area approvals and can be installed onshore or offshore. Our signaller certification includes Group IIC, making them hydrogen-ready.

Magnetic Non-Intrusive Signallers

Compact magnetic signallers detect magnetic pigs in any pipeline medium by detecting a change in the magnetic field as the pig passes beneath the sensor. They are designed to accommodate thick pipeline walls, along with low and high-speed pig applications.
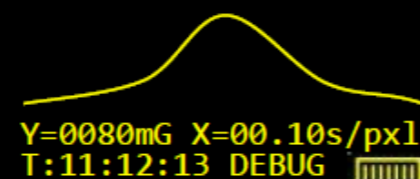
Magnetic pig signallers have no location restrictions. They are suitable for any pipe size and can be installed on a major barrel. The magnetic sensor can be supplied on a cable up to 10m long for use on buried pipelines or where access is limited.

4001D MAGSIG®
The 4001D MAGSIG® is ATEX and IECEx certified and is designed for effortless operation. It features a user-friendly interface allowing you to receive pig passage data and easily navigate and control directly from the display.

Advanced Survey Mode provides a live graphical representation of gauss readings ensuring precise monitoring and analysis.

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4003 MAGSIG®
The 4003 is ATEX, IECEx , UL and CSA certified and is designed to enhance operational flexibility.

With a unique Bluetooth App, you can view real-time pig passages and modify settings directly on your phone or tablet without having to enter a potentially hazardous zone. Alternatively, you can utilise one of the many remote communication options to receive pig passage data such as via the SCADA system, LoRaWAN or by satellite.

2-Stage Detection Algorithm

IK Trax's non-intrusive magnetic signallers use a 2-stage detection algorithm which provides added assurance that a pig has safely passed a location. This can be critical to prevent a valve from being closed on a pig or to minimise the time spent identifying the pig location.

Upon reaching the pre-set threshold, the unit displays "PIG APPROACH" to show the pig approaching or within detection range. The unit signals "PIG PASSED" only when the second detection criteria is met, specifically when the flux value drops by a set amount.

The user can review all logged events and differentiate between the pig safely passing the signaller and the pig potentially stalling by reviewing the accompanying graphical data.

Onshore and Topside Remote Signalling and Communication Options

There are several available options for remote pig passage signalling:

- DPDT (VFC) dry relay
- 4-20mA
- Satellite communication
- LoRa/LoRaWAN radio transmission.
- Bluetooth and RS485 MODBUS permits two-way communication for remote programming and data download.

Please contact IK Trax to discuss your specific remote signalling and communication needs.

Ultrasonic and Acoustic Signallers

Ultrasonic and Acoustic signallers confirm the passage of any pig without the need for magnets or transmitters. Active Ultrasonic Signallers send a pulse through the pipe wall and detect a reflection when the pipeline is liquid filled. A pig passage is signalled when the signal path is disturbed. Passive Acoustic Signallers utilise advanced sensors to detect the distinctive sound of the pig within the pipeline.
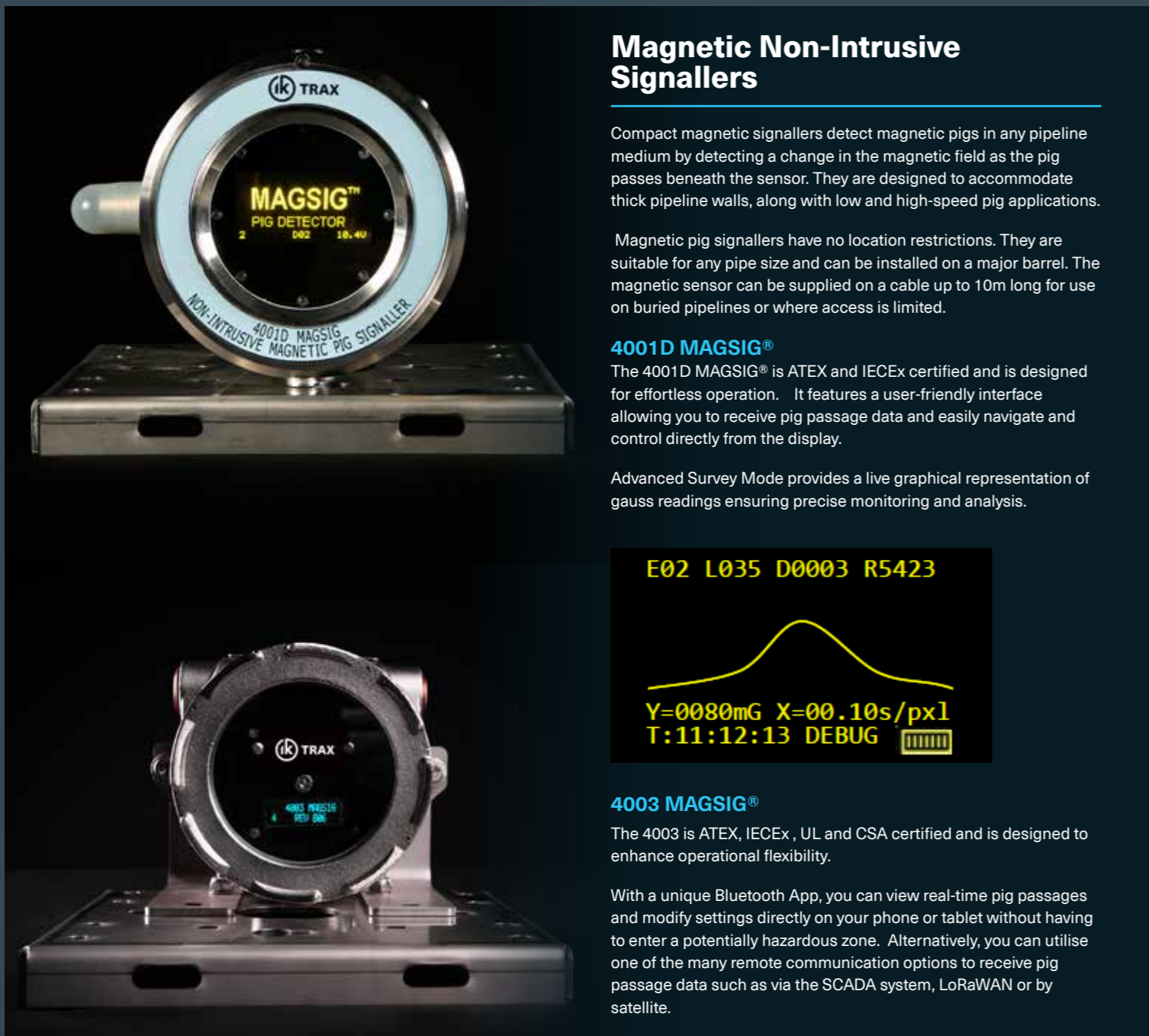
ID5000A (Liquid Lines)
The ID5000A is ATEX certified and is a dual functionality unit, integrating both pig signalling and location confirmation. By precisely determining the pig's location, you can minimise downtime and mitigate the risk of a valve being closed upon the pig. The ID5000A can also be configured to ignore debris and small objects, reducing the risk of false detections.

ID5001P and ID5002P (Gas, Multiphase and Liquid Lines)
The ID5001P is ATEX and IECEx certified and provides detection across all pipeline mediums. Pig passages can be viewed in real-time on the graphical display or you can monitor remotely. Our dedicated software allows you to adjust parameters from the control room and provides a comprehensive view of the sensor readings, offering a deeper understanding of the principle of operation.

The ID5002P shares the same features as the ID5001P and is Intrinsically Safe for use in Zone 0 environments.

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Maximise pipeline performance. Minimise risks.

Ensuring the optimal efficiency of your pipeline operations is our top priority. Our range of intelligent products is perfectly tailored to suit diverse applications onshore, offshore and subsea.

We utilise a variety of technologies to assist our clients throughout the entire lifecycle of a pipeline. To find out more about the complete range of products offered by IK Trax please visit our website or contact us directly to discuss how we can assist.

Intelligent Pipeline Technology

iktrax.com

ID5001P PASSIVE
NON-INTRUSIVE PIG SIGNALLER

Ex

bsi
ISO
9001:2015
Quality
Management