

NOVOSOUND BELENUS

Belenus, (Be-lenus, Gaulish) - god of fire and healing



High Temperature Ultrasound Sensor

6mm Aperture Sensor
High Resolution
Couple Free Application
Compact Size

A compact, non-invasive ultrasound sensor for the continuous monitoring of corrosion and erosion. With its **low-profile size** and flexibility, the Belenus can be fitted to a range of structures including **pipes, storage tanks and pressure vessels**, enabling 24/7 asset monitoring.

Suitable for fixed installation in both **extreme and ambient environments**, the Belenus is

the world's first corrosion monitoring sensor that can operate completely soaked in high temperature atmospheres **up to 400°C (752°F)** for extended periods of time.

The Belenus provides real-time, asset integrity data, enabling operators to proactively manage corrosion risk, make data-informed decisions and reduce the overall cost of operations.

Applications



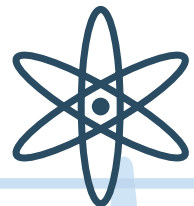
OIL & GAS



POWER



CIVIL STRUCTURES



NUCLEAR

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Key Features and Benefits

- Continuous operation completely soaked in high temperatures up to 400°C, with no cooling
- Low profile and lightweight
- In-service installation reduces the cost of downtime for minimal disruption to operations
- Intelligent asset monitoring enabling proactive predictive maintenance scheduling
- High resolution monitoring for early warning of wall thickness loss
- Couplant free operation, with a flexible transducer conforming directly to asset surfaces
- Belenus X available for monitoring in safety critical & high-risk environments (ATEX, IECEx & UKEX)

Specifications

General	
Dimensions	50 x 25 x 20
Casing Material	316 Stainless Steel
Operating Temperature	-50°C to 400°C
Cabling	Up to 10m (custom options available including high temperature cabling)
Connector	BNC or crimped ends (custom options available)
Fixture Sizes	Straps available from 2" to 14" NPS (>14" custom fixtures are available on request)
Probe Features	
Probe Type	0° UT Probe
Operating Frequency	5 - 15 MHz
Active Element	6 mm
Thickness Range in Steel	down to 2 mm
Drive Electronics	
Excitation Voltage	up to 100 V
Pulse Width	up to 50 ns
PRF	up to 5 kHz
Belenus X certification: Ex ia IIC T6...T1 Ga. Certificates available on request	