RoGeo XYZ Service

High-Resolution Mapping Providing Geolocation Data for Pipeline Routes

Accurate pipeline route mapping

World's largest ILI tool fleet ensures high availability

Enables integrity assessments of onshore and offshore pipelines

Pipeline assets are at risk of reduced operational performance, damage and eventual failure because of geometrical deformation and other anomalies. High-resolution in-line inspection (ILI) and mapping of your pipelines can detect, categorize and locate deformation, enabling you to act before minor damage turns into a major shutdown.

You cannot predict geohazards, climate extremes or the actions of third parties that might damage your pipelines. However, you can design and implement a holistic and integrated geometric deformation risk management strategy. This reduces your risk and, as part of a wider integrity management framework, can identify multiple threats to further safeguard your pipeline assets.

Geohazards and seismic events can shift pipelines. Pipeline assets often traverse terrains that are difficult to access and map, or your original route maps may be lost following multiple changes of ownership. RoGeo XYZ is a high-resolution mapping service that meets your GIS and mapping challenges by providing detailed pipeline location data.

A high-end inertial measurement unit (IMU) accurately measures angular changes and accelerations in the X,Y and Z axes as the tool moves through the pipeline.

- Produces pipeline routing information when the originals have been lost
- Accurately identifies pipeline centerlines
- Delivers data for your in-house GIS

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empowered by technology
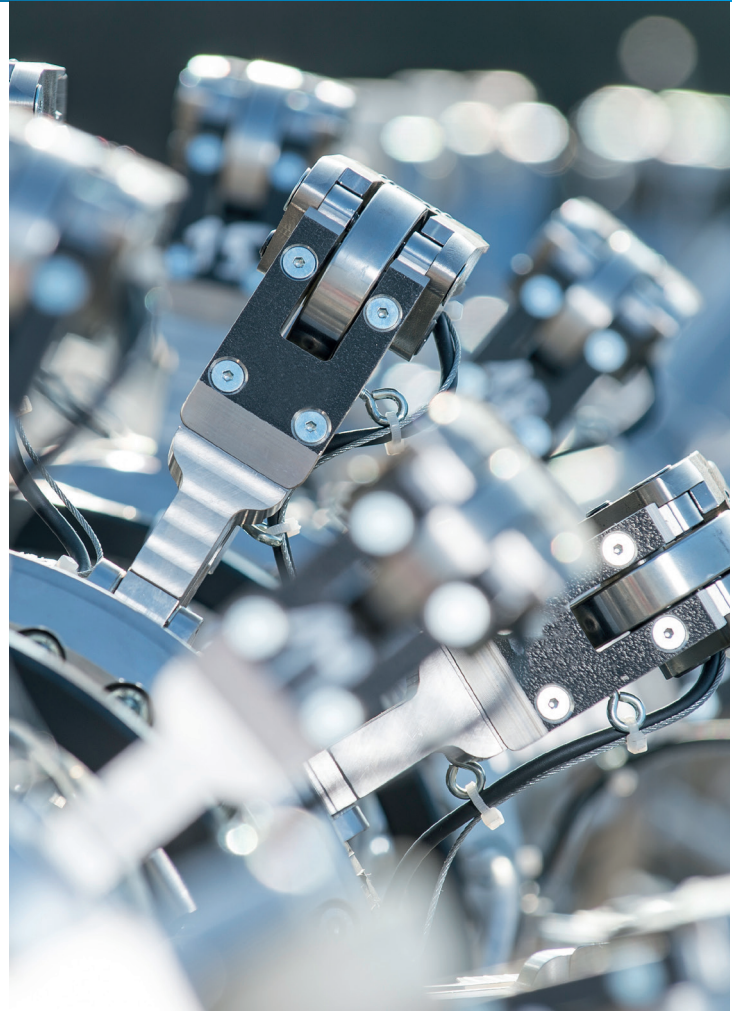
RoGeo XYZ Pinpoints Your Pipeline Path for Integration Into Your GIS

- Identifies pipeline movement by detecting differences between two or more data sets due to land movement such as landslides, heave, subsidence, anchor strikes and sediment falls
- Gyro inspection enables the coordinates for girth welds and features to be calculated and recorded, and determines the radius of bends
- Detects buckles and wrinkles when combined with additional in-line inspection sensors
- Cost-efficient detection of anomalies, as the RoGeo XYZ service can not only be used as a stand-alone service, but can also be combined with all other in-line inspection services
- IMU data enables bending strain assessments to identify areas of highest stress to the pipeline
- Creation of depth-of-cover information for pipelines by using centerline information and topographic profiles, such as LiDar or satellite data.

Technical Specifications

Standard Operating Specifications

Tool sizes available	4" – 56"
Pipeline product	Gas or liquids
Product temperature range	0 °C – 55 °C (32 °F – 131 °F)
Operating speed range	Up to 5.0 m/s (11.18 mph)/ minimum 0.5 m/s (1.118 mph) required
Maximum operating time	400 hours (depending on ILI tool basis)
Maximum inspection length	1.000 km (620 miles) (depending on ILI tool basis)

Note: Please contact ROSEN for conditions outside of these specifications.

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