

Pipeline Services

Examine the possibilities with our customized applications



Nondestructive magnetic inspection solutions that deliver results.

The magnet assemblies we have designed and manufactured are in operation worldwide on pipeline cleaning pigs, caliper pigs and non-destructive pipeline inspections pigs utilizing the magnetic flux leakage (MFL) principle. The relatively low operating temperatures of pipeline pigging allows for greater flexibility in the selection of magnet materials. Because of our expertise in magnetic design & applications, our typical inspection designs use Neodymium Iron Boron (Nd-Fe-B). Nd-Fe-B magnets are the strongest commercially available magnetic materials, both magnetically and structurally. They are also extremely resistant to demagnetization. For cleaning pigs, depending on their type and size, the application may call for any one of a variety of magnet materials, including Flexible Ferrite, Hard Ferrite or Nd-Fe-B.

We offer both the standard reusable Alnico horseshoe type magnet pipeline marker as well as our own lower cost marker assembly. You have told us it is not always convenient or cost effective and is sometimes even unsafe to spend the additional time and manpower retrieving pipeline marker magnets. As a result, our engineers have developed a lower cost marker assembly. The threaded holes in the top of our marker assembly provide you the option of mounting other components or accessories and the lower cost of the Dexter marker assembly make it more cost effective to use it and leave it.

- ▶ Non-Destructive MFL Inspection Solutions
- ▶ Custom Solutions
- ▶ MFL Pipeline Inspection Pig Magnetizers
- ▶ Permanent Magnet Magnetizer Assemblies
- ▶ Electromagnet Magnetizer Assemblies
- ▶ Defect Profiling Solutions
- ▶ Sensor Bias Magnetic Assemblies
- ▶ Odometer Assembly Magnets & Assemblies
- ▶ Cleaning Pig Tramp Metal Collection Assemblies
- ▶ Pipeline Marker Magnets

Dexter Magnetic Technologies Oil and Gas Business Unit

About Us

Our Oil & Gas Business Unit is dedicated to the development and commercialization of industry-changing products for the downhole and pipeline service markets. Product development is headquartered at our oilfield dedicated Research and Development facility in Rockwall, Texas. The Rockwall R&D facility operates a flow loop and data acquisition system for evaluation of downhole tools under full flow conditions and to characterize erosion as well as product life.

To better service our Oil & Gas market customers, our engineering group utilizes state-of-the-art solid modeling and multiphysics software packages such as SolidWorks, ANSYS and Lorentz to ensure optimized operation in the real-world operating environment.

Because of this, we deliver a wide array of magnetic solutions to the pipeline service and downhole service industries. We routinely fabricate magnet structures and encasement assemblies using high strength alloys such as Titanium, Inconel, Monel, Hastelloy and stainless steel.

Additional Downhole & Pipeline Services Solutions:

- ▶ Downhole Turbine Generators
- ▶ Nuclear Magnetic Resonance Assemblies
- ▶ Sealless SSSV Linear Actuation Couplings
- ▶ Magnetic Couplings & Positioners
- ▶ CCL Magnets and Assemblies
- ▶ Decentralizers
- ▶ Bypass Valve Actuators
- ▶ Synchronous and Non-Synchronous Actuators
- ▶ Fishing Tools
- ▶ Seismic Transducer Assemblies
- ▶ Geophone Magnets
- ▶ Non-Destructive, Explosion Proof Coiled Tubing Inspection Devices

Sample Application



 BJ Pipeline Services Canada
VECTRA MFL Inspection Pig

Design verification and
magnets provided by Dexter