PIG DETECTION SYSTEMS

Portable pig tracking equipment can be utilised to monitor the progress of a pig as it traverses a pipeline. Transmitters and detectors can also be used to accurately pinpoint the location of a stuck pig.



ABOVE GROUND MAGNETIC PIG TRACKING EQUIPMENT

This is a portable, battery operated pig tracking system that operates by detecting a change in magnetic field as a pig passes through the pipeline beneath the sensor. No excavation or bare pipeline access is required - the sensor is simply positioned on or in the ground and is capable of detecting a pig in a pipeline up to 3m below ground.





ACOUSTIC MONITORING EQUIPMENT

This equipment enables the user to listen to the progress of a pig as it travels through the pipeline. The fully portable, battery operated system operates by filtering noises generated by a pig as it passes over internal weld beads, which are then amplified to produce an audible output via





NON-INTRUSIVE PIG SIGNALLERS

Non-intrusive pig detection and pig signalling systems can be supplied for portable, temporary or permanent installation for onshore, offshore or subsea applications. Equipment can also be supplied with the relevant certification for use in a hazardous area.









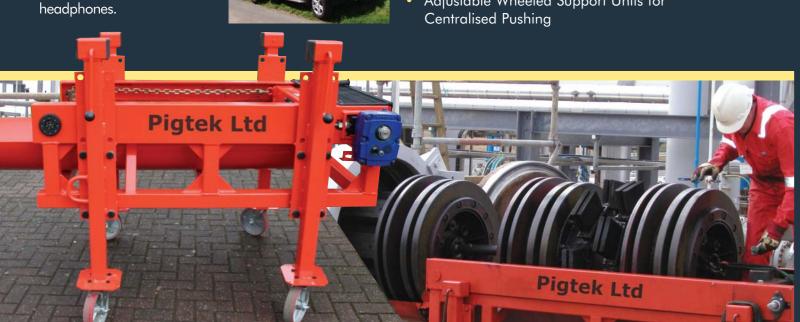
TRANSMITTERS

Electronic transmitters are often installed in the rear of pigs to enable the exact location to be identified in the event that the pig stops or becomes stuck. Pigtek can supply pigs fitted with various transmitters, or brackets to mount an existing transmitter. Portable transmitter detection units can also be supplied.

PIG LOADING & RECEIVING TRAYS

Pigtek can provide pig handling trays for loading or removing pigs. The drive mechanism for the trays are tailored to customers requirements and include manual, air driven and hydraulic. Trays can be portable or for permanent installation and provide a safe yet rapid solution whilst working in front of an open pipeline.

- Fast and Simple Set Up
- · Individual Leg Height Adjustment
- Multi-Size Pig Loading/Receiving
- Heavy Duty Swivel & Brake Castors
- Common 3/4" Gearbox Fitting for Manual or
- Removable Tray Extension Lip
- Pusher Bars for Pig Loading
- Adjustable Wheeled Support Units for Centralised Pushing









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INNOVATIVE PIGGING SOLUTIONS FOR THE PIPELINE INDUSTRY

ADVANCED CLEANING PIGS SPECIALIST PIGS ON-LINE PIGGING SERVICES PIG DETECTION SYSTEMS SERVICE SALES HIRE





For further information about Pigtek, please visit www.pigtek.com

www.pigtek.com

INNOVATIVE PIGGING SOLUTIONS

Pigtek are world leaders in providing specialist pigging products and services for applications where "standard" or "proprietary" products simply cannot perform or are proving to be inefficient.

Products and services are performance driven and Pigtek's reputation is built on quality, experience and customer care. Clients include many of the world's leading oil and gas majors, primary pipeline operators and international pipeline inspection companies.







EXPERIENCE COUNTS

Pigtek continue to design and develop many unique specialist pigs and revolutionary pigging methods. From tackling pipelines with little or no previous pigging history to routine maintenance pigging, Pigtek have the products, services and experience for your pipeline flow assurance, no matter how diverse.

- Rapid Response
- Tailored Solutions
- Hire Fleet of more than 150 pigs
- 4x4 Trucks for Infield Services
- More than 4,500sq.ft Offices, Workshop and Storage
- Assembly Facilities
- Pig Trials & Testing Facilities
- AutoCAD Design Facilities

Full technical support is assured for all our products and services. Pigtek are certified to ISO 9001:2000.

ADVANCED CLEANING PIGS

Pigtek Advanced Cleaning Pigs offer optimum performance and have achieved top results in extreme pipeline conditions. Comprehensive pipewall conditioning is essential for flow assurance and removing debris through the use of efficient pigging equipment has many advantages;

- Improved flow throughput
- Reduced pipeline operating costs
- Stable flow pressure and velocity
- Corrosion inhibitors have access to bare pipewall for maximum protection

Pigtek have products specifically designed to tackle various types of pipeline debris, such as wax, scale, sand, sludge, dust and ferrous debris.

PIG TYPE	KEY FEATURE	TYPE OF DEBRIS REMOVED
Magnetic Cleaning Pig	High-power, multi-pole magnetic packages	Metallic and other ferrous debris, corrosion product, construction and maintenance debris
Brush Cleaning Pig	Flexible steel wire for sweeping	Wax, sand, sludge, dust and black powder
Heavy-Duty Brush Cleaning Pig	Dense, hard wire bristle packages for scouring	Wax and scale removal
HDR Pin Pig	Steel pins with tungsten carbide scraper tips	Hard wax and scale removal
HDR Plough Pig	Steel blades	Bulk hard scale removal
Wax Removal Pig	Profiled polyurethane discs	Wax removal

For additional pipeline cleaning, two pigs can be connected together using proven universal or ball joint designs to form a Dual Module Pig, such as;

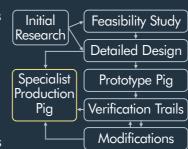
- Dual Module Brush/Magnetic Cleaning Pig
- Dual Module Brush Cleaning Pig
- Dual Module Magnetic Cleaning
- Dual Module Flexi-Cupped Gauging Pig
- Dual Module Bi-Directional Pig

SPECIALIST PIGS

Pigtek design and produce individual, unique pigs to overcome specific pipeline pigging problems. Following an initial assessment, pig development often continues through to full-scale trials and testing of a prototype pig. Trials provide the opportunity to witness how the pig is likely to perform in "live" conditions and enables any amendments to be made before final production.

- Jetting Pigs
- Dual Diameter Pigs
- Multi Diameter PigsWye Passing Pigs
- High Sealing Pigs
- Long Distance Pigs

High Temperature Pigs









ADVANCED BY-PASS PIG

This pig is fitted with a number of internal pressure relief valves. If the pig becomes stuck due to a build up of debris, the differential pressure across the pig will increase until the valves open. Jets of product can then flow through the valves and flush the debris away. The differential pressure will then drop, the valves will close and the pig will continue to traverse the pipeline.





Alternatively, if the pig has become stuck due to a mechanical restriction, the valves will remain open and allow product to by-pass through the pig, preventing a complete pipeline shutdown.

The Advanced By-Pass Pig can also be used as a Rescue Pig to locate and remove lost or stuck pigs, whilst minimising the risk of a complete pipeline blockage.



ON-LINE PIGGING SERVICES

The level of on-line pigging service experience that Pigtek have is probably unrivalled. We understand and are familiar with the challenges and logistics that pipeline operators are faced with when undertaking any pigging operation. Pigtek take a "hands-on" approach and our personnel have pioneered many industry leading pipeline cleaning methods. We continue to develop new and evermore efficient technology to maintain our position as the market leaders.

- Pipeline Proving and Gauging Services
- Advanced Pipeline Cleaning Services
- Pre-Inspection Pipeline Cleaning Services
- Pig Tracking and Pig Location ServicesStuck Pig/Lost Pig Location and Removal Services
- Training and Supervision during live pigging operations.





Pineline **after** cleaning by Piate

Pipeline **before** cleaning by Pigtek Pipeline **after** cleaning by Pigtek



