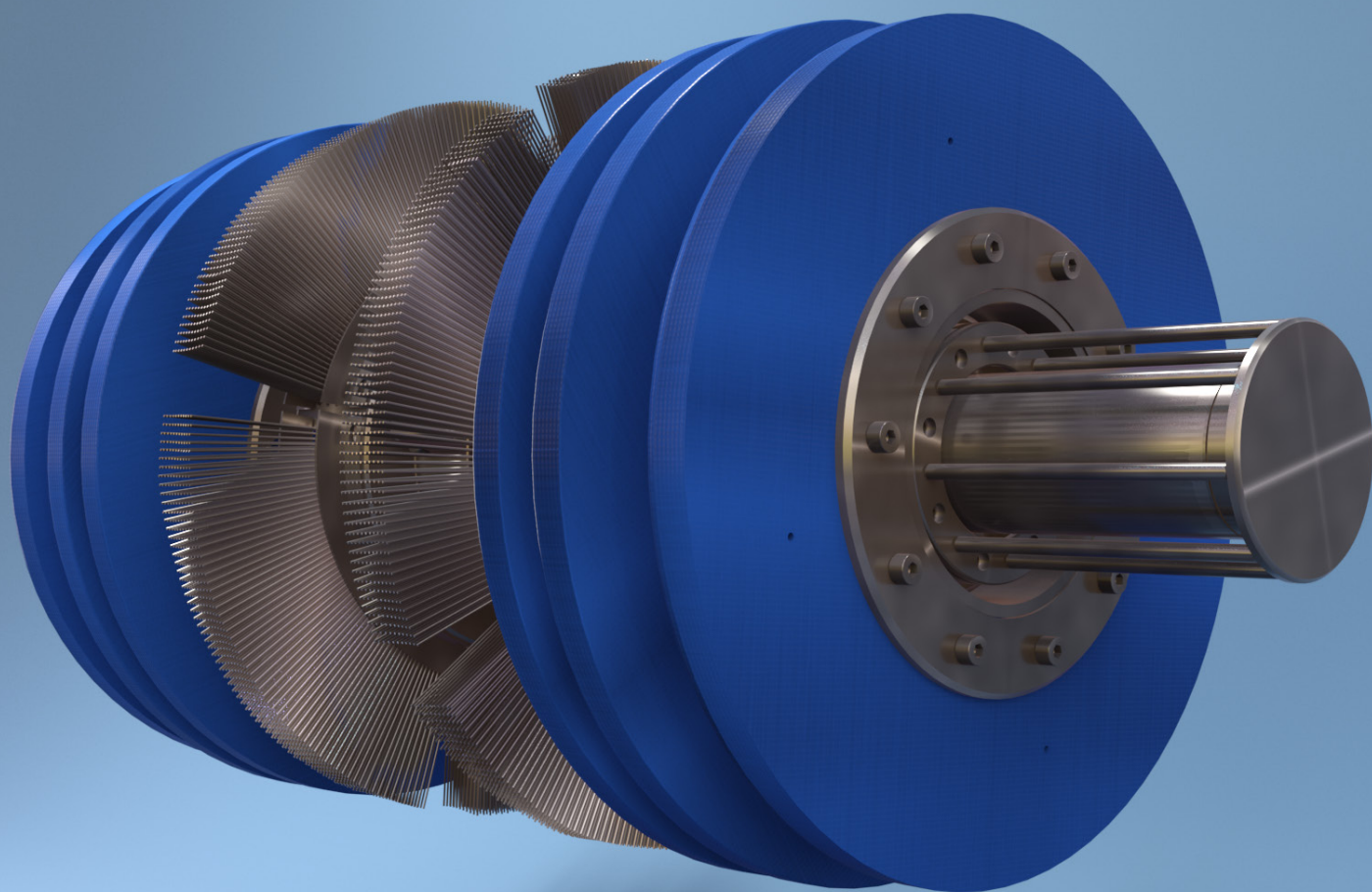




Detect Systems



# PIGGING ACCESSORIES CATALOG

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# INTRODUCTION

Pipelines require regular maintenance to ensure optimal performance, product purity, and the smooth operation of inline inspection tools. Over time, debris, sludge, and other contaminants can accumulate, reducing pipeline capacity and increasing energy consumption needed to transport the same volume of product.

Neglecting regular cleaning can also compromise the quality of oil or gas, potentially damaging downstream facilities and impacting overall operational efficiency.

At Detect Systems, we specialize in routine and pre-inspection cleaning campaigns tailored to the specific needs of pipelines in the hydrocarbon industry. Our custom-designed pigging tools and accessories are engineered to remove even the toughest buildup, ensuring your pipelines remain clean, efficient, and safe.

# ACCESSORIES

## 1. Pipeline Data Logger (PDL)

Our PDL is designed for installation on pipeline cleaning or inspection tools. It records key pipeline parameters such as upstream and downstream pressure, temperature changes, and tool vibrations. Once the PDL completes its run, the data is downloaded via USB for analysis, providing valuable insights into your pipeline's performance.

- ✓ Pressure and temperature recording
- ✓ Vibration and shock monitoring
- ✓ USB connection for easy data download
- ✓ Transmitters fit inside or can be towed behind all types & sizes of tools
- ✓ Lightweight & easy installation
- ✓ Digital display & audible signal for tracking & locating



## SPECIFICATIONS

| SPECIFICATIONS                                 |                                       |
|------------------------------------------------|---------------------------------------|
| Operating Pressure                             | Up to 150 BARs                        |
| Operating Temperature                          | -20°C to +100°C                       |
| Sensors Sampling Period (Temperate & Pressure) | 1000 Hz                               |
| Sensors Sampling Period (Accelerometers)       | 125 Hz                                |
| Data Storage Capacity                          | 64 Gb                                 |
| Maximum operating pressure                     | Up to 100 bar                         |
| Accelerometers                                 | Tri-Axial, +/- 8g                     |
| Battery Life                                   | 280 Hrs                               |
| Battery Type                                   | High Temperature SO2CL2 (DD Size x 1) |

## 2. ELF (Extremely Low Frequency) Transmitters

Detect Systems's ELF Transmitters are standalone units that can be installed in cleaning or inspection tools. These transmitters emit 22 Hz electromagnetic pulses, making it easier to detect and locate tools in both above-ground and buried pipelines. We offer two sizes to accommodate various operational requirements.

01

### Improved Tool Detection

ELF Transmitters emit 22 Hz signals, making it easier to locate tools in both above-ground and buried

02

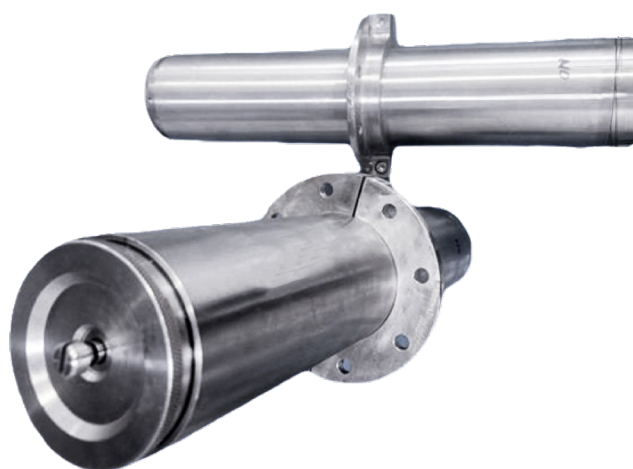
### Versatile Installation

USB connection allows quick data download for fast analysis and issue resolution.

03

### Customizable Sizing

Lightweight and compatible with all tool sizes, ensuring easy setup and operation.



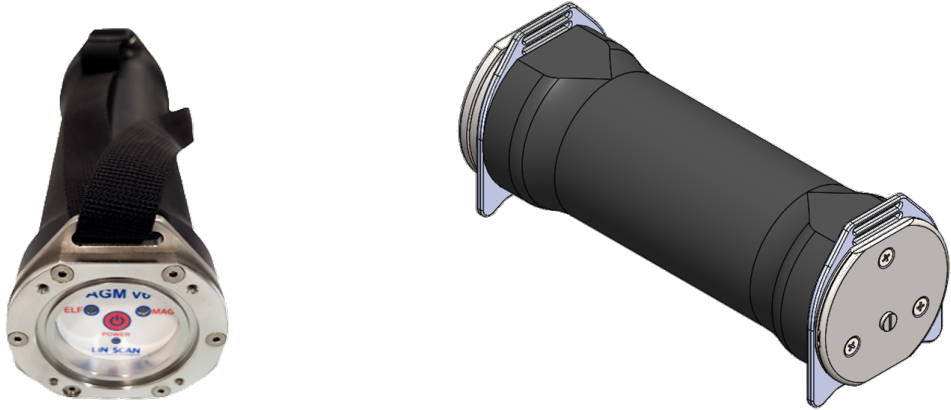
## SPECIFICATIONS

| STANDARD SPECIFICATIONS            |                            |
|------------------------------------|----------------------------|
| Power Supply                       | 12 'C'-size alkaline cells |
| Nominal Supply Voltage             | 9+ v                       |
| Operation Time (Pulsed/Continuous) | 100/300 hrs                |
| Frequency                          | 22 Hz                      |
| Operating Temperature              | -18 to +60°C               |
| Maximum operating pressure         | Up to 80 Bar               |

### 3. Above Ground Marker (AGM)

Detect Systems's Above Ground Markers (AGM) provide accurate time-based tracking during In-Line Inspection (ILI) runs. Equipped with advanced GPS and real-time clock features, our AGM ensure reliable benchmarking when used with ELF transmitters or magnets.

Designed for durability, they are waterproof (IP68) and can handle high-pressure environments, ensuring dependable performance even in tough conditions. The AGM 7 model offers added convenience with SMS alerts and remote tracking for real-time updates.



### SPECIFICATIONS

| SPECIFICATIONS (AGM v6 & AGM v7)         |                                                                                                                         |
|------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|
| ELF frequency range                      | 21,5 ÷ 22,4 Hz                                                                                                          |
| Detection range (ELF & Magnetic)         | <ul style="list-style-type: none"><li>– In air : at least 20 meter</li><li>– Under ground : at least 3 meters</li></ul> |
| Pass time accuracy (with GPS correction) | Better than 0,1 sec                                                                                                     |
| Marker point location accuracy           | 2.5± meters                                                                                                             |
| Sealing class                            | IP68, 20Bar                                                                                                             |
| Power source                             | Alkaline batteries                                                                                                      |
| Battery type                             | 2 x D-Cell LR20                                                                                                         |
| Operating time                           | 20 days (Default settings)                                                                                              |
| Operating temperature range              | - 40°C +60°C                                                                                                            |
| Bluetooth communication range            | 50 meters                                                                                                               |
| GPS antenna                              | Built In                                                                                                                |
| ELF antenna                              | Built In                                                                                                                |
| ATEX compliant                           | Yes                                                                                                                     |
| SMS Notification & Remote Tracking       | Available in AGM v7                                                                                                     |

## 4. PIG Tracker (ELF)

Our PIG Tracker is designed to detect cleaning or inspection tools equipped with ELF transmitters. It allows for precise tracking of the tool's movement and can be used to monitor tool passage during pipeline inspection activities.

- 01

**Precise Tool Tracking**  
Detects ELF-equipped tools accurately during pipeline
- 02

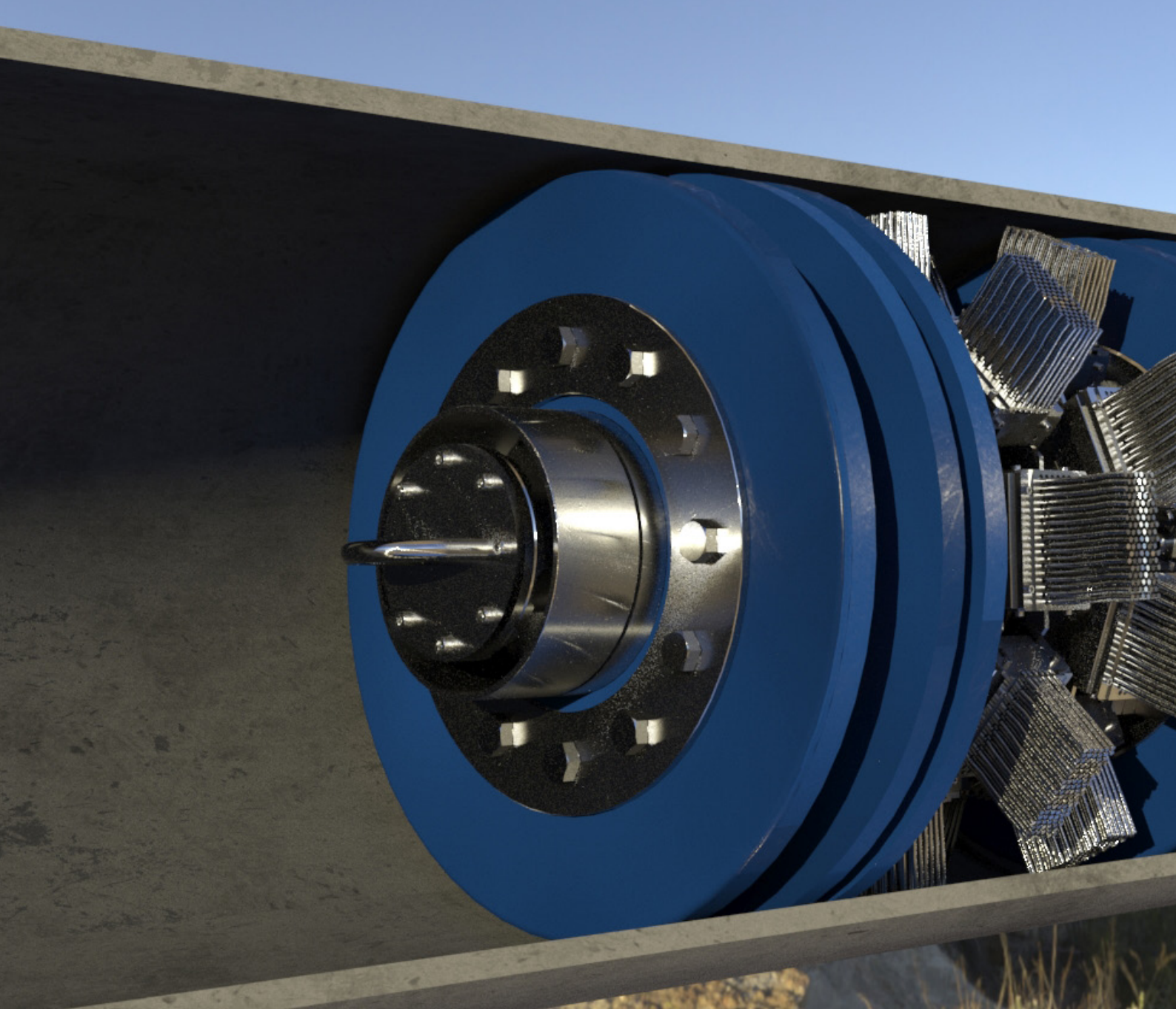
**Long Battery Life**  
Provides up to 200 hours of operation with AA batteries.
- 03

**Effective in Any Condition**  
Works in open or buried pipelines with 10 sensitivity levels and wide temperature range.



## SPECIFICATIONS

| STANDARD SPECIFICATIONS                         |                                |
|-------------------------------------------------|--------------------------------|
| Power Supply                                    | Three 'AA'-size alkaline cells |
| Operation Time                                  | 200 hrs                        |
| ELF Detection Frequency                         | 22 Hz                          |
| Sensitivity Levels                              | 10 Levels                      |
| Operating Temperature                           | -18 to +60°C                   |
| Maximum detection distance in open air          | 18 mtrs                        |
| Maximum detection distance for buried pipelines | 5 mtrs                         |



## Why Our Accessories?

With Detect Systems, you get more than just reliable pigging tools you get a complete solution. Our tools help you track and gather essential pipeline data, and when you pair them with Predicta® software, managing that data becomes simple.

From tracking tools to analyzing information, we've got you covered. We make it easy for you to keep your pipelines safe and running smoothly, all in one place.



### Complete Solution

Our pigging tools and software work together, offering a seamless way to track and manage pipeline data.



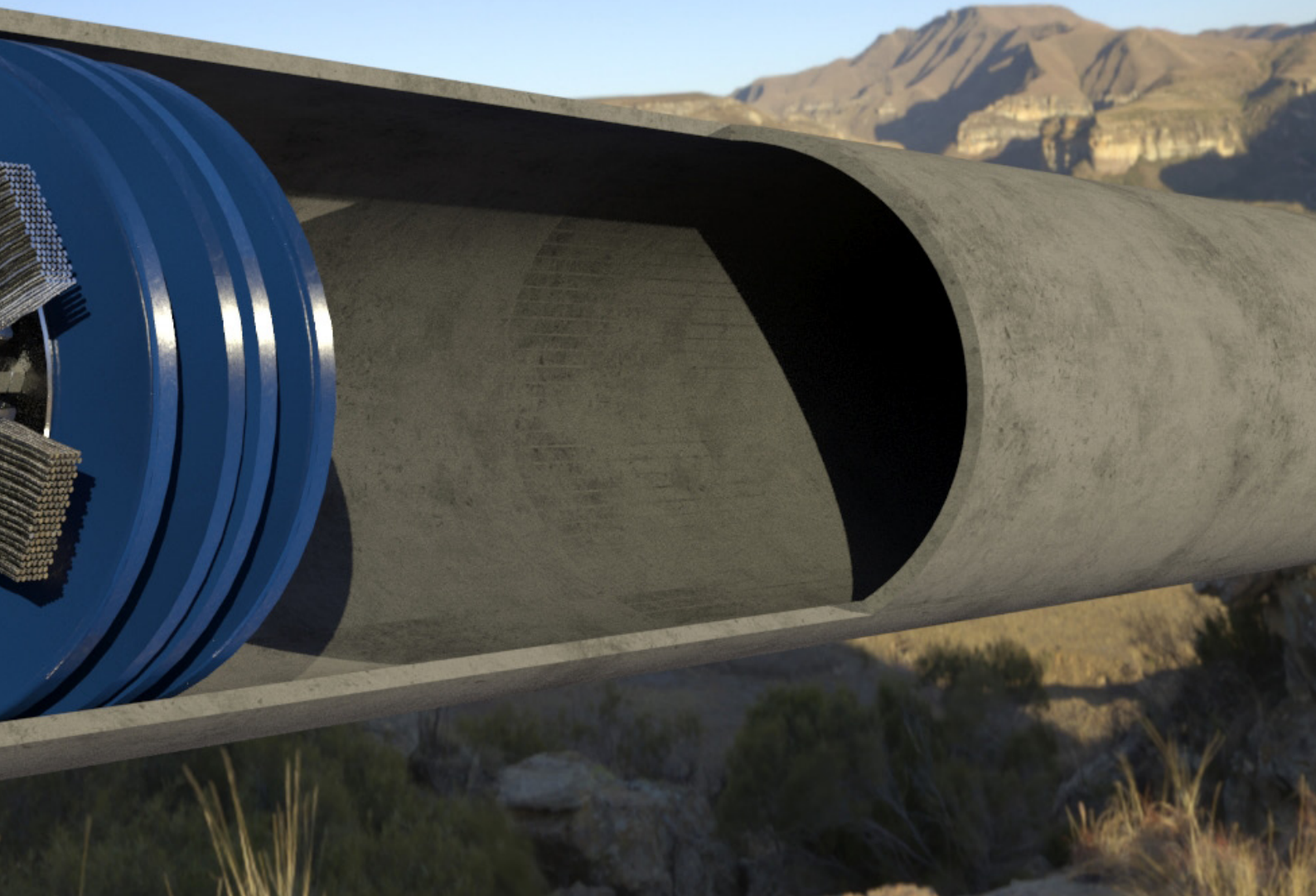
### Easy to Use

Easy installation and straightforward data access, helping you make quick, informed decisions.



### Reliable Performance

Built to deliver accurate results in real-time, even in tough conditions, ensuring your pipelines stay safe and operational.



## What Does Detect Systems Do for

- ✓ **Extend Asset Life:** Helps you assess pipeline conditions and plan for long-term reliability.
- ✓ **Simplify Data Management:** Collect and analyze data with ease, using both pigging tools and Predicta® software.
- ✓ **Reduce Maintenance Costs:** Optimize your pipeline upkeep by detecting potential issues early, avoiding unnecessary expenses.
- ✓ **Support Sustainability:** Promotes environmentally responsible operations through proactive maintenance and monitoring.

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 Email

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info@Detect Systemsgroup.  
com  
www.Detect Systemsgroup.  
com

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## PIGGING ACCESSORIES CATALOG

We care about your pipelines.

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