

## Fact Sheet 1: Fun facts of pipes and smart PIGs

**Pipe:** A pipe is a tubular section or hollow cylinder, usually but not necessarily of circular cross-section used mainly to convey substances which can flow such as liquids and gases (fluids), slurries, powders, and masses of small solids. It can also be used for structural applications; hollow pipe is far stiffer per unit weight than solid members.

**Pipe applications:** Pipes can be used to transport water supply, waste water, chemical, energy related fluids, etc.

**Pipe materials:** Steel and other metals, Plastic such as PVC, Concrete, etc.

**Function and Types of PIGs:** Cleaning, sealing, dewatering, and inspecting pipes



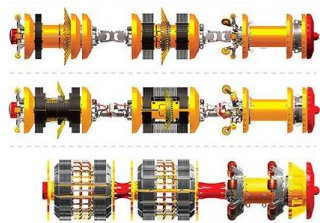
**Foam Pigs:** This pig is the most basic type of pig. Its purpose is to remove debris or liquid (dewater) from the pipeline. Foam pigs come in many shapes and sizes, all of which are designed for different applications and purposes. It includes the **Bare Foam & Coated Pigs** which is used for general cleaning, batching and proving. The Bare Foam and Coated pigs are commonly used after construction as they are extremely flexible; the **Power Brush Pig** which has brushes that effectively remove stubborn material, such as corrosion deposits, from the inside of a pipeline; and the **Foam Disc Pig** that was designed by Inline for the efficient removal of liquids, such as hydrotest water. Available in a large size range, foam pigs play an important role in the safe cleaning and proving of pipelines.



**Mandrel Bodied Pigs:** These pigs are designed with a metal body that can be customized with replaceable discs, cups and/or scraper brushes or gauging plates that are bolted in place. Disc pigs such as the BD6 are ideal for liquids and wax removal. Cups are added where extra sealing or wear resistance is required and are particularly effective for accommodating pipes that are out of round. This pig consists of brushes, cups and discs and is very efficient at cleaning, liquids removal and particularly effective the removal of black powder.



**Urethane Pigs:** A more flexible pig body is designed for cleaning, wax removal and liquids displacement, but are manufactured as a one-piece construction.



**Smart PIGs:** Pigs are inserted into the pipeline and are pushed along by the flowing product. They may measure several different things from inside of the pipeline, including restrictions and deformations of the pipe, as well as metal loss.