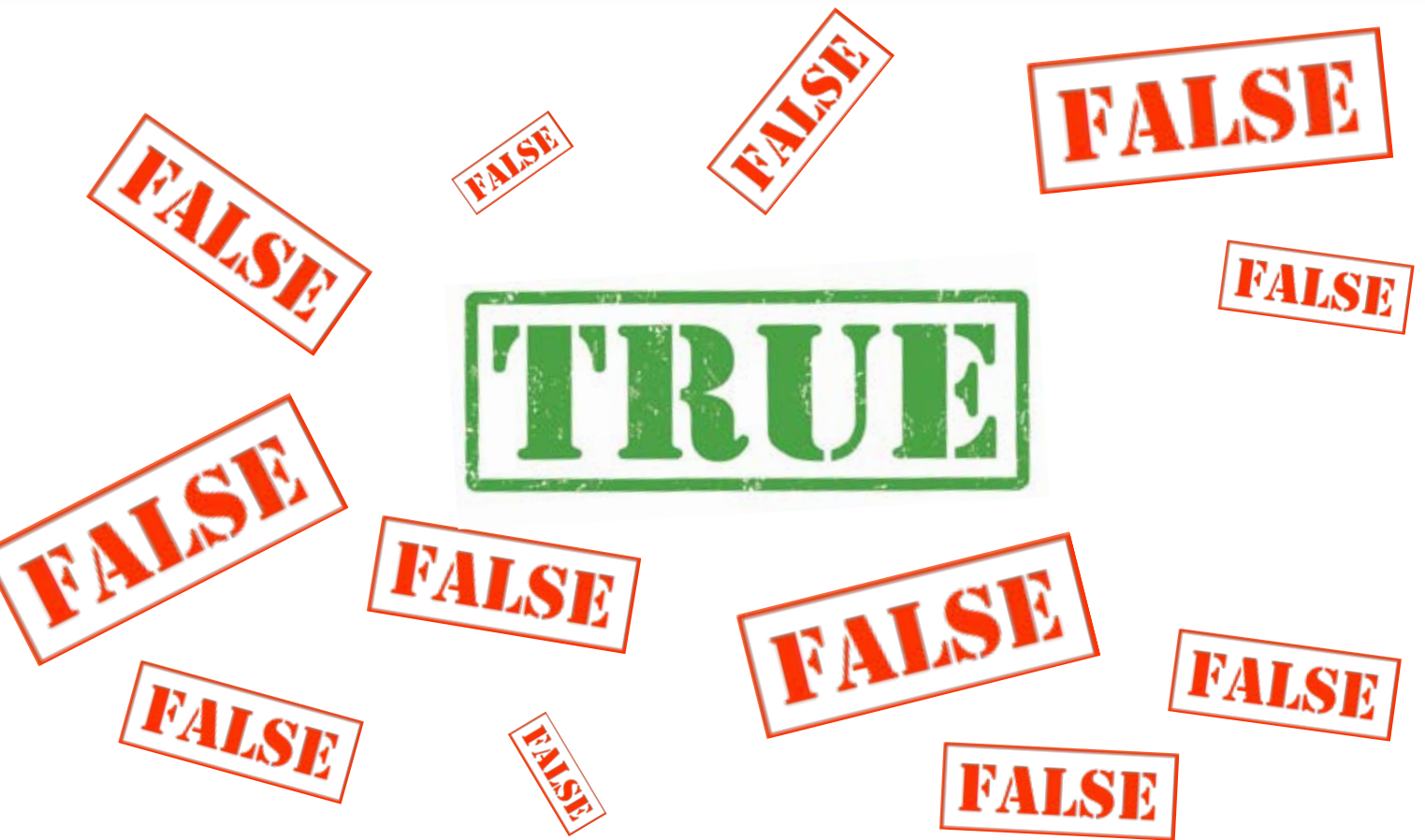


Myths About Pigging



HPS Product Recovery Solutions

Quality • Innovation • Simplicity • Integrity

www.HPS-Pigging.com



Be Aware of Myths – so they Don't Hold You Back!

Pipeline product recovery and [pigging](#) systems are established methods of improving product yield, reducing waste and making business processes more efficient. Today, pigging has a broad range of uses in a wide variety of different sectors throughout the world. The technology continues to develop with innovative new ideas and enhancements improving performance and extending the scope of applications year on year.

As Technology Develops, So Do Myths

The success of product recovery and pigging system technology hasn't happened overnight. It took extensive development and testing before the first commercial product recovery systems became available in the last half of the 20th century. Similarly, the design, operation and use of pigging systems in some areas, for example oil and gas pigging, are far removed from that of the hygienic pigging systems used in food, beverage, homecare, chemical, pharmaceutical or other products.

As with any established technology that's developed over time, there are a number of interesting stories that have cropped up along the way. Some of these, through embellishment, rumour or just lack of understanding, have given rise to a number of myths about pigging.

While these myths may be interesting, they can also be obstructive. Taking too much notice of myths can prevent a business progressing. Therefore, it's important to be aware what's true and what isn't.

"We must not be hampered by yesterday's myths in concentrating on today's needs"

Harold S. Geneen

So, here are some of the myths, misunderstandings, falsehoods and untruths about Pigging Systems we've come across over the years.

Myths about Pigging Systems

Pigging Myth Number 14:

“Pigging is Slow”

FALSE

Not true. In process applications, pigs generally travel through pipes extremely quickly. This in turn makes the pigging process extremely quick, in addition to making flushing and CIP quicker (because pigging removes nearly all residual product). While the precise speed that a pig travels through a pipeline depends on a variety of factors, most people are surprised by just how fast they go. To see an example, take a look at the [videos of a pigging system operating in this blog post](#).

Pigging Myth Number 13:

“Pigs Contain Solid Magnets, Which Can Break or Shatter”

FALSE

Pigs that contain solid magnets are a problem, because broken or shattered magnets, along with ripped or torn fins, can damage equipment, cause product contamination and other issues. Fortunately, it is not true of HPS pigs. These do not contain solid magnets. Instead, they have a flexible silicon-based magnetic core which will not shatter. HPS pigs don't have fins either, because fins are also problematic.

Pigging Myth Number 12:

“Pigs Can't Go Around Bends”

FALSE

HPS pigs are made from a flexible, hardwearing material that can travel through 1.5 D – 90° bends.

Pigging Myth Number 11:

“Ice Pigging is the Future”

FALSE

Ice pigging, which uses ice slush in place of a solid pig, is an interesting development. It does have its uses, for example in clearing sewage pipes, but so far, its applications are limited.

In hygienic applications in particular, ice pigging has a number of drawbacks that make it largely impractical. For example, the ice obviously needs keeping at a low temperature to be effective and not dilute the product. This rules it out for many food, drink and beverage applications. The ice doesn't provide a reliable seal, making it unsuitable for any process where contamination has to be avoided, seepage is unacceptable or for other reasons needs a strong fit. Certain products, such as chocolate, cannot come in to contact with water during the production process, so ice pigging is not a realistic alternative for these types of product.

With ice pigging, the ice pig can only be propelled by a liquid. It requires excessive amounts of water and the power consumption of the machinery is high, so from an environmental point of view ice

pigging is not an ideal choice. It is also extremely difficult to automatically detect the presence of ice, making PLC control challenging.

Ice pigging in hygienic applications needs specially cleaned water, and also requires specialised ice-making machinery to be available at the pigging location. This is not practical for many industrial processes.

Pigging Myth Number 10:

“Pigs Can Only Travel in One Direction”

FALSE

That may be true of some manufacturer’s pigs, but not ours. HPS pigs are fully bi-directional.

Pigging Myth Number 9:

“Pigs Get Stuck in the Pipes”

FALSE

Wrong. Pigs don’t get stuck (well, not HPS pigs anyway!). As long as you haven’t exceeded the recommended usage of our pigs (so avoiding excessive wear or damage), then there must be a reason why a pig doesn’t reach its destination. This could be due to lack of propellant pressure, pipeline faults, leakage from a pipe connection, or an obstruction such as a closed valve in front of the pig.

Pigging Myth Number 8:

“You Have to Manually Carry the Pig Back to the Start”

FALSE

Not true. HPS Pigs are bidirectional. They don’t usually need to leave a system except for inspection or renewal. Most systems are semi or fully automated. Either way, pigs are usually transported back to their launch station in a similar manner to which they arrived.

Pigging Myth Number 7:

“Once A Pig is In a Pipe, It’s Easy to Lose It”

FALSE

HPS systems use specially designed Pig Detectors. These are located externally on the pipe and establish the presence of an HPS Pig when it’s in close proximity. The pig detectors produce electronic signals providing the location of each pig. So in other words, you won’t lose them.

Pigging Myth Number 6:

“You Can’t Add a Pigging System to Existing Plant”

FALSE

We custom design all our pigging solutions. There may of course be modifications, but we can fit them to either existing or new plants.



Pigging Myth Number 5:

“You Need to Pig a System Several Times to Clean It”

FALSE

It depends on the type of system and application, but HPS solutions will typically recover 99.5% of product in a single run. So you'll only usually need a single run.

Pigging Myth Number 4:

“Pigging Systems are Expensive”

FALSE

How much you spend on a pigging system depends on a number of things. However, properly designed and implemented, a pigging system will save you money and increase your profits. Typically, HPS systems pay for themselves within 12 months (often sooner). For more information, here's an article on [How to Calculate Return on Investment from a Pigging System](#).

Pigging Myth Number 3:

“Pigs Can't Go Through Valves”

FALSE

That's partly true, as in pigs can only go through **certain types** of valve. HPS can supply a range of piggable valves, including piggable diverter valves, piggable sanitary ball valves, and even [piggable flowverter automatrix](#) and [rotomatrix product distribution systems](#).

Pigging Myth Number 2:

“Pigging Systems are Dangerous”

FALSE

Pigs are projectiles that travel at high speed through pipes. Therefore, like many other industrial processes, pigging systems are not without potential risk. What's important is the minimisation of these risks.

In the past, there have been accidents, but these have nearly always been in large bore applications in the oil and gas industries. These are very different systems in terms of size, purpose, operation, and level of potential risk from the hygienic product recovery and pigging systems provided by HPS.

HPS pigging systems have an exceptionally high safety record. But that's by no means a reason to be complacent. We provide many safety features to prevent or minimise the risk of accidents. These can include automatic interlocks, valve condition checks, pig bars (which prevent pigs leaving the pipe) and so on. To reduce human error, we also provide training and advice on robust, effective safety procedures.

If you purchase a product recovery or pigging solution from HPS, we will ensure it is as safe as possible in terms of design, installation, operation, usage and training. It will then be no more or less dangerous than other industrial process equipment.

...and the worse myth about pigging that we've ever heard is:



Pigging Myth Number 1:

“Pigging Systems Don’t Work!”

FALSE

Unfortunately, that’s a comment we hear far too often. It’s an appalling myth that usually derives from either lack of experience, knowledge or understanding of the science and technology behind product recovery.

Properly designed and implemented, **Pigging Systems DO Work.**

In fact, they work extremely well.

We have successfully implemented thousands of product recovery solutions throughout the world. We’ve deployed them in new plants and existing plants, in large-scale processes run by internationally recognised organisations to smaller, localised operations. We keep downtime to an absolute minimum and our systems have a typical payback period of just a few months.

The concept of hygienic pigging is straightforward. However, producing the design, specification and implementation of an effective product recovery and pigging system is a specialist task. It takes extensive knowledge and experience to put it in to practice.

That’s why, if you’re thinking of implementing a product recovery and pigging system, you need to talk to a specialist company like HPS.

Then, you have the assurance that you’ll get a practical, reliable, efficient and cost-effective solution – that works!

So What’s the Truth about Pigging?

Despite the myths, thousands of organisations around the world successfully use product recovery and pigging technology to improve their processes. The benefits include:

- ✓ **Increased Profits, Productivity and Efficiency**
- ✓ **Higher Product Yields**
- ✓ **Lower Labour Costs**
- ✓ **Less Downtime**
- ✓ **Reduced Waste Processing**
- ✓ **Lower Cleaning Costs**
- ✓ **Faster Changeovers**
- ✓ **Reduced Water Usage**
- ✓ **Positive Environmental Impact**
- ✓ **Smaller Carbon Footprints**

TRUE

Find Out More

If you have any questions about hygienic pigging and product recovery, for a **free consultation**, a **free quotation** or to find out more about how you can increase the profitability of your organisation, please [contact HPS!](#)

