Morris Couplings: The Gold Standard in Plastics Processing

In the world of industrial vacuum and conveying applications, where precision, reliability and durability are paramount, Morris Couplings stand as the gold standard.

These unique compression couplings, a.k.a. band couplings, developed by Morris Coupling Company in 1941, have become synonymous with excellence – the "Kleenex" of compression couplings. But what exactly are Morris Couplings, and why are they so revered?

What Are Morris Couplings?

Morris Couplings are specialized compression couplings used to join pipes and tubing in plastics processing and other industrial applications. They consist of a clamshell design with bolts and a gasket in between that cinches as the bolts are cranked down.

When tightened, these bolts create a secure and leak-proof seal, ensuring the smooth flow of materials through pipes and tubing. Morris Couplings are available in 2, 3, 4, 6, and 8-bolt configurations, offering flexibility to accommodate various connection needs.

Precision Matters: The Benefits of Couplings in Plastics Manufacturing

In injection molding and other plastic processing facilities, materials are transported from a central location to machines through aluminum or stainless steel tubing, often traveling hundreds of feet with elbows providing changes of direction.

These pipes and tubing must maintain a consistent diameter without any gaps or obstructions, and Morris Couplings play a crucial role in achieving this.

Similar to how electrical wiring requires precise installation by electricians, the installation of piping and tubing requires precision. The ends of the piping must butt together squarely inside the coupling. There's no room for error: a slight offset can damage pellets or other materials traveling at high speeds, leading to "streamers", pipe blockages and product damage. Any mismatch under vacuum could also cause the gasket to be sucked into the space, leading to material contamination.

The Essential Grounding Strap

Morris Couplings incorporate an integral feature that's vital for efficient and safe operations: the grounding strap. Embedded within the coupling, this component ensures continuous discharge of static electricity.

It's a misconception to assume tubes are inherently grounded; without proper grounding, static can accumulate, causing materials like plastics or powders to adhere to the tube walls, disrupt flow and create potential safety risks. The grounding strap within Morris Couplings addresses these issues, ensuring a seamless flow of materials and mitigating any risks associated with static build-up.

Pipes vs. Tubing: A Key Difference

A common error in the industry is confusing pipe with tubing. While they may look similar, pipe and tubes have distinct applications.

Tubing, typically made from aluminum, stainless steel or carbon steel, is used for material handling, including plastics, grain, and pharmaceutical powders. Alternatively, pipe is primarily used for liquids and highly abrasive materials like sand.

A key distinction is that tubing is measured by its outer diameter (OD) — typically a thinner, 11-16 gauge thickness — whereas pipe is measured by its inner diameter (ID) and has a thicker wall like the schedule 40.

Morris Couplings offer all sizes of their coupling for both pipe and tube applications. It is important to know the application and the material that is being used to make sure that the correct couplings are specified.

Wide Product Range

Beyond couplings, Morris offers a wide range of related products, including tube bending and pipe made from stainless and carbon steel of various thicknesses (such as schedule 5, 10 and 40), hanger components, and even specialized glass elbows designed for abrasive wear in plastics processing. Additionally, they can create custom solutions like manifolds and complex transitions. They also have many standard components such as, parallel laterals, adapters, Ys, and Tees, in a wide range of sizes and materials necessary for the complex material handling systems installed in all types of processing industries.

While the technology behind Morris Couplings is no longer under patent protection, their reputation for quality remains unrivaled. A few companies produce their own couplers designed to the same specifications, but Morris remains the gold standard for quality, durable products.

A Plastics Manufacturing Partner for Quality Products

At Plastixs, our team specializes in the Morris Coupling product line, and we bring an in-depth understanding of its various applications. Whether you're in maintenance and repair, installation or an OEM, Plastixs can help you identify the exact products you require based on your needs. No matter the order quantity, we can handle it quickly and efficiently.

Contact our team or view our coupling catalog to learn how Morris Couplings can keep your operations running smoothly.

Contact us to learn more about Morris Couplings