# 121 Summer edition 2018









From fire trucks to steel mills, swivel joints are essential components for all kinds of machinery and applications. The components provide the smooth connection between stationary pipes or hoses and rotating machinery parts.

#### Design, plant and maintenance

engineers use swivel joints in flexible piping systems, loading arms, hose reels, sewer rodding and wastewater treatment equipment, and various types of process machinery. They also use swivel joints in machine tool coolant transfer, drum-filling applications, and in a variety of in-plant fluid and dry bulk transfer applications. Here, *David Morrow*, *Director of Product Management for OPW Engineered Systems* offers his expertise.

The most advanced machinery can breakdown if its elements aren't able to move. Swivel joints are necessary investments that pay off in a big way. They extend machinery lifetime and reduce maintenance and downtime. It's extremely important to follow the manufacturer's specifications when selecting swivel joints or leakage will occur and the machinery will fail.

The application environment is critical to selecting the right swivel joint. Application design parameters such as pressure, temperature and supported weight all play an essential role in properly selecting a swivel, as well as understanding the corrosiveness of the fluid itself.

#### The Options are Endless

The breadth of swivel joints is endless when you consider the potential combinations of sizes, seals, and connections, not to mention metals. Versatility is the key to any effective swivel joint as specification can vary drastically depending on the job and functionality required.

#### **Specialty Swivel Joints**

Custom swivel joints can be designed and manufactured for any possible application. Engineers can help you determine the appropriate design for your special application by providing experienced consultation, backed up by the right swivel design, tailored specifically to meet your application needs. Specialty swivels are available in a wide range of materials and sizes. A few of the most typical applications include: Loading arms, hose reels, steel mills, marine/dock hoses, filtration equipment, tank trucks, drum fillers.

## Loading Arm Replacement Swivels

Loading arm systems allow the transfer of fluids or liquefied gas into a tank truck or rail car through a flexible piping system. Some applications require a loading arm to load through a top connection, while other connection points are at the bottom. The functionality of loading arm swivel joints has evolved over the years to meet the demands of fluid handling solutions.

### **Hose Reel Swivels**

Swivel joints are an integral part of many hose reel applications and there is a large variety of these parts designed specifically for hose reels, with customisation options.

#### **Dual Split Flange Swivels**

Dual Split Flange swivel joints are specifically designed to transfer acids, solvents, petrochemicals and other toxic fluids. This type of swivel joint feature heavy-duty construction and unique design components that help make it the best available swivel technology in the industry.

For more information on swivel joint features and custom design capabilities, please visit www.opw-es.com.