

IN AREAS WHERE CORROSION IS A CONCERN, STAINLESS STEEL IS THE BETTER CHOICE.

Corrosion is one of the biggest challenges faced across industries.

It is estimated that the cost of corrosion worldwide is \$2.5 trillion annually. Corrosion costs are not limited to individual component replacement; worn-out parts and conduit systems can result in total plant shutdowns, lost production batches, and additional labor required to bring equipment back online. In some instances, there are also dangers associated with reinstallation in hazardous environments or where accessibility is an issue. Nearly every industry contends with corrosive environments and harsh conditions.



Food & Beverage

While food products and beverages can themselves be corrosive in nature and while corrosion catalysts such as heat, moisture, evaporation, and cooling water abound in food plants, a push for greater food safety has introduced additional corrosion risk in food facilities. In order to prevent food contamination, industry standards and government regulations, such as HACCP

guidelines and the FSMA, are including wash-down procedures with higher pressures and temperatures, as well as greater frequency, and higher chemical concentrations (e.g., chlorine washes, disinfectants, sanitizers, lye).

Wastewater Treatment Plants

Sewage and industrial process water is treated via biological and chemical processes involving the addition or the release of corrosive elements. Oxidizing agents and chemicals, such as ferric chloride and ferrous sulphate, in combination with a very wet plant atmosphere, increase the risk of corrosion.



Pulp & Paper Mills

Chemical pulp processing can involve corrosive chemicals such as sodium sulfide, sodium hydroxide and sodium sulfate. Secondary paper-making processes, such as bleaching, can also involve chemicals such as sodium hypochlorite, chlorine dioxide, caustic soda, peroxide, etc. Catalysts such as heat, evaporation, and moisture are present throughout these plants, exacerbating the risk of corrosion.

Coastal & Marine Environments

Salt ions and impurities in the water, such as dissolved gases, organic materials, and microscopic organisms, give seawater its corrosive nature. Locations within five to ten miles of saltwater are at risk for corrosion as sea salt is carried by weather (e.g., wind, fog, and rain).



Petrochemical Plants

Petrochemical plants convert natural resources to byproducts used in downstream industrial processes. The presence of various hydrocarbons, toxic gases, and other process chemicals, such as solvents, neutralizers, and catalysts, often at elevated temperatures, creates a corrosion-prone environment.

Infrastructure

Tunnels, bridges, and buildings are continuously exposed to weather and elements that can cause corrosion. Rain, ice, sleet, snow, acid raid, road salts, and deicing liquids can greatly increase rates of corrosion.



Chemical Processing Plants

In chemical processing facilities, the major corrosive agents are the chemicals being processed (e.g., nitric acid, ammonia, hydrogen chloride). As chemicals are mixed, heated and transported across the facility, plant systems are at risk for corrosion.

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WHY CHOOSE GIBSON STAINLESS?

Gibson Stainless & Specialty, Inc., has been a premier provider for the electrical and other industries since pioneering stainless steel electrical systems over 20 years ago.

We proudly provide electrical conduit and fittings that meet and exceed industry standards; many of which are UL Listed. Our customers benefit from the high inventory we maintain as we ship over 90% of our orders complete within 24 hours. Gibson Stainless & Specialty, Inc. is an American company, 100% American owned. From the very beginning, we have used castings from American foundries, steel from American mills, and manufacturing processes right here at Gibson Stainless. Today, most of our products are either 100% Made in USA or Manufactured in USA. We are dedicated to quality and transparency across all of our work. If there is an imported product in our line, we will tell you it's an import!



Our approach at Gibson may be a little different than most. Quality is our number one priority throughout all of the processing steps, and is one thing we are never willing to sacrifice. Every product we offer is polished to achieve a bright finish. Each individual part is inspected at various stages of production and assembly and then again during packaging. All items are packaged and labeled individually. All of our conduit is shipped securely in wooden, custom-built crates. Just as important to the quality of the product we offer, is the quality of the customer service we provide. We strive to give our customers fast and accurate responses. While all Gibson Stainless items are stock items, we do occasionally have less in stock than required by the customer. When this happens, we give our customers realistic and reliable lead times. We hope that doing business with Gibson Stainless is enjoyable and that we are perceived as offering a true quality package made up of both the product and our service.