


FENG YI STEEL CO., LTD.
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The One-of-a-Kind Titanium Alloy Screws Manufacturer

Feng Yi Steel Co., Ltd. was established by president Kern-Hsiung Huang in 2005. Initially, Feng Yi focused on import and export of carbon steel coils and wire. In 2008, president Huang successfully invented the first titanium alloy self-drilling screw in the world, which has been patented in Taiwan, the EU, Japan, etc. Today, Feng Yi is a professional manufacturer of pure titanium and titanium alloy screws, marketed with the slogan: "screws that never get rusty". Feng Yi exports its products to various countries around the world and has gained its reputation for titanium screws in Taiwan.

Feng Yi's Key to Success- Choosing Titanium

The reason that president Huang chose titanium screws as the main products of the company is: Titanium never gets rusty and it's a very unique metal in terms of its advantageous physical and chemical properties. Titanium has excellent corrosion resistance (e.g., aqua regia) and even shows better corrosion-resistance to chloride in sea water than that of stainless steel, only second to platinum. Titanium is also lightweight and its weight is about 60% of that of stainless steel or carbon steel. Additionally, titanium as a stable metal has high strength, is non-magnetic, and shows excellent temperature resistance. However, the properties of titanium make it difficult to be processed and its higher material price results in a higher unit price than those of general screws. Titanium is mostly used in industrial goods for automobile, aerospace, military and medical industries. Titanium is commonly seen on aircrafts, detection instruments, submarines, underwater facilities, yachts and oil exploring ships. Take Taiwan as example, Taiwan is encircled by sea, creating a potential environment for stainless steel to get rusty. Hence, chemical plants, sewage treatment plants and hot spring facilities all need to use PH-resistant titanium.

Leading Technology & Creating Advantages

Feng Yi uses state-of-the-art forging technology to manufacture titanium screws. President Huang said, "In general, most manufacturers use turning technique rather than forging process. Although the technique of forging is more difficult, it can speed up mass production. Besides lowering the cost, the quality and safety of screws is much better. If a screw is made by turning, its mechanical property may be inferior to the one made by forging process, decreasing its strength. While using forging technology, the texture of metal still remains. After squeezing and modeling, the titanium screws can be stronger and more durable." President Huang added, "Feng Yi's titanium screws show quality equivalent to those produced by European and US competitors, or even better". Although its price is a bit high, its quality is extremely good. In 2011, when Japan was stricken by a huge earthquake, Feng Yi went to Japan to exhibit at a fair. Since then, Feng Yi has opened its own Japanese market and its product quality has been also approved by Japanese customers.

Careful Examination and Quality Guarantee

Feng Yi's titanium screws are mainly for export and it has the inventory for customers' regular demand for standard parts, instantly satisfying their requests. It also accepts customized orders and the quality of products in domestic and export sales is the same. In order to ensure stable screw quality, president Huang spent millions of NT dollars buying the testing equipment to ensure product quality. He said, "It is not an easy work to produce a screw with good quality, so our engineers even use microscopes to inspect titanium screws and every detail must be done perfectly."

The Current Situation of Taiwanese Wire Rod Market

Apart from titanium screws, wire rod is another premium product of Feng Yi. Feng Yi is a wire and coil retailer providing wire rods to small and medium-sized businesses. President Huang also briefly explained the conditions of Taiwanese wire rod industry. The annual demand of wire in Taiwan is approximately 1.8 million tons. The total annual output of CSC is about 10 million tons and wire takes up to 10% of them. Among the 10%, the fastener industry takes up to 80-90%, and others are for wire rod. Taiwan imports 700-800 thousand tons of wire mostly from Japan, South Korea and a few from China every year. In recent years, steel prices keep rising rapidly. In regions like Europe and Japan, steel prices have even increased to USD140-150. Steel prices in Taiwan and China are also increasing. President Huang said, "If the wire price difference between Taiwan and China could be controlled within 15%, Taiwanese products would be more competitive and acceptable to the market."

Feng Yi will exhibit at Fastener Fair Stuttgart in Mar. 2017. With its extraordinary technique and unique titanium alloy self-drilling screws, Feng Yi is believed to continuously be a shiny star in the field of titanium screws. ■