Fitting Material Selection Guide

Type 300 SS

Most common and economical grade of Stainless Steel. Moderate corrosion resistance. Use when galvanized cables have been selected and in mild environmental conditions. This material is more economical to manufacture due to alloying elements added specifically for manufacturing economy.

Type 17-4PH

17-4 is a slightly magnetic, precipitation hardening (PH) stainless steel. While slightly less corrosion resistant than 300 series stainless, this material can be heat treated to tensile strengths as high as 200ksi. When heat treated, polished and passivated, 17-4 performs well in mildly corrosive environments. Choose17-4 when strength-to-weight ratio is your most important criteria.

Type 316 SS

This chromium-nickel stainless with the addition of molybdenum is widely accepted as the best choice for demanding architectural applications. 316 SS provides a high level of corrosion resistance without sacrificing strength. When cold reduced (Also called condition B - a method of squeezing the material through dies in order to increase tensile strength), tensile strengths of up to 130ksi are achieved. Choose 316 when your application is exterior and highly urban, near salted roads, or in a marine environment.

Nitronic 50

Nitronic rods and fittings while more expensive, offer all the strength of type 17-4 with tensile strengths up to 225ksi. Nitronic 50 exhibits superior corrosion resistance. This material has been strengthened by nitrogen, with 22% nickel and 12% chromium for corrosion resistance. Nitronic fittings should be used when extreme conditions require the best combination of strength and longevity.

Titanium

Impervious to the elements, high strength, and 50% lighter than Stainless Steel, titanium can distinguish your project. Specify titanium carefully however, it tends to be prohibitively expensive. Call for a quote.