## Finishes and Materials

## **Available Finishes**



TGIC Powder Coat - This polyester-based finish is well suited for bike racks made from mild steel, and is available in a wide variety of colors. Powder coating serves as a protective barrier to the various environment elements that cause corrosion. To further increase corrosion resistance, Sportworks recommends an additional zinc plated undercoat be applied prior to the powder coating process. Zinc acts as a sacrificial anode to protect the base metal from corrosion should the powder coat become chipped.



PPA-571 Thermoplastic Powder Coat - This thermoplastic finish is also well suited for mild steel racks, and Plascoat's special formulation (PPA-571) produces a more flexible and robust coating. When compared to polyester-based powder coatings, PPA-571 thermoplastic powder coatings are tougher, more resistant to chips, and naturally graffiti resistant. This finish is also available in a wide variety of colors.



Galvanized - If color is not a requirement, this hot dip galvanized finish is a good choice for durability, low cost and corrosion protection on mild steel racks. While a galvanized finish will appear rough when compared to zinc plated and powder coated finishes, galvanizing provides the highest degree of corrosion resistance of all three. Additionally, galvanizing can also be used as an under coating treatment to TGIC and PPA powder coats. All Sportworks galvanized bike racks are finished to ASTM A123. (Galvanized finish not available on No-Scratch and Plaza series bike racks).



Bead Blast - Unlike powder coating and galvanizing, this finish removes material during the application process, and is ideal for stainless steel racks. Small glass particles (media) traveling at high velocities impact the metal removing the outer surface, and resulting in a mildly-textured or matted finish. Similar to galvanizing, there are no color options available for this type of finish. Sportworks stainless steel bike racks represent the highest level of corrosion protection available.

\*All finishes subject to minimum lot size charge.

## **Available Materials**



Mild Steel - Mild steel is a type of steel where the main alloying element is carbon. Having anywhere from .05% to .20% carbon, mild steel can still be bent and formed, but has mechanical properties that will provide a good amount of strength to the part being fabricated. Mild steel rusts and corrodes when exposed to air and moisture, so for outdoor applications, it must be coated with finishes such as galvanizing, plating, powder coating, thermoplastics, and painting. Without one or a combination of these finishes, mild steel can rust and corrode to the point of part failure.



Stainless steel - Stainless steel does not stain, corrode, or rust as easily as mild steel and is used where both the properties of steel and resistance to corrosion are required. Stainless steel differs from mild steel by the amount of chromium and nickel that is present. Stainless steels contain sufficient chromium and nickel to form a passive film of chromium oxides, which prevents further surface corrosion and blocks corrosion from spreading into the metal's internal structure. Stainless steel can still corrode and discolor in some conditions, but in general it will retain its strength and appearance when exposed to the outdoors