

General Information

Stainless Steel Roller Information

Premium Class (P-Class)

P-class rollers are made from all stainless steel components and are intended for use in frequent washdown, high corrosive and food processing applications.

- Manufactured with 304 stainless steel, mill finish materials (unless otherwise noted)
- Stainless steel or polymer roller bearings
- Washdown rated
- Stainless steel sprockets and fasteners
- FDA/USDA approved materials
- Continuous MIG welds
- Rollers with thru-bore bearings are NOT water-tight; liquid may become trapped inside

Additional Options

- Polished stainless steel finishes
- 316 stainless steel materials
- Special "water-tight" roller designs utilizing blind bore bushings

Deluxe (D-Class)

D-class rollers are made of combinations from corrosion-resistant material and carbon steel materials. They are intended for use in occasional washdown and low corrosive applications.

- Standard roller designs (zinc plated, galvanized, PVC, stainless steel or aluminum tubing)
- General purpose roller bearings
- General purpose sprockets and chain
- Zinc plated fasteners
- Rollers with thru-bore bearings are NOT water-tight; liquid may become trapped inside

Surface Finishes Available

Mill Finish – Also known as rolled or unpolished finish. A mill finish is a bright, smooth, semi-reflective and non-directional finish. Exact visual appearance can vary based on different grades and thicknesses of stainless steel. Pitting, scratches, welds and tool marks may be visible on the surface. If these blemishes are cleaned up they cannot be blended to recreate an original mill finish appearance. These reworked areas will remain apparent unless additional surface finishing operations are performed. Mill Finish is the standard finish for rollers unless otherwise requested by the customer.

Glass Bead Blasted Finish – Glass bead blasting produces a bright uniform matte or frosted finish with low reflectivity and no directionality. It reduces glare from shiny stainless steel while still retaining a smooth feel. Although the surface has a consistent look it may still contain pits and scratches. The maximum surface roughness is Ra of 125 micro-inches.

Sand Blasted Finish – Sand blasting is the same operation as glass bead blasting but uses a more abrasive medium. This produces a duller and less smooth finish than glass bead blasting. Similarly the surface may still contain pits and scratches.

Polished Finish – Also known as brushed or satin finish. A polished finish is the result of additional mechanical operations which include grinding, polishing and buffing that are intended to change the appearance and condition of stainless steel metal surfaces. The most common stainless steel cosmetic polished finish is described as a No. 4 finish. It is a bright, uni-directional finish with a visible "grain" which prevents mirror reflection. It is obtained by finishing with a 120-150 mesh abrasive, following initial grinding with coarser abrasives and has a surface roughness with a maximum Ra of 32 micro-inches. Areas where welds and tool marks were cleaned up can be blended or repaired by using the same or similar polishing methods that were used to create the original polished finish. Sprocketed rollers can only be polished on the effective width.

For additional general roller information view our full [Roller Catalog](#)



General Information

Stainless Steel Roller Information (continued)

Bushings (Roll End Bearings)

Bushings, or Roll End Bearings, can be used in place of traditional ball bearings in rollers. In applications with speeds less than 150 FPM they offer many advantages.

- No moving parts to break down
- No lubrication to be washed away or dry out
- Equivalent load capacity to ball bearings
- Fit in any tube size or tube material
- Can be custom built for uncommon tube and axle size combinations
- Blind bore designs with stub axles for “water-tight” rollers
- Free-draining designs
- Available in a wide variety of materials



Based on the material they are made from bushings can be used in many applications.

- Sanitary and food applications
- High temperature applications (up to 550° F)
- Low temperature applications (down to -50° F)
- Excessively abrasive dust or debris applications
- Underwater applications
- Corrosive environments