Understanding Bearing Options

Delrin® Bearing

Delrin, a DuPont engineered plastic, is extremely durable under a wide range of temperature and humidity conditions, and is corrosion resistant. Wheels with Delrin bearings are well suited for applications where brine conditions, steam cleaning, excessive water, or liquids are present. One piece or two piece Delrin bearing models are available (shown with spanner bushing). To order, see page 104.

Annular Ball Bearing



Annular ball bearings are precision type bearings with machined, hardened raceways. This bearing is for applications where maximum rolling ease and quiet operation are needed and best suited for light to medium duty loads. The bearing is pre-assembled, and the entire unit is mounted in the wheel.

Precision Sealed Ball Bearing (Prec. Ball)

Recommended for maximum rolling ease with no maintenance lubrication required, this quiet operating bearing is for medium duty to heavy duty loads. This bearing is available on all Endura Solid Elastomer and 2" tread width non conductive Performa Rubber wheels and is standard on all Triumph, Conquest and Commander HD wheels. Now available for Performa hand truck wheels! To order, see page 104.

Pedestal Precision Ball Bearing (PPBB)

This bearing is perfect when excellent rolling ease and quiet operation are required for your application. There is no maintenance grease required. The integrated spanner bushing makes installation easy. Now available in stainless steel, too! To order, see page 104.

Stainless Steel Model

Plain & Sleeve Bearing

Plain and sleeve bearings provide a metal sleeve inserted in a wheel to rest directly on the axle. This option is only recommended when rolling ease is less critical. To order, see page 105.



Bronze Bearing

The bronze bearing is durable under a wide range of temperature and humidity conditions and is corrosion resistant. It is highly recommended for high heat (up to 350°F) or wet applications (shown with spanner bushing). To order, see page 104.

Roller Bearing

The roller bearing is capable of carrying a greater load than the same size diameter ball bearing. It has a split outer race shell into which the roller assembly is inserted.



Standard Colson roller assembly features hardened steel rollers enclosed in a thermoplastic case on 1-1/2" and 2" tread width wheels. Metal cage roller bearings are available (Specify WB29) and are standard on wheels with tread widths of 2-1/2" and larger. Combination seal/thrust retainer washers protect the bearing from dirt, water, and chemicals. They also help absorb thrust friction (Note: roller bearing must be used with hardened spanner bushing or hardened shaft). To order, see page 104.

Torrington-Style Roller Bearing

Colson's Torrington-style caged drawn cup bearings have a steel cage that provides inward retention of the needle rollers. This design provides maximum cage strength consistent with long service life. This bearing is available on 2" tread width wheels only. (Note: Must be used with hardened spanner bushing or hardened shaft.) To order, see page 104.

Plastic & Metal Thread Guards

Designed to keep lent, thread and other soft materials out of bearings.

Certain industries and institutions find that excessive amounts of lint, thread and other soft materials have a tendency to work into caster wheel bearings. Wheel thread guards help overcome this problem. The thread guard does not revolve and thus forces thread to deposit away from the wheel bearing, not to mention it greatly improves the caster's appearance. Colson offers both plastic and metal thread guards. Plastic thread guards are more flexible and will not rust or corrode making them ideal for wash down applications. Metal thread guards have a zinc plated finish on 1-3 Series wheels and a galvanized finish for 4-7 Series models to protect against corrosion. To order on a caster, specify "**TG1**" for metal and "**TG2**" for plastic thread guards. To check for availability on caster models consult factory (see page 108).

