



Swivel Radius:
Distance between the center of the kingpin and the trailing edge of the wheel.

Offset:
Distance between the center of the kingpin and the center of the axle. Longer offsets swivel easier, shorter offsets increase strength.

Overall Height:
The vertical distance from the top of the fastener (that equipment rests on) to the bottom of the wheel.

Caster Size:
Caster size refers to wheel diameter. (if the wheel is 6" in diameter, it is considered a 6" caster).

Tread Width (Face):
Width of the wheel tread, measured from the side of the wheel core rather than the point of floor contact.

Autoclave / Autoclavable: Sterilizing equipment uses either pressure & steam at 250° F to 280° F for 10 to 20 minutes, or dry heat up to 375° F up to 3 hours. Autoclavable wheels can withstand heat and steam environment. SteROLLizer™ wheel is designed for this purpose.

Axle: Bolt that attaches wheel into caster yoke (frame, bracket).

Bearing Cap: Part used with single precision bearing wheels; integrates a spanner thrust bushing with bearing guard, only covers the bearing and not the full wheel hub. 2 per wheel.

Bearings: Wheel bearings provide either mechanical rolling assistance or a slick surface that reduces friction and increases roll-ability. Race-way bearings are a device on a swivel caster, enabling it to turn while bearing the load.

Blank Wheel: Wheel without bearing installed (plain bore).

Bolt Hole Pattern: Measurement between mounting holes on top plate, including length and width dimensions.

Bore: Refers to inner dimension of blank wheel or bearing.

Brake Kit: Kit containing all needed parts to install a brake onto a

caster (including: brake arm, lever / pedal, axle & nut, etc).

Brake/s: Component part of caster, when activated, assists in stopping wheel from rolling.

Caster: Complete assembly of caster yoke (frame), wheel(s), & axle; enabling equipment to roll.

Caster Pad: Assembly that is either welded or bolted to the bottom of a piece of equipment that enables a caster with a top plate to be quickly installed or removed. May also refer to a weld plate that has an identical overall size and bolt pattern to casters and can be used to reinforce mounting area, act as a shim or assist in caster installation.

Centered Hub: Wheel hub that has the same dimensions on either side; typically used in casters. Hub usually protrudes from wheel core.

Chemical Bond: Method of bonding wheel tread to wheel core using glue or a chemical reaction that fuses the materials together.

Cold Forged: Refers to a chemical procedure softening steel for a more dedicated forming. Heat treatment is usually followed after cold forge to re-enhance the steel strength.

Complete Wheel: A wheel that has bearings installed.



Crown Tread: Wheel face that is slightly rounded; reduces surface area & friction. Crown tread helps wheel roll & turn easier.

Cut & Welded Design: Describes casters made using a raceway & legs that are formed separately and welded together instead of stamping out of one piece.

Double Ball Raceway: 2 sets of bearings rolling in embossed tracks held together with a kingpin; one set supports the load, while the other assists in swivel thrust.

Drop Forged / Hot Forged: A procedure that billet is heated to burning red before being stamped for forming to certain shapes that otherwise could have been done by welding. The process increases the density of metal and further enhances its strength by eliminating any inconsistency of welding. Most of our heavy duty casters are made with top plate, raceway and king bolts forged to one piece.

Durability: Capacity of a caster to last in demanding applications.

Durable Superior Casters®: Reliable source for all your caster & wheel needs. Only Superior Casters are Durable!

Durometer: System of establishing the hardness of rubber, plastic or polyurethane wheels using either an "A" scale or "D" scale when it is beyond "A" scale's range.

Dustcap: Metal cap that helps keep foreign materials out of raceways.

Dynamic Load: Maximum load of a caster/wheel while rolling.

Ergonomic: Features which reduce injury by providing easier maneuverability or lower rolling resistance.

Fastening Type: Refers to the way a caster is attached to a piece of equipment. (i.e.: top plate, stem, hollow kingpin, and etc).

Flat Spot: Condition of a wheel tread flattening or compressing without the ability of rebounding to normal shape, causing undesirable rolling condition; happens with overloading or misapplication.

Floor Lock: Accessory used in conjunction with casters; a device to secure carts from moving on level floors.

High Modulus: Extra thick, round wheel tread.

High-Temp: Casters or wheels (including all parts), that are capable of operating at higher temperatures without failure or deformation.

Hollow Kingpin Caster: Tubular rivet used to hold swivel raceways together; the hole in the rivet kingpin can accept a bolt or customized modular stems for any particular mounting requirement.

Hub Length: Distance from one side of wheel hub to the other.

Inner Diameter "I.D.": Measurement of wheel bore, bearing bore or tubing inside diameter.

Integrally Forged: Different components are made into one single component through hot forging process. The process increases the density of metal and further enhances its strength by eliminating the problem of one or more components failure at severe application. Our Momentum 49 Series has an integrally forged top plate, kingpin and upper raceway. Our Kingpinless casters also have integrally forged top plates & inner raceways.

Keyway: Machined notch inside the wheel bore allowing wheel to be locked onto a drive shaft using the "key" that slides into correlating notches between the wheel bore and drive shaft, shaft is then able to turn the wheel. Wheels with thick metal hubs can be machined with keyways.

Kingpin: Bolt or rivet used to hold swivel raceways together; some of our heavier duty drop forged casters have the kingpin integrally forged as one piece with the top plate. Kingpins are typically the weakest point of a caster; kingpinless casters are stronger.

Kingpinless: Casters without a bolt & nut kingpin. A kingpinless caster's top plate and inner raceway are a one piece construction or integrally forged; the outer raceway with legs attached are held together with the inner raceway by hardened steel ball bearings. This design offers unsurpassed durability and use in abusive and demanding shock load applications that may cause kingpin casters to fail.

Load Capacity: Recommended maximum weight carried by a single caster or wheel under ideal operating conditions. Overloading could result in catastrophic failure.

Mechanical Bond: Method of bonding wheel tread to the wheel core by means of inter-locking materials together.

Mobility: A caster or wheel's ability to roll freely; many factors are involved, such as wheel hardness, shape, type, bearings, etc.

Modular Stem Casters: Casters created to accept a variety of customized fastening requirements.

Mounting Bolt / Attaching bolt: Fastening bolt or screw to attach casters to equipment. Top plate specs will list maximum bolt size. Attaching hardware is not furnished.

MRO: Industry abbreviation for Maintenance, Repair & Overhaul.

NSF: Abbreviation for National Sanitation Foundation. If a caster is NSF; it meets the criteria to be NSF listed. Used in Food Service Ind.

OEM: Industry abbreviation for Original Equipment Manufacturer.

Offset Hub: Wheel hub that protrudes on one side and is recessed on the other; Offset hubs are popular on wheels used on hand trucks and other mobile equipment using wheels instead of casters.

"O.D.": Measurement of the outside diameter of a wheel, bearing, tube, socket, etc.

Plain Bore: Wheel bore that rides directly on axle, no bearing.

Quick Change Plate: See terminology for "Caster Pad".

Raceway: Section of a swivel caster or wheel bearing; bearings that roll in an embossed or machined track.

Retainer Washer: Washer to keep bearings & grease in & debris out.

Rivet Axle: Permanent axle type used mostly on light duty casters.

Rivet Kingpin: Kingpin that has the both ends enlarged by hydraulic spin or staking, to hold a swivel raceway together, w/s nut & bolt.

Roll-ability: A caster or wheel's ability to roll in its application. The optimum of roll-ability can only be reached by correct selection of caster frames, wheels & bearings.

Seals: Select swivel raceways & wheels may have seals installed to keep debris out and keep grease in. Some wheel bearings are sealed and don't require maintenance. Check temperature ranges & limitations.

Shock Load: Impact or vibration sustained by caster/wheel from loading or outside forces, such as weight dropped on equipment, equipment running into obstacles.

Side thrust: Horizontal force from non-rolling direction of a caster.

Stamped Yoke: Main portion of caster frame assembly made from a single stamped piece of steel instead of multiple parts welded together.

Static Load: Maximum load of a caster/wheel while stationary.

Thread Guards: Metal or plastic disks that cover wheel hub preventing debris from getting into bearings or wrapping around axle.

Thrust Washer: Washers used between wheel hub and caster leg.

Wheel: Wheel only, not in a caster frame.

Yoke: Swivel or rigid frame of a caster. Also referred to as Fork or Rig.

Zerk: Grease fitting on wheels, caster raceways or axles.