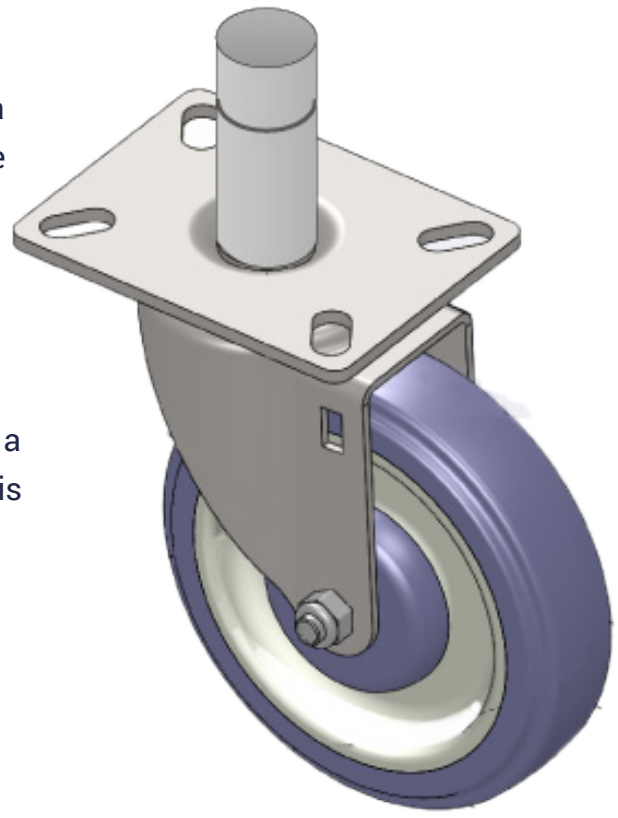
Knowing basic caster terms will help you make the right choice for your application

CASTER TERMINOLOGY

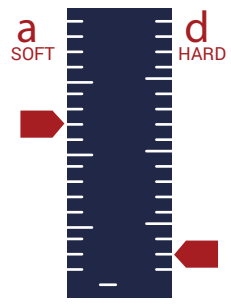
Dynamic Load

The load applied to a wheel or caster while in motion.



Static Load

The load applied to a caster while it is stationary.



Durometer

A measure of the hardness of a wheel. It is measured on a numeric scale with numbers ranging from lower (i.e. softer) to higher (i.e. harder). Wheels are measured in two scales, “A” shore for soft wheels and “D” shore for harder wheels.

Impact Load

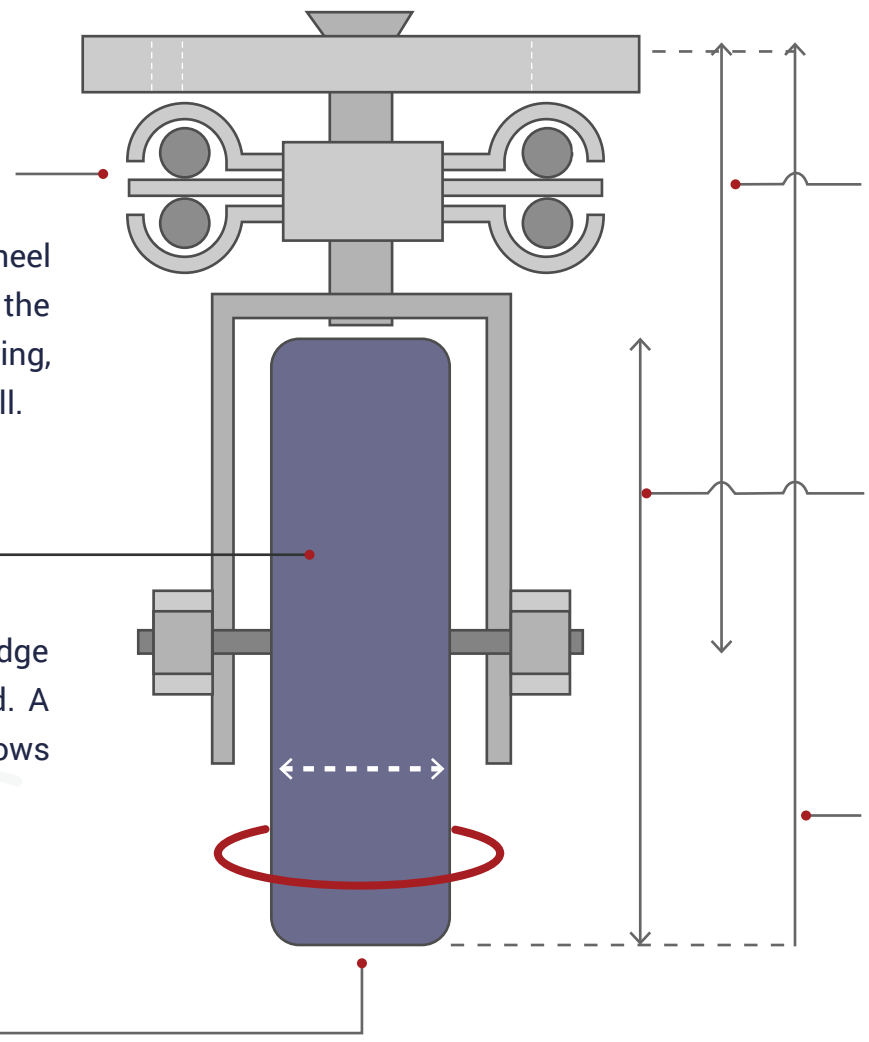
A temporary load applied to a wheel or caster when the load is dropped on the equipment or it strikes an obstruction or experiences vibration.

Wheel Bearings

The part that allows the wheel to rotate. The higher the quality of the wheel bearing, the easier the wheel will roll.

Tread Width

The distance from outer edge to outer edge of the tread. A wider tread normally allows greater weight capacity.



Offset

The perpendicular distance between the vertical centerlines of the kingpin and the axle of a swivel caster. Larger offsets afford easier swiveling, shorter offsets allow greater load strength.

Wheel Diameter

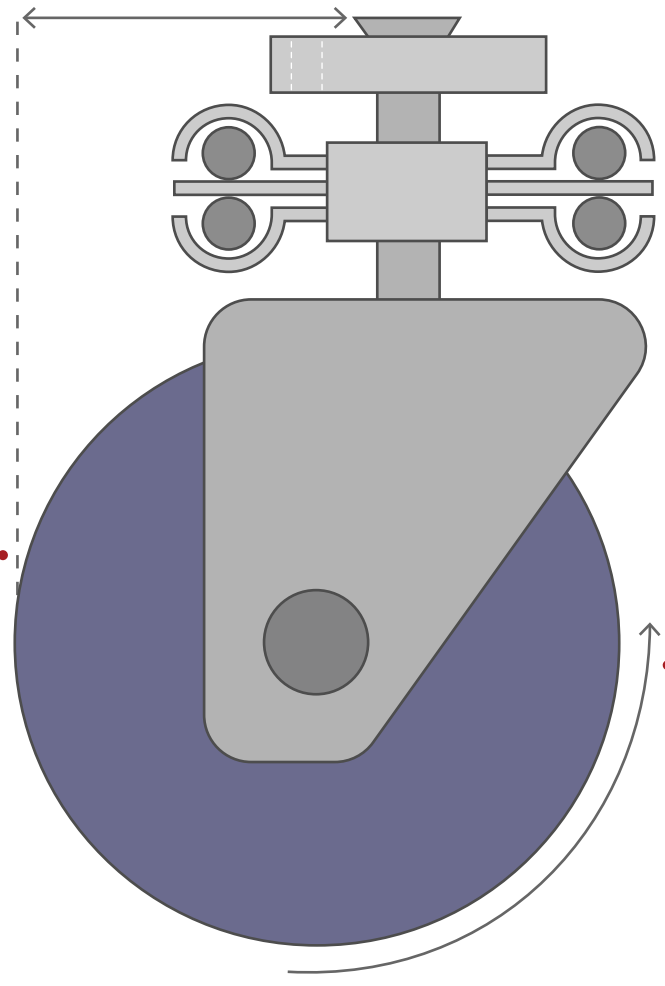
The length of a straight line passing across the axle hole on the face of a wheel connecting two points on the tread. As wheel diameter increases, the load capacity and ability to roll over obstacles increases.

Mounting Height

The vertical distance between the top edge of the caster plate of the unit and the bottom of the wheel.

Steering

The ease in which a caster turns to a desired direction. Tread shape, wheel material and caster swivel bearings all affect steering. The offset of the swivel plays a role in the ease or difficulty in steering. Too much offset can reduce load capacity and increase wobble, and too small an offset will increase steering effort.



Swivel Radius

The horizontal distance from the outside edge of the wheel tread to the vertical center line of the kingpin. The dimension identifies the minimum distance necessary for the caster to swivel 360’ when mounted.

Rollability

The ease in which a caster’s starting and continued mobility is measured or wheel can be rolled. This can be influenced by type of tread, swivel and wheel bearings, and wheel size. The larger the wheel, the easier it will roll. A hard, narrow crowned tread rolls easier than a flat, soft tread on a smooth floor, but may be harder on flooring. Soft treads protect floors and pass over floor obstructions more easily.