

Circular Solutions

A case study from **CasterWorld**
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The secret is to divide by three



Want to order or spec a caster? The first question you're going to have to answer is what's the weight capacity that you're looking for. So, you take the total weight of the equipment and the load the caster is

being used for and you divide by four. Right? Wrong. In many cases, that will have disastrous results.

Before anything, let's be clear that, as a completely integrated manufacturer of casters, we ensure that every one of our products is tested and meets stated specifications. If anything, our engineering department will rate casters for less capacity than they can withstand. We know that it's often hard to pinpoint the full load that a piece of equipment will carry and the tendency is to underestimate.

Nevertheless, just dividing the load by four to determine individual caster capacity doesn't always work and in many cases it can lead to equipment failure, collapse and personal injury.

Here are three mini-case studies that illustrate why three – as a denominator – is often better than four.

We have a customer that manufactures kitchen cabinetry and uses a number of carts and racks as part of the production process. Mainly female employees push carts with wood framing from station to station. However, the floors in the facility are uneven – as is true in many, if not most, manufacturing environments. As loaded carts hit uneven spots, one caster is lifted off the floor and now you only have three casters touching the ground. The result is increased load on each caster and a cart that employees complained was incredibly difficult to move. Our solution was to divide the load by three and recommend casters that individually had greater capacity. We added precision bearings to the wheels and eliminated the complaints about difficulty in moving the carts.

Many of our customers use soft tread wheels to reduce noise and cushion equipment ride. But this results in those casters generating more friction as a result of surface contact. A load that is divided by four combined with soft wheels, has, for many of our customers created a situation where the equipment has bottomed out and become impossible to move. If the customer wants to keep the noise reduction and floor protection of soft wheels, the ideal solution that we have

recommended on many occasions is to use precision bearings and increase the capacity of each caster by dividing the load in three and not four.

You have probably seen the large wooden carts that are often used to transport fresh produce in transit, into grocery stores and on to the retail area. One of our customers manufactured those carts. Their specification was that each cart had to hold 800lbs., so naturally they ordered four casters for each cart, each with a capacity of 200lbs. Those carts have to be carefully maneuvered often through narrow aisles while avoiding customers. That requires lots of starting and stopping. On top of that, to save transportation and storage space, the carts were often filled to their maximum. The result was that store employees complained that they were unable to move the carts. The solution? You guessed it. Divide the load by three and increase the individual capacity of each caster.

So, there you have it. Our time-tested secret is to divide by three. We can almost guarantee you that, in the process, you will buy more than three times the longevity and make your customers and employees more than three time more satisfied.

For more information on how CasterWorld can provide solutions for your wheel and caster needs, call 1-877-473-9309 or email sales@casterworldbc.com. Visit our website at www.casterworldbc.com