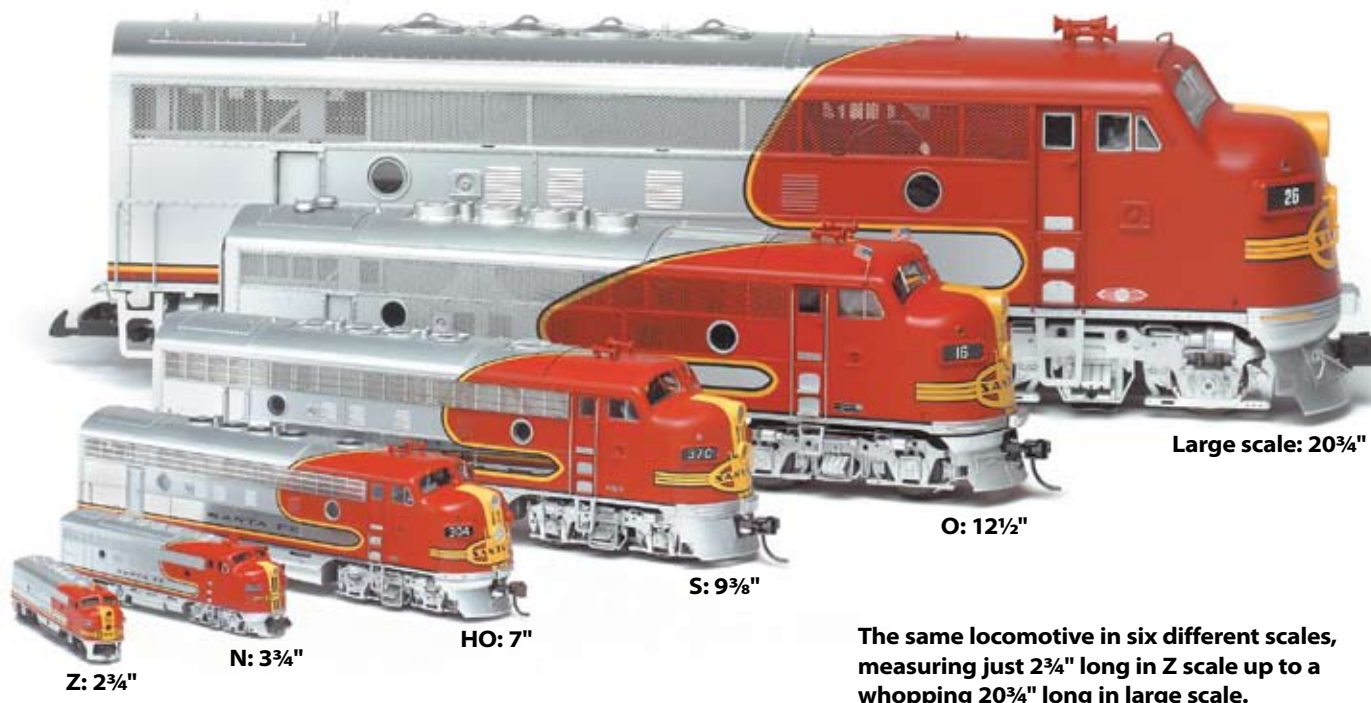


Understanding scale & gauge



The same locomotive in six different scales, measuring just 2 3/4" long in Z scale up to a whopping 20 3/4" long in large scale.

You don't have to spend much time with model trains to realize that they come in different sizes. Let's take a look at them so you can think about which size may be best for you.

We differentiate model and toy trains according to their scale and their gauge. "Scale" relates to the comparative ratio of measurements between a model and its full-size prototype.

"Gauge," the second aspect of a model's size, refers to the space between the rails of the track. Precision and consistency are essential when dealing with gauge. Manufacturers must be able to guarantee that the wheels of all the models they advertise as being of that gauge do indeed fit on that size track so all trains can be used together.

The largest of them all

The largest scales in use today are collectively called "large-scale trains." These models are offered in a range of scales, and all operate on Gauge 1 track. This track has 45 mm between the rails. To give you an idea

of the size of these trains, the 50-foot-long locomotive shown in the photo above measures about 20 3/4 inches in 1:29 scale.

The most popular gauge for toy trains is O, with 1 1/4 inches between the rails and built to a ratio of 1:48. The 50-foot locomotive in the photo is 12 1/2 inches long in O.

Slightly smaller than O gauge trains are S gauge trains. They run on track whose rails are spaced 7/8 inches apart, and have a ratio of 1:64.

Small and popular

Scale models built to be approximately half the size of O gauge models are called HO. These trains have a relationship of 1:87 to their full-size compatriots, and the track gauge measures 16.5 mm. Our 50-foot locomotive now measures only 7 inches in length.

HO trains are small enough to allow you to plan a satisfying layout in a compact space, and still are large enough to show off lots of detail and be easy to work with. HO railroading is the most popular of the scales, with more than two-thirds of

modelers making it their top choice.

Smaller still is N scale. Rolling stock and locomotives of this size are designed to be in a ratio of 1:160 to their prototypes. The track gauge is 9 mm between the rails. N scale works well for modelers who don't have a lot of space at their disposal or who prefer to run their trains through truly expansive scenery.

Even smaller are Z scale trains. Their proportion to the prototype is 1:220, and they run on track whose rails are 6.5 mm apart. How tiny is this scale? That 50-foot locomotive measures just 2 3/4 inches in Z.

Which size is best?

No one scale is right for everyone. Look at several scales and consider how much space you have to devote to your trains. Talk with experienced modelers, club members, or hobby shop employees. Don't worry if you change your mind and later decide that a different scale is a better choice for you. No matter what you choose, prepare to have a blast! 