



What is Scale vs. Gauge?

Scale

A scale model is a virtually exact replica of the original, usually reduced proportionally to a smaller size. The “scale” is a dimensional ratio where one foot of the original prototype is reduced some number of “scale feet” for the model. For example, 1:48 scale means that an object 48 feet long would be one foot long as a model. The scale model is dimensionally correct in length, height and width. The model is usually finished to appear as the original appears(ed). For model railroading, there are several popular scales, each typically identified by an alphabetical name for ease of reference. The most common railroading scales are noted below.

Gauge

Gauge refers to the space between the rails of track. Precision and consistency are important when dealing with gauge. All models advertised as being a specified gauge must be able to properly run on that size of track. The chart below indicates the gauge of the most popular scales in model railroading:

Scale	Z	N	HO	S	O	G
Proportion	1:220	1:160	1:87	1:64	1:48	1:22.5
A 75 foot long locomotive measures	4 inches	5-1/2 inches	10-1/2 inches	14 inches	18-3/4 inches	40 inches
Gauge (distance between rails)	6.5 mm	9 mm	16.5 mm	7/8 inches	1-1/4 inches	45 mm