

# Scale vs Gauge of Trains

## Scale vs. Gauge

Scale is the actual relation of the size of the item to the full size. 12 inches to the foot is real size.  
Simplified the Gauge refers to the rail size and is commonly referred to by a letter or number. 4' 8-1/2" is standard US rail  
Narrow Gauge in real life has 2 normal gauges of 2 foot and more common 3 foot

Name of Gauge or Scale	Documented Dist. Between Rails	Approx. Dist. In Inches	Scale is the size relation to 1 foot	Number Of Rails	Height of Adult Toy Person	Notes
<b>ZZ</b>	3 MM	1/16"	1/450	2	1/8"	Worlds Smallest Japan 2007
<b>T</b>	4 MM	3/16"	1/300	2	1/8"	Very Small probably very expensive
<b>Z</b>	6.5 mm	1/4"	1/220	2	3/8"	Very Small expensive
<b>N</b>	9 mm	11/32"	1/160	2	1/2"	Very Popular but small
<b>HO N3</b>	9 mm	11/32"	1/87	2	7/8"	HO Narrow Gauge runs on N gauge track
<b>TT</b>	11 mm	15/16"	1/120	2	3/4"	Produced from 1946s to 1966 TT Means Table Top
<b>HO</b>	16.5 mm	21/32"	1/87	2	7/8"	Most Popular today
<b>O0</b>	19 mm	3/4"	1/76	2 or 3	1"	Collectable in US more popular in Foreign Countries
<b>S</b>	7/8"	7/8"	7/8	2	1-1/8"	Some What Pricy more being sold again today
<b>ON 30</b>	16.5 mm	21/32	Approx. 1/48	2	1-1/2"	New size O narrow gauge runs on HO track
<b>O</b>	1-1/4"	1-1/4"	Approx. 1/48	2 or 3	1-1/2"	Scale "O" 2 rail and "O" HiRailer 3 Rail
<b>G or Gauge 1</b>	45 mm	1-3/4"	1/22.5 to 1/32	2	2-1/4" to 3-1/4"	Garden
<b>Standard Lionel</b>	2-1/8"	2-1/8"	1/27	3	2-3/4"	Large 3 rail
<b>2-7/8 Inch 1st Lionel Street Cars 1901-1905</b>	2-7/8"	2-7/8"	N/A	2	N/A	First toy electric train made was in Cincinnati, OH at Carlisle & Finch Co.
<b>USA Railroad Standard</b>	1435 MM	4' 8-1/2"	1-1	2	6'	This is the real thing

<b>ZZ or T Gauge</b>	Worlds smallest developed in Japan 2007 T means 3 and that is the distance between the rails in MM 3mm
<b>Z Gauge</b>	No Longer the Smallest size that runs on own rails. This is so small that layouts are built into suitcases.
<b>N Gauge</b>	This is the second smallest size and is very popular in today's hobby.
<b>HO Gauge</b>	This is the most popular size for the hobby today. HO is short for Half O.
<b>O0 Gauge</b>	Known as Double O this size is slightly larger than HO and is very collectable in the US. It never was popular in the US.
<b>S Gauge</b>	Is an older and popular size made mostly by American Flyer that is out of business. Other companies are now producing some again
<b>Foreign O0</b>	Is not found too much in the US. It has various sizes of track usually about 1 inch to 1-1/4 inch and will not work on any US O0 trains.
<b>ON-30</b>	Newer size is O narrow gauge. Runs on HO track smaller than normal O cars but is in Scale to O to represent a narrow gauge 3' rail train
<b>O Gauge</b>	Used to be the most popular size toy trains. LIONEL was the largest name years ago and there are many more today.
<b>O-27 Gauge</b>	This refers to the track diameter and LIONEL made a smaller train which would run on this size diameter
<b>O-72 Gauge</b>	Same as O-27 the number refers to the diameter of the track circle. Some larger engines of today will only run on this diameter
<b>Super O Gauge</b>	LIONEL made in late 50s to 1966 in an attempt to hide the center rail.
<b>G Gauge</b>	Better know as Garden is becoming the fastest growing gauge today. Very durable and weather resistant for outside running.
<b>#1 Gauge</b>	This is Garden and is better know in Europe as #1.
<b>Standard Gauge</b>	This was the size produced in the early 1900s and LIONEL came up with the name. Many other companies made them also.
<b>2-7/8 Inch Gauge</b>	This was the size produced by LIONEL and Carlisle and Finch CO. from Cincinnati when they made the first eclectic toy trolley
<b>USA Railroad Standard</b>	Full size US railroad track is standardized into 4' 8-1/2". At one time there were numerous rail sizes.

Just a note that Carlisle and Finch made the first eclectic toy to run on rails right here in Cincinnati, OH.  
Do you know what they are most noted for making then and now as they are still in business?