

# Micro-Mark®

## OPTIMUM MODEL TRAIN WEIGHT\*

Carefully documented tests have shown that model train cars are more likely to stay on the track if they are weighted to an optimum value. Too-light cars in the front section of a train may be pulled off the track in tight curves, as will long cars. Rough track may also cause derailments if cars are not weighted properly. At the same time, cars that are too heavy do not necessarily track or roll better than correctly weighted cars and only decrease the number of cars a locomotive may pull.

For best performance, cars should be constructed to keep weight distributed as low as possible. Weight added to bring a car to optimum weight should also be installed as low as possible. Optimum weight is based on scale and actual length, as shown in the chart below:

<b>Scale</b>	<b>Initial Weight (oz.)</b>	<b>+</b>	<b>Additional Weight (oz.) per actual inch of body length</b>
O	5.00	+	1.00
On3	1.50	+	0.75
S	2.00	+	0.50
Sn3	1.00	+	0.50
HO	1.00	+	0.50
HOn3	0.75	+	0.37
TT	0.75	+	0.37
N	0.50	+	0.15

To establish the optimum weight for a car, start with the initial weight for the scale in which the car is modeled. Then multiply the car's length in inches by the additional weight shown in the chart. Add the initial and additional weight together to find the optimum weight of the car.

Example: An HO scale car that is 5.5 inches long should weigh  $1.00 + 5.5(0.50) = 3.75$  oz.

Additional factors that affect car tracking include proper gauging of track and wheels, wheel profile, truck equalization and free movement, sufficient coupler swing, smooth rail joints and track work. See your Micro-Mark catalog for additional tools and gauges that will help you improve your model railroad's performance.

## Micro-Mark®

THE SMALL TOOL SPECIALISTS

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