



1. Purpose

This standard refers to the ratio between the electrical power supply and the maximum speed of model engines.

2. Reference value of the electrical power supply

The electrical parameter that controls the speed of the motors is decisive for this standard. It depends on the type of train conveyance and its nominal value is set out in the relevant standards.

Reference values that are considered in this standard:

- the mean value of the rated voltage on the track for direct current traction (according to NEM 630),
- the effective value of the rated voltage on the track for alternating current traction (according to NEM 640),
- the highest driving level with digital power supply with the maximum values on the track according to point 4.2a) of NEM 670 or NEM 680.

3. Maximum speed

When the reference value is reached, the model engine without attached load on the horizontal straight line shall, according to the entry time recommended by the manufacturer, reach a speed between the scale maximum speed of the model and an increased speed in accordance with the following table.

For maximum speeds of the prototype greater than 200 km/h, the scale realization in the model should be limited to 200 km/h in the model.

Table:

max v up to km/h	Gauge	Z	N	TT	H0	S	0	≥
80	Increase in %	60	50	40	30	20	10	0
160		30	25	20	15	10	5	0
200		15	10	5	0	0	0	0

The maximum speed thus determined allows a reserve in the absence of load control in the inclines and arcs for heavy attached loads and compensates for the visual impression of a seemingly too low driving speed at scale speed, especially in the smallest nominal sizes.