

Masses and dimensions (trailers)

Legislation

EC Directive 97/27/EC

Objective

Verify that stated values for masses and dimension correspond with measured values (within tolerance), verify load bearing capacity and manoeuvrability

Requirement

- Measured value of mass is within 3% for O3 and O4 or within 5% for O1, O2 of the manufacturers stated value. If not, measured value is taken
- Measured dimensions are within 1% of manufacturers stated value. If not, measured value is taken
- Sum of the technically permissible masses on each axle and each axle group is not less than the technically permissible maximum laden mass of the trailer

Manoeuvrability (large semi trailers)

-Must be able to manoeuvre 360° inside two concentric circles, outer circle having a radius of 12.5m, inner circle radius 5.3m, without protruding outside circumferences of the circles.

A semi trailer is deemed to meet this requirement if its wheelbase⁽¹⁾ is not greater than:

$$\sqrt{(12.50 - 2.04)^2 - (5.30 + L/2)^2}$$

Where L is the semi trailers width

⁽¹⁾ the wheelbase as the distance of the axis of the kingpin to the centre line of the non steering bogie axles; if one or more of the non-steering bogie axles has an axle lift device (see 2.14), then the wheelbase with lowered/lifted axle(s), whichever is the longer, is taken into account