

NOTE

This leaflet is part of a set which also includes :

- Leaflet 505-1 : Kinematic gauge for powered units used on international services.
- Leaflet 535-2 : Standardisation and positioning of steps, end platforms, gangways, handrails, tow hooks, automatic coupler and brake valve controls on wagons in connection with the fitting of the automatic coupler on the UIC Member Railways and the OSJD Member Railways.

The following provisions shall apply to new Diesel and electric shunting powered units, exclusively or mainly intended for shunting purposes.

1- At least one end, and if possible both ends, of the shunting powered units shall be provided with a transverse platform accessible from both sides.

2- The following shall be provided at each of the four corners of the underframe:

- either a step for gaining access to the platform, situated longitudinally and enabling at least one member of the staff to stand on the lower rung.
- or, in the event of no platform being provided, a recess embodying a step on which at least one member of the staff can stand.

3- The dimensions of the end platforms, in the longitudinal direction of the powered unit, shall be sufficient to allow staff to gain access thereto in complete safety.

The outside of the platforms shall be provided, over the whole frontal width of the powered unit, with a guard rail at least 1 100 mm high, constructed with a view to safeguarding staff against any possibility of falling on to the track.

If the guard rail consists of a handrail and an intermediate horizontal bar, the height of the latter above the floor shall not exceed 350 mm.

4- The lowest rung of the steps mentioned in § 2 shall be situated at the lowest height above rail level compatible with the gauge limits, without exceeding 560 mm. The positioning of this rung shall ensure that a member of the staff standing upon it comes within the gauge (Leaflet 505-1). The unobstructed surface of this rung shall be at least 500 mm long in the running direction, and at least 300 mm deep transversely.

The space to be left free for the shunting member of the staff above this rung is defined in Appendix 1 to Leaflet 535-2.

This free space must be provided behind the buffer fixing plane.

The vertical spacing of the rungs shall not exceed 325 mm.

5- In cases where the powered unit is provided with steps, other than the steps referred to in § 2, for gaining access to the driving cab, these steps shall consist of rungs the lowest of which is situated at the lowest height above rail level compatible with the gauge limits, without exceeding 560 mm.

The surface of the rungs shall be at least 300 mm long in the running direction and at least 150 mm deep transversely insofar as the free space behind the rung does not exceed 150 mm in depth. The vertical spacing of the rungs shall not exceed 450 mm.

6- The steps rungs shall consist of non-slip metal gratings.

7- All steps shall be provided with handrails on both sides. These latter shall reach down to at least 1 200 mm above rail level and shall continue to a distance of at least 1 200 mm above the highest rung of the step.

8- The external diameter of the handrails shall be between 25 and 35 mm.

9- The unobstructed area between the handrails for gaining access to the platforms or recesses, and the nearest obstruction, shall be at least 60 mm.

10- The shunting powered units shall be provided, at both ends, with shunters' handrails arranged beneath the buffers. These handrails shall be approximately 500 mm long and positioned so that :

- the end nearest to the longitudinal centre-line of the powered unit is 500 to 600 mm distant therefrom.

- the end furthest from the centre-line is no more than 300 mm distant from the end of the headstock.

The unobstructed area between the handrail and the nearest obstruction shall be approximately 120 mm and not less than 100 mm.

APPLICATION

All Railways belonging to the Union.

RECORD REFERENCES

Headings under which the question has been dealt with :

- Regulations for footboards and handrails on tractive stock.
(4th-5th Committees : Paris, May, 1961 ; Portsmouth, May, 1962).
- Standardisation of footboards and handrails on Diesel and electric shunting powered units.
- *Question 5/B/FIC* : Approval of the new version of Leaflet 646.
(Traction and Rolling Stock Committee : Paris, June 1979).
- Examination of comments on the draft leaflet 646.
(Working Party for Diesel Traction : Paris, January 1980).