SLOVENSKI STANDARD
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Vozila za talni transport - Paletni viliļ arji - Glavne mere

Pallet trucks -- Principal dimensions

Transpalettes -- Dimensions principales

Ta slovenski standard je istoveten z: **ISO 509:1996**

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INTERNATIONAL STANDARD

ISO 509

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Transpalettes — Dimensions principales

Reference number
ISO 509:1996(E)

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

International Standard ISO 509 was prepared by Technical Committee ISO/TC 110, *Industrial trucks*, Subcommittee SC 2, *Safety of powered industrial trucks*.

It cancels and replaces the Recommendation ISO/R 509:1966, of which it constitutes a technical revision.

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Pallet trucks — Principal dimensions

1 Scope

This International Standard specifies the principal dimensions for pallet trucks for transporting flat pallets complying generally with ISO 6780 and their loads.

The dimensions apply to the heights, widths and lengths of the fork arms of pallet trucks which may have either single or tandem trail wheels.

It should not be inferred that the use of a particular size of pallet truck is restricted to one particular size of pallet.

NOTE 1 The pallet dimensions shown in figure 2 are informative only and are given in anticipation of an amendment to ISO 6780 of the entry dimensions of full perimeter base pallets as defined in ISO 445. The amendment is intended to bring ISO 6780 into line with existing practice.

2 Normative reference

The following standard contains provisions which, through reference in this text, constitute provisions of this International Standard. At the time of publication, the edition indicated was valid. All standards are subject to revision, and parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent edition of the standard indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 6780:1988, *General-purpose flat pallets for through transit of goods — Principal dimensions and tolerances.*

3 Truck dimensions

3.1 Fork arm heights

3.1.1 In the unloaded condition and in the lowered position the fork arm height dimensions of pallet trucks shall be as follows:

a) the distance between the underside of the fork arms and the ground, F (see figures 1 and 2), shall be a minimum of 30 mm;

b) the height of the fork arms from the ground at the point of entry, G_1 (see figure 1), shall be a maximum of 86 mm;

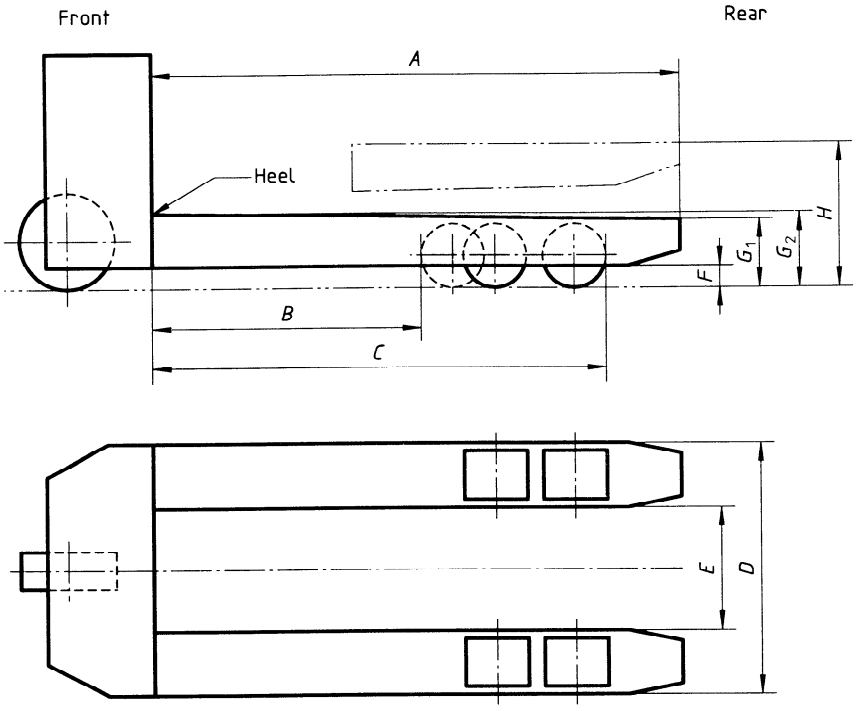
c) the height of the fork arms from the ground at the heel of the truck, G_2 (see figure 1), shall be a maximum of 90 mm.

3.1.2 In the unloaded condition and the raised position, the fork arm height dimension of pallet trucks shall be such that the height of the top surface of the fork arms from the ground, H (see figure 1), shall be a minimum of 185 mm.

3.2 Fork arm widths

3.2.1 Distance between fork arms

For pallet trucks, the distance between fork arms, E (see figure 1), shall be a minimum of 180 mm.



NOTE — Figure 1 illustrates a pallet truck with tandem trail wheels, as this type of truck has the greatest overall dimensions over the wheels.

Figure 1 — Truck dimensions

Dimensions in millimetres

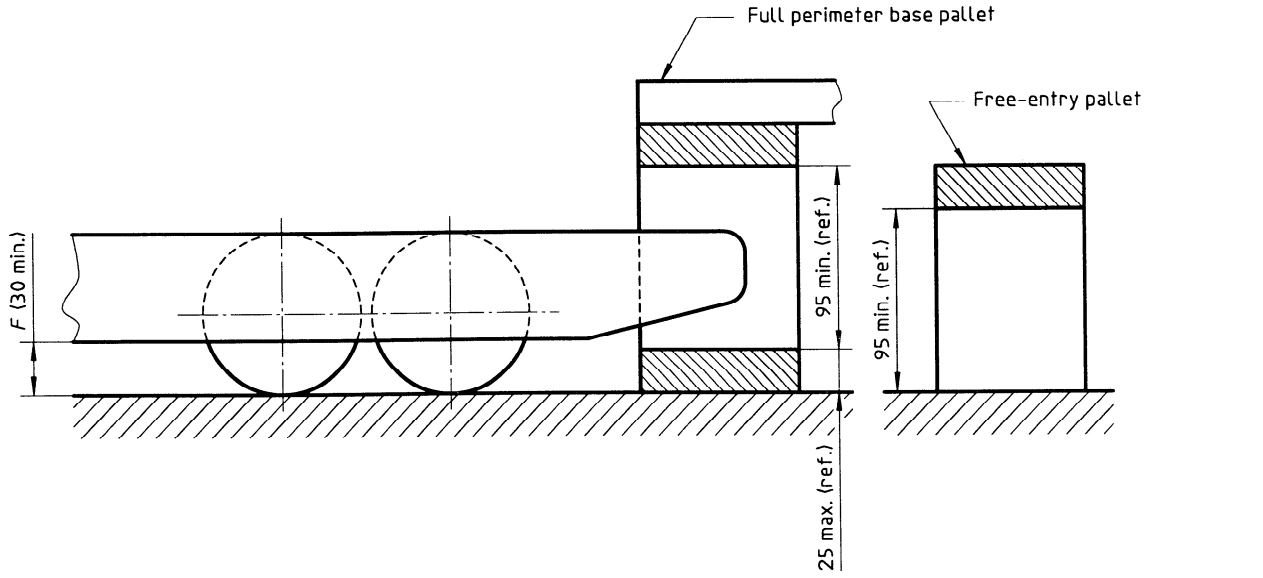


Figure 2 —Details of ground clearance and pallet dimensions

3.2.2 Overall width over fork arms

The overall width over fork arms, D (see figure 1), in relation to the corresponding dimensions of pallets in accordance with ISO 6780 shall be as follows.

a) D shall not exceed 570 mm for trucks corresponding to pallets having a minimum entry width of 590 mm (pallets 800 mm wide).

b) D shall not exceed 690 mm for trucks used in conjunction with pallets having a minimum entry width of 720 mm (pallets 1 000 mm or more wide).

3.3 Fork arm lengths

NOTE 2 Dimensions A, B and C are related to the dimensions of the pallet and the minimum openings in the bottom deck, which are symmetrically disposed about the axes of the pallet. See ISO 6780.

The overall length of fork arms, A (see figure 1), shall not exceed the value in table 1 corresponding to the appropriate nominal value of l or w as defined in ISO 6780.

3.4 Wheel position

Dimension B is the shortest possible distance between the heel of the truck and the nearest point of the trail wheel closest to the heel. Dimension C is the largest possible distance between the heel of the truck and the furthest point of the trail wheel furthest from the heel (see figure 1). Dimensions B and C control the positioning of the trail wheels relative to the heel of the truck during lifting. The values of dimensions B and C shall be such that, when the wheels pass through the minimum size of openings in the bottom deck of the pallet, a minimum clearance J of 6 mm is maintained between the components of the truck and the edges of the deck members forming the opening in the bottom deck of the pallet (see figure 3).

When the truck is operated so that the distance between the underside of the fork arms and the ground is 34 mm or greater, the clearance J should also be maintained at the upper side of the bottom deck.

Table 1

Dimensions in millimetres

Nominal dimension of pallet (l or w)	Fork arm length (A) max.
800	780
1 000	980
1 140	1 120
1 200	1 180

Dimensions in millimetres

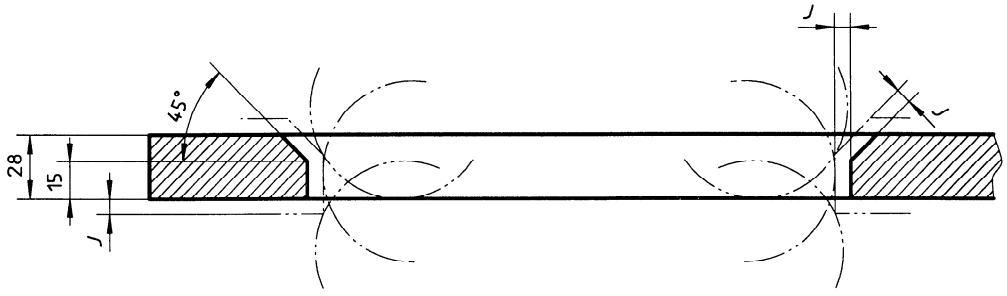


Figure 3 — Minimum clearance between trail wheels and pallet opening