

INTERNATIONAL STANDARD

ISO
8566-2

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Cranes — Cabins —

Part 2: Mobile cranes

*Appareils de levage à charge suspendue — Cabines —
Partie 2: Grues mobiles*



Reference number
ISO 8566-2:1995(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 8566-2 was prepared by Technical Committee ISO/TC 96, *Cranes*, Subcommittee SC 6, *Mobile cranes*.

ISO 8566 consists of the following parts, under the general title *Cranes — Cabins*:

- *Part 1: General*
- *Part 2: Mobile cranes*
- *Part 3: Tower cranes*
- *Part 4: Jib cranes*
- *Part 5: Overhead travelling and portal bridge cranes*

Annex A of this part of ISO 8566 is for information only.

Cranes — Cabins —

Part 2: Mobile cranes

1 Scope

This part of ISO 8566 establishes the criteria for cabins for mobile cranes as defined in ISO 4306-2. These criteria are intended to cover cabins only for crane operation and not for road travel.

The general criteria for cabins on mobile cranes are presented in ISO 8566-1.

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this part of ISO 8566. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this part of ISO 8566 are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 7752-2:1985, *Lifting appliances — Controls — Layout and characteristics — Part 2: Basic arrangement and requirements for mobile cranes*.

ISO 8566-1:1992, *Cranes — Cabins — Part 1: General*.

ISO 11660-2:1994, *Cranes — Access, guards and restraints — Part 2: Mobile cranes*.

3 General requirements

3.1 The general requirements for mobile crane cabins may apply to the operation of the crane for lifting and for job-site travel.

3.2 The general requirements for the cabin, including those concerning visibility, noise and vibration, shall be in accordance with ISO 8566-1.

4 Cabin construction

4.1 Cabins and enclosures shall be constructed to protect the operator's station from the weather.

4.2 Windows shall be provided in the front, top/roof and on both sides of the cabin with visibility forward, upward and to either side consistent with structural requirements. Visibility forward shall include a vertical range adequate to cover the jib point at all times. When a cabin is mounted on the chassis and the boom is capable of slewing in excess of 180° independent of the cabin, the cabin shall be provided with windows on all sides.

A windscreen wiper shall be provided on the front window and the top/roof window.

The front or top/roof window may have a section which can be readily removed or held open, if desired. If the section is of the type held in the open position, it shall be capable of being secured to prevent inadvertent closure.

Cabin windows shall be equipped with latches which guard against opening the windows from outside the cabin.

Windows next to the moving jib or hoist mechanisms shall limit the amount of opening or be equipped with guards to restrict egress through the window, including head and/or arm protrusions through the window, opening or guard.

Cabin windows shall be of durable transparency, made of safety-glass or its equivalent which does not lose transparency under exposure to natural light and which resists mechanical shock.

4.3 All cabin doors, whether of the sliding or swinging type, shall be restrained from inadvertent opening or closing during travelling or operation of the machine. The door adjacent to the driver, if of the swinging type, should open outward and, if of the sliding type, should slide rearward to open.

A clear passageway shall be provided from the driver's station to an exit door on the driver's side.

Cabin doors shall be equipped with locks or a locking means to control entrance into the cabin.

4.4 If access to the cabin roof for rigging or service is required, a ladder or steps shall be provided in accordance with ISO 11660-2.

4.5 Provisions shall be made in the cabin for storage of operator's manuals and any other crane information or instructions designated by the manufacturer.

4.6 Provisions shall be made for mounting and storage of a fire extinguisher in the cabin.

4.7 The cabin dimensions specified in figure 1 are the minimum requirements for a one-operator cabin and should be larger where practical. The minimum inside height shall be 1 300 mm, the inside width 790 mm, and the inside depth, taken through the seat index point (SIP), 1 300 mm.

4.8 Cabins designed for containing the operator and other personnel shall provide:

- a) the operator with the minimum dimensional requirements of 4.7;
- b) for each occupant space, a minimum inside envelope with dimensions of 1 300 mm height, 790 mm width and 900 mm depth.

4.9 A primary access system shall be provided to the operator's cabin. The components of the primary access system, such as steps, ladders and handrails, should conform to the requirements of ISO 11660-2.

4.10 Cabins shall be provided with means, other than the primary access, for alternative access according to the requirements of ISO 11660-2.

5 Cabin seat

5.1 An individual cabin seat shall be provided for the operator and each intended passenger.

5.2 The seat shall be:

- a) firmly mounted and to the minimum dimensions given in figure 2;
- b) adjustable without tools to a convenient sitting position, and then lockable, horizontally and vertically, in order to allow the operator a suitable working position;
- c) equipped with an inclinable backrest, which is suitably shaped and supports the back;
- d) where needed, equipped with springs and cushioning to isolate or damp vibrations;
- e) sufficiently rigid in both structure and mounting to allow the operator to exert the necessary forces on all controls without experiencing noticeable movement of the seat;
- f) so constructed as to allow direct easy access.

NOTE 1 A seat belt should be provided for each seat in cabins of wheel-mounted cranes for use during transit and travel. For wheel-mounted cranes where the function of the operator within the cabin is solely to operate the crane, seat belts are not required.

6 Control elements

The general principles for the layout and characteristics of control elements shall be in accordance with ISO 7752-2.

7 Information

The following information, provided on substantial and durable items with clearly legible letters and figures, shall be securely affixed to the crane cabin in a location easily accessible to the operator while seated at the control station:

- a) a rated capacity chart;
- b) a hand-signal placard;

- c) appropriate operating information, range diagram, instructions or hazard messages;
- d) if a monitor is used to provide this information, then the durable information (hard copy) shall be easily accessible to the operator.

8 Heating and cooling

8.1 Cabins shall be arranged so that optional heating and/or air-conditioning equipment can be fitted when specified by the purchaser.

8.2 The cabin design shall be such as to minimize draughts and heat losses and, when equipped with heating and/or air-conditioning, maintain the cabin

temperature between 15 °C and 30 °C during operation except under extreme external conditions.

9 Cabin lighting

9.1 The cabin shall include illumination source(s) to allow all information contained within the cabin, such as crane instruction manuals, signs, labels or rated capacity charts, to be readily legible during crane operation.

9.2 Artificial lighting shall be provided by permanent lighting fixture(s) within the cabin.

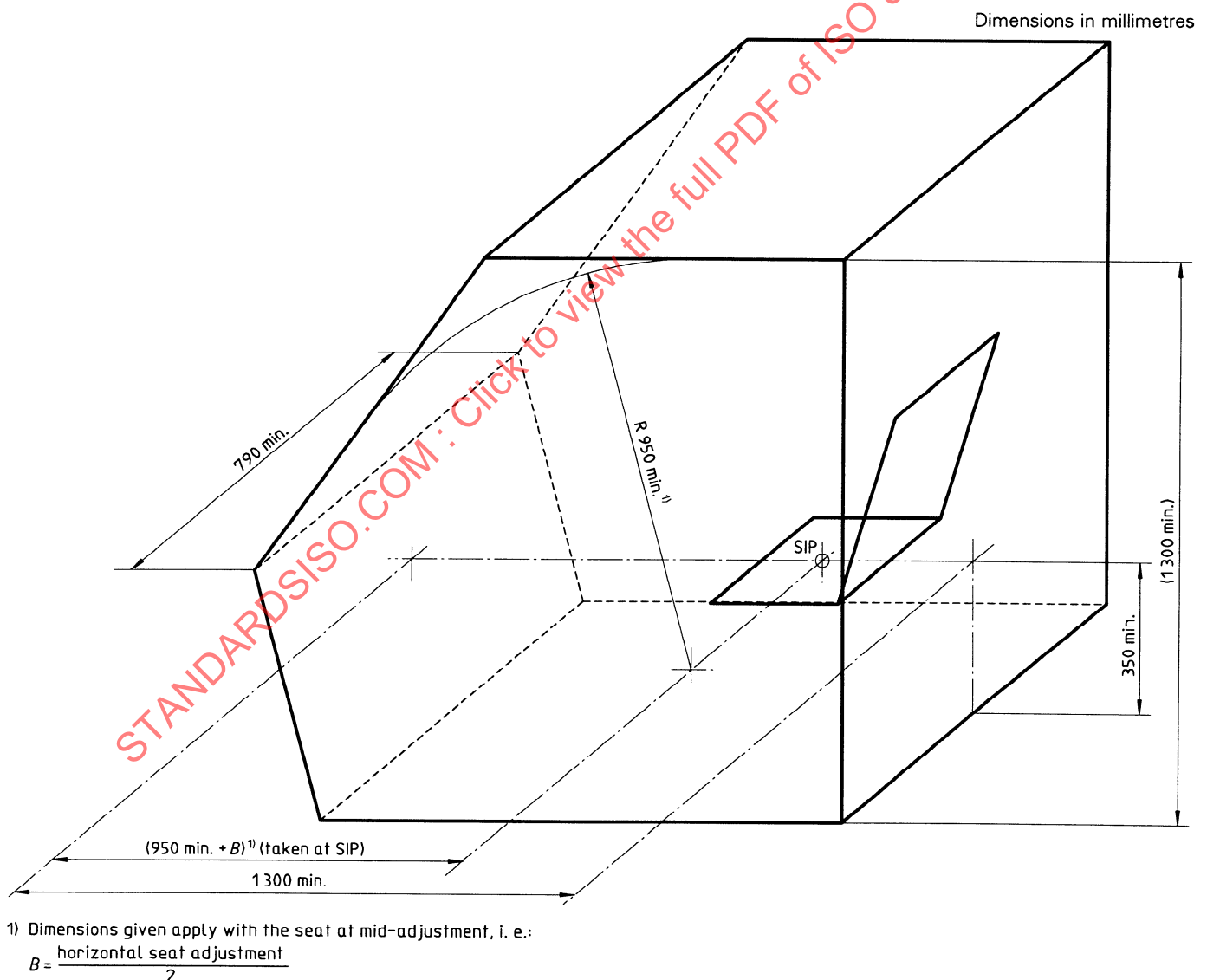


Figure 1 — Minimum inside cabin dimensions

Dimensions in millimetres

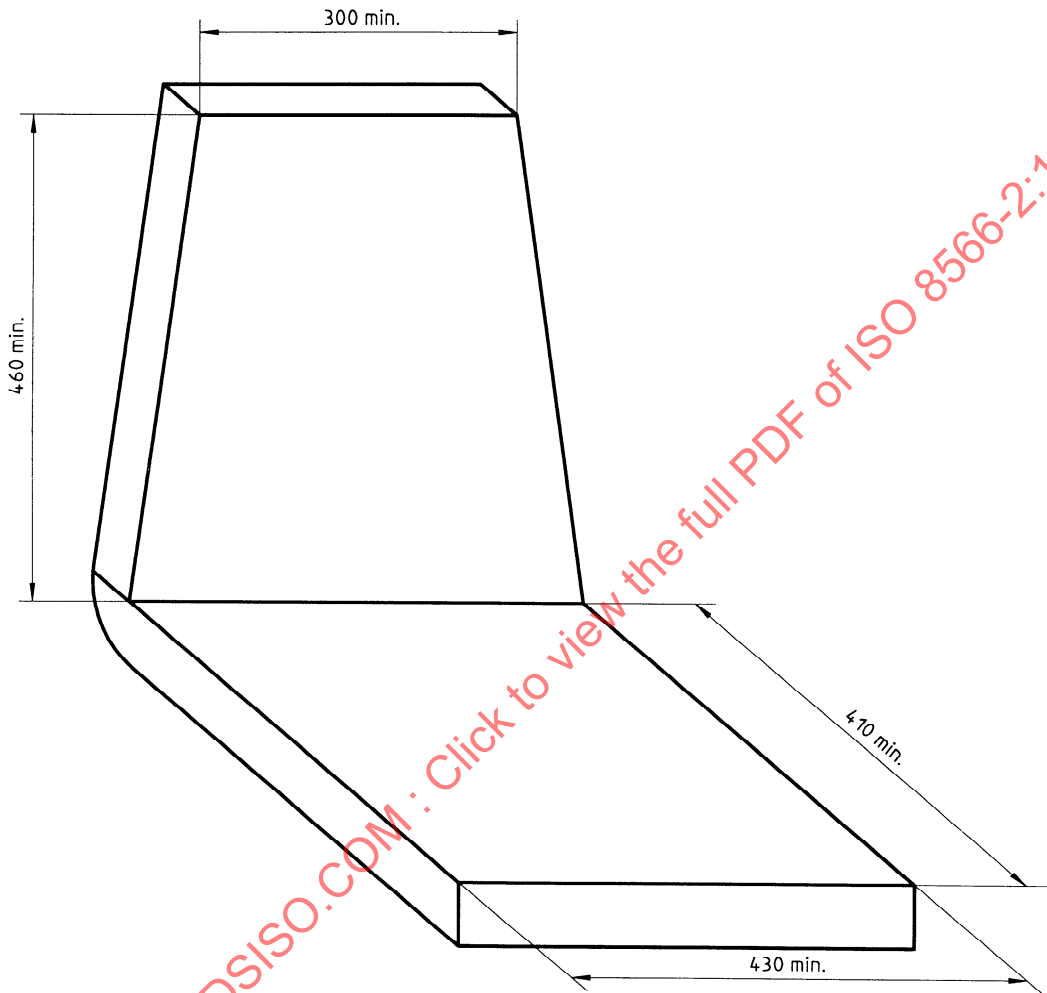


Figure 2 — Minimum seat dimensions