
International Standard



6305/3

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION • МЕЖДУНАРОДНАЯ ОРГАНИЗАЦИЯ ПО СТАНДАРТИЗАЦИИ • ORGANISATION INTERNATIONALE DE NORMALISATION

Railway components — Technical delivery requirements — Part 3 : Steel sleepers

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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of developing International Standards is carried out through ISO technical committees. Every member body interested in a subject for which a technical committee has been authorized 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.

Draft International Standards adopted by the technical committees are circulated to the member bodies for approval before their acceptance as International Standards by the ISO Council.

International Standard ISO 6305/3 was developed by Technical Committee ISO/TC 17, *Steel*, and was circulated to the member bodies in August 1982.

It has been approved by the member bodies of the following countries :

Australia	Hungary	South Africa, Rep. of
Austria	India	Sweden
Belgium	Iran	Switzerland
Canada	Japan	Tanzania
Egypt, Arab Rep. of	Korea, Dem. P. Rep. of	Turkey
France	Korea, Rep. of	United Kingdom
Germany, F. R.	Romania	USSR

No member body expressed disapproval of the document.

Railway components — Technical delivery requirements — Part 3 : Steel sleepers

1 Scope and field of application

This part of ISO 6305 specifies the quality requirements of the product and the conditions of acceptance testing for steel sleepers. When the products are to be manufactured from flat plates, an alternative but equivalent specification may be agreed between the purchaser and the manufacturer.

2 References

ISO 82, *Steel — Tensile testing*.

ISO 85, *Bend test for steel*.

ISO 2859, *Sampling procedures and tables for inspection by attributes*.

3 Conditions of manufacture

3.1 Steelmaking process

The steelmaking process shall be at the manufacturer's option. If requested by the purchaser, the manufacturer shall state in his tender the type and the principal characteristics of the steelmaking process; he may not alter them without advising the purchaser's representative.

The steel used shall be of one of the grades defined in table 1 below with a maximum sulphur and phosphorous content of 0,06 %. The choice of grade shall be left to the purchaser.

Table 1

Tensile strength, R_m N/mm ²	Minimum elongation %
380 to 460*	24*
430 to 510*	20*
510 to 620	18

* Following an agreement between the parties, the two quantities can be regarded as a single quality, with a minimum guaranteed elongation of 20 %.

3.2 Manufacture

The sleepers shall be manufactured by cutting to length a rolled section or plate followed by hot or possibly cold forming.

They shall be finished in accordance with drawings supplied by the purchaser.

Throughout the production process, the manufacturer shall use the best techniques so that the sleepers satisfy the requirements of this standard. Continuously cast blooms may be used in addition to blooms made from ingots.

3.3 Coatings

If specified in the invitation to tender, the sleepers shall be supplied tar coated, or with another protective coating as agreed between the manufacturer and the purchaser.

3.4 Drawings and working gauges

A copy of the final drawings shall be supplied to the manufacturer by the purchaser together with the notification of approval of the order.

If stated in the order, the manufacturer before starting production shall make up two sets of maximum and minimum working gauges, incorporating the specified dimensional tolerances. If required by the purchaser, the working gauges shall be stamped after approval by the purchaser's representative.

Only these working gauges shall be valid for checking purposes.

One set of working gauges shall be made available to the receiving inspector for the period of acceptance testing.

The working gauges shall be provided at the manufacturer's expense. New working gauges need not be provided for items ordered in quantities of less than 10 000 at any one time.

When the working gauges have been approved by a purchaser, or by an outside testing agency, these shall be used for other purchasers wherever possible.