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# International Standard



# 6305/1

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

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## **Railway components — Technical delivery requirements — Part 1 : Rolled steel fishplates**

*Éléments constitutifs de la voie ferrée — Spécifications techniques de livraison — Partie 1 : Éclisses en acier laminé*

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# Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards institutes (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 set up 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 6305/1 was developed by Technical Committee ISO/TC 17, *Steel*, and was circulated to the member bodies in May 1980.

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

Austria	Germany, F. R.	South Africa, Rep. of
Belgium	Hungary	Spain
Bulgaria	India	Sweden
Canada	Italy	Switzerland
Chile	Japan	Turkey
China	Korea, Dem. P. Rep. of	United Kingdom
Czechoslovakia	Korea, Rep. of	USA
Egypt, Arab Rep. of	Netherlands	USSR
Finland	Poland	Venezuela
France	Romania	

The member bodies of the following countries expressed disapproval of the document on technical grounds :

Australia  
Brazil

# Railway components — Technical delivery requirements —

## Part 1 : Rolled steel fishplates

### 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 rolled steel fishplates intended for use with rails of linear mass equal to or greater than 35 kg/m.

### 2 References

ISO 82, *Steel — Tensile testing*.

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 one of the grades defined in table 1 and as selected by the purchaser.

Table 1

Tensile strength, $R_m$ N/mm <sup>2</sup>	Elongation % min.
470 — 570	20
550 — 650	18
$R > 690^*$ (with $R_{eH} > 480$ )	12*

\* Refers to mechanical properties obtained after heat treatment.

#### 3.2 Manufacture

The fishplates shall be manufactured by cutting to length a rolled section and finished in accordance with drawings supplied by the purchaser.

Throughout the production process, the manufacturer shall use the best techniques so that the fishplates satisfy the requirements of this part of ISO 6305. Continuously cast blooms may be used in addition to blooms made from ingots.

#### 3.3 Heat treatment

Where the fishplates are to be subjected to heat treatment the purchaser shall be advised of the conditions of such treatment by the manufacturer.

#### 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 5 000 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.

#### 3.5 Marking

The fishplates shall carry in legible characters at the position shown on the drawings compatible with the rolling requirements :

- the identification mark of the manufacturer's works;
- the last two figures of the year of manufacture;
- if required a symbol indicating the section of the fishplate.