### INTERNATIONAL STANDARD



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

## Hot-rolled structural steel wide flats - Tolerances on dimensions and shape

Larges-plats en acier de construction laminés à chaud --- Tolérances sur dimensions et forme

ISO

9034

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#### Foreword

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International Standard ISO 9034 was prepared by Technical Committee ISO/TC 17, *Steel.* 

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# Hot-rolled structural steel wide flats — Tolerances on dimensions and shape

#### 1 Scope and field of application

This International Standard specifies the tolerances on the dimensions, shape and mass of hot-rolled wide flats of non-alloyed and alloyed steels (excluding stainless steels).

It applies to wide flats, as defined in clause 3, of steels with a specified minimum yield strength equal to or less than 700 N/mm<sup>2</sup>.

#### 2 Reference

ISO 7788, Steel — Surface finish of hot-rolled plates and wide flats — Delivery requirements.

#### 3 Definition

wide flat: A flat product of width greater than 150 mm up to 1 250 mm and a thickness generally over 4 mm, always supplied in lengths, i.e. not coiled. The edges are sharp. Wide flats are hot rolled on their four sides (or in box passes). They may also be produced by shearing or flame cutting wider flat products provided the tolerances as given in this International Standard are observed.

#### 4 Tolerances on dimensions

#### 4.1 Width

The tolerance on width shall be  $\pm 2$  % of the nominal width but shall not exceed 10 mm.

#### 4.2 Thickness

**4.2.1** The tolerance on thickness for nominal thickness up to 100 mm shall conform to the values in table 1. According to the specification when ordering, the wide flats may be supplied

- either with a variable minus tolerance depending on the nominal thickness (class A);

- or with a constant minus tolerance of 0,3 mm (class B).

**4.2.2** By agreeement at the time of ordering, wide flats may also be supplied with other types of tolerances with respect to the nominal thickness (symmetrical, wholly over or wholly under, etc.), provided that the permissible deviation range given in table 1 and the maximum difference in thickness in a transverse cross-section as given in table 2 are respected.

Values in millimetres

Nominal thickness e	Permissible deviation on nominal thickness (see 6.2)			
	Class A		Class B	
	under	over	under	over
4 <b>≼</b> <i>e</i> < 8	0,4	0,6	0,3	0,7
8 ≤ e < 15	0,5	0,7	0,3	0, <del>9</del>
15 <b>&lt;</b> e < 25	0,6	0,8	0,3	1,1
25 <b>&lt;</b> <i>e</i> < 40	0,8	0,9	0,3	1,4
40 <b>&lt;</b> <i>e</i> < 80	1,0	1,4	0,3	2,1
$80 \le e \le 100^{1}$	1.0	2.2	0.3	2.9

Table 1 — Tolerances of thickness

1) For nominal thicknesses over 100 mm, the permissible deviations shall be the subject of agreement at the time of ordering.

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