
International Standard



7788

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Steel — Surface finish of hot-rolled plates and wide flats — Delivery requirements

Acier — État de surface des tôles et larges-plats laminés à chaud — Conditions de livraison

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Foreword

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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. They are approved in accordance with ISO procedures requiring at least 75 % approval by the member bodies voting.

International Standard ISO 7788 was prepared by Technical Committee ISO/TC 17, *Steel*.

Users should note that all International Standards undergo revision from time to time and that any reference made herein to any other International Standard implies its latest edition, unless otherwise stated.

Steel — Surface finish of hot-rolled plates and wide flats — Delivery requirements

0 Introduction

Responsibility for the required surface finish rests with the material producer, who has to take the necessary precautions.

However, rolling or heat-treatment scale may conceal surface discontinuities. In these conditions, the producer can only take account of discontinuities which are visible to the naked eye.

If, during the subsequent descaling or working operations by the user, the material is found to be defective because of faulty rolling or processing by the producer, the producer shall be allowed to have the product repaired, provided that this is not in conflict with the appropriate quality standard.

The repair conditions laid down in the quality standard shall always prevail. If the user requires a surface free of defects according to 4.3, he must order descaled plates or wide flats, which shall be delivered free of defects visible to the naked eye.

1 Scope and field of application¹⁾

This International Standard specifies delivery requirements which apply to the surface finish of hot-rolled plates and wide flats rolled on reversing mills, with nominal thicknesses equal to or less than 150 mm.

For plates with a thickness greater than 150 mm and for special applications for which a different surface condition is required, special agreements shall be made at the time of enquiry and order.

2 References

ISO 6929, *Definition of steel products by shape and dimensions*.²⁾

ISO 7452, *Hot-rolled structural steel plates — Tolerances on dimensions and form*.

3 Definitions

The definitions of products and discontinuities referred to in this International Standard are given in annex A.

4 Requirements

4.1 General

4.1.1 For plates and wide flats for boilers and pressure vessels, the remaining thickness of the affected area under the discontinuities shall not be less than the minimum permissible thickness as specified in the appropriate standards covering tolerances. This provision may also be applied for other applications as agreed at the time of enquiry and order.

4.1.2 In cases of dispute, measurement of depth of discontinuities shall be carried out from the surface of the product, descaled in the vicinity of the discontinuity.

4.1.3 Areas affected by surface discontinuities shall be determined as follows:

- a) for isolated spotlike discontinuities [figure 1 a)], the affected area is obtained by surrounding the discontinuity with a circle having a radius which is 50 mm greater than the radius of the circumscribing circle of the discontinuity;
- b) in the case of discontinuities appearing in a cluster or line [figure 1 b) and 1 c)], the affected area is obtained by drawing a rectangle or a square the sides of which are 50 mm from the rectangle or square circumscribing the cluster or line.

4.1.4 Depending on the steel grade and manufacturing process, plates and wide flats may have surface discontinuities, which may be divided into five categories depending on their nature, depth and number as defined in 4.2 and 4.3.

1) See 4.1.1.

2) At present at the stage of draft.