SLOVENSKI STANDARD
SIST EN ISO 377:1998

01-avgust-1998

Jeklo in jekleni izdelki - Mesto jemanja in priprava vzorcev ter preskušanci za mehansko preskušanje (ISO 377:1997)

Steel and steel products - Location and preparation of samples and test pieces for mechanical testing (ISO 377:1997)

Stahl und Stahlerzeugnisse - Lage und Vorbereitung von Probenabschnitten und Proben für mechanische Prüfungen (ISO 377:1997)

Acier et produits en acier - Position et préparation des échantillons et éprouvettes pour essais mécaniques (ISO 377:1997)

Ta slovenski standard je istoveten z: **EN ISO 377:1997**

ICS:

77.040.10	Mehansko preskušanje kovin	Mechanical testing of metals
77.140.01	Železni in jekleni izdelki na splošno	Iron and steel products in general

SIST EN ISO 377:1998 **en**

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN ISO 377

July 1997

ICS 77.040.10; 77.140.01

Descriptors: See ISO document

English version

Steel and steel products - Location and preparation of samples and test pieces for mechanical testing (ISO 377:1997)

Acier et produits en acier - Position et préparation des échantillons et éprouvettes pour essais mécaniques (ISO 377:1997)

This European Standard was approved by CEN on 1997-06-12. CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CEN member.

The European Standards exist in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the Central Secretariat has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

CEN

European Committee for Standardization
Comité Européen de Normalisation
Europäisches Komitee für Normung

Central Secretariat: rue de Stassart,36 B-1050 Brussels

CORRECTED 1997-07-31

Foreword

The text of the International Standard ISO 377:1997 has been prepared by Technical Committee ISO/TC 17 "Steel" in collaboration with Technical Committee ECISS/TC 9 "Technical conditions of delivery and quality control", the secretariat of which is held by IBN/BIN.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by January 1998, and conflicting national standards shall be withdrawn at the latest by January 1998.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

Endorsement notice

The text of the International Standard ISO 377:1997 was approved by CEN as a European Standard without any modification.

NOTE: Normative references to International Standards are listed in annex ZA (normative).

CORRECTED 1997-07-31

Annex ZA (normative)
Normative references to international publications with their relevant European publications

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies.

Publication	Year	Title	EN	Year
ISO 3785	1976	Steel - Designation of test piece axes	EN ISO 3785	1995
ISO 6929	1987	Steel products - Definitions and classifications	EN 10079	1992

INTERNATIONAL STANDARD

ISO 377

Second edition
1997-07-15

Steel and steel products — Location and preparation of samples and test pieces for mechanical testing

Acier et produits en acier — Position et préparation des échantillons et éprouvettes pour essais mécaniques

Reference number
ISO 377:1997(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 377 was prepared by Technical Committee ISO/TC 17, *Steel*, Subcommittee SC 20, *General technical delivery conditions, sampling and mechanical testing methods.*

This second edition of ISO 377 cancels and replaces ISO 377-1:1989, which has been technically revised.

Annex A forms an integral part of this International Standard.

International Organization for Standardization
Case postale 56 • CH-1211 Genève 20 • Switzerland
Internet central@iso.ch
X.400 c=ch; a=400net; p=iso; o=isocs; s=central

Printed in Switzerland

Steel and steel products — Location and preparation of samples and test pieces for mechanical testing

1 Scope

This International Standard specifies requirements for the identification, location and preparation of samples and test pieces intended for mechanical tests on steel sections, bars, rod, flat products and tubular products as defined in ISO 6929. If agreed in the order this standard may also apply to other metallic products. It does not apply to non-destructive tests.

These samples and test pieces are for use in tests which are carried out in conformity with the methods specified in the product or material standard or, in the absence of this, in the test standard.

Where the requirements of the order or product standard differ from those given in this International Standard, then the requirements of the order or product standard apply.

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this International Standard. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this International Standard 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 3785:—[1], *Metallic materials — Designation of test piece axes.*

ISO 6929:1987, *Steel products — Definitions and classification.*

3 Definitions

For the purposes of this International Standard, the definitions given in ISO 6929 and the following apply.

3.1 test unit: Number of pieces or the tonnage of products to be accepted or rejected together, on the basis of the tests to be carried out on sample products in accordance with the requirements of the product standard or order. (See figure 1.)

3.2 sample product: Item (e.g. bar, sheet, coil) selected for inspection and/or testing. (See figure 1.)

1) To be published. (Revision of ISO 3785:1976)

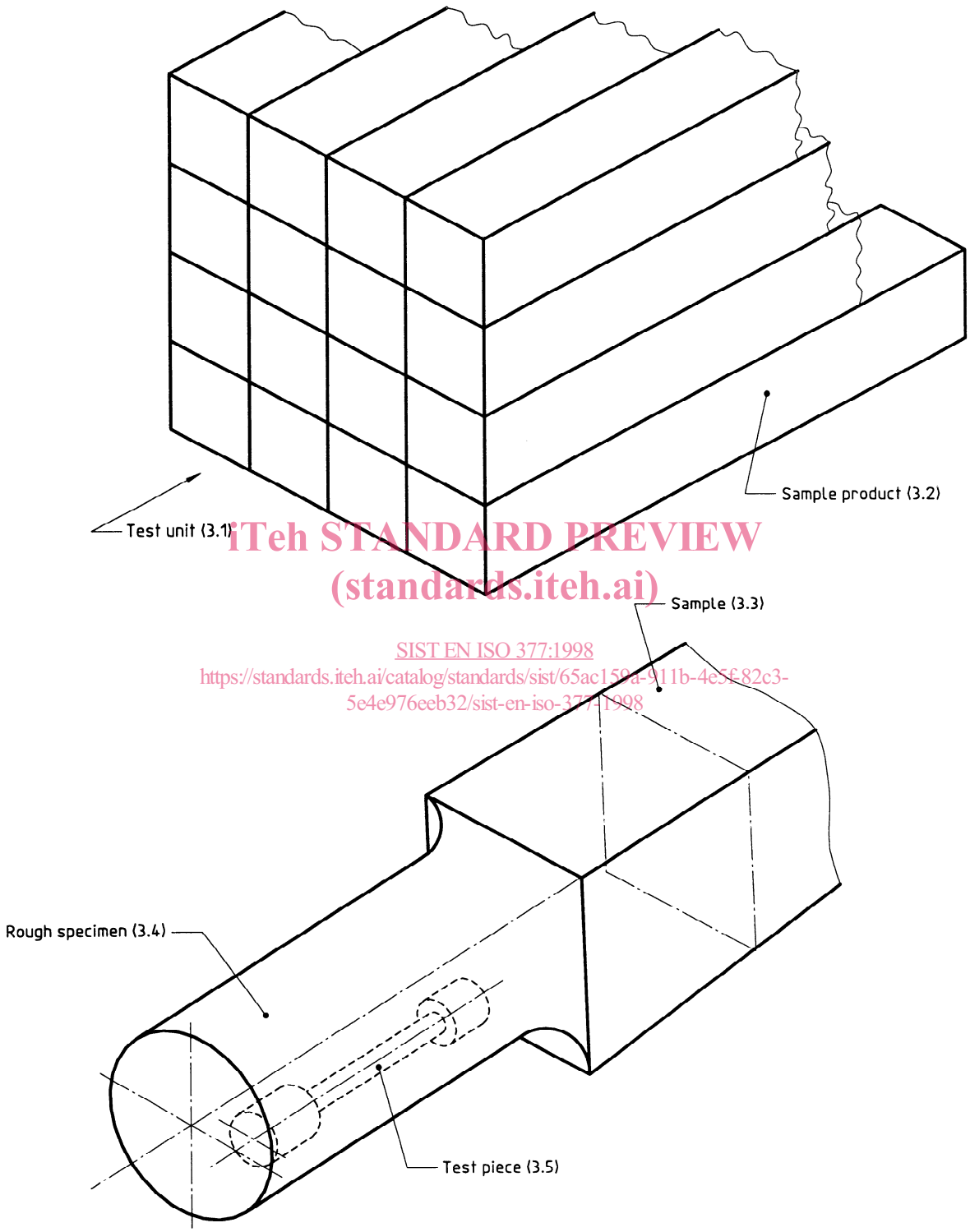

Figure 1 — Examples of terms defined in clause 3

3.3 sample: Sufficient quantity of material taken from the sample product for the purpose of producing one or more test pieces. (See figure 1.)

NOTE — In certain cases, the sample may be the sample product.

3.4 rough specimen: Part of a sample having undergone mechanical treatment, for the purpose of producing a test piece. (See figure 1.)

3.5 test piece: Part of a sample or rough specimen, with specified dimensions, machined or unmachined, brought to a required condition for submission to a given test. (See figure 1.)

NOTE — In certain cases, the test piece may be the sample or the tough specimen.

3.6 reference condition: Condition of a sample, rough specimen or test piece having undergone a heat treatment to represent the intended final condition of the product.

NOTE — In such cases the sample, rough specimen or test piece is called the reference sample, reference rough specimen or reference test piece.

4 General requirements

4.1 Representative testing

Sample, rough specimens and test pieces selected in accordance with annex A, shall be considered to be representative of the product.

NOTE — As a result of their production sequence i.e. melting, casting hot and/or cold forming, heat treatment etc., steel products are not homogeneous. The mechanical properties of samples taken from other locations may be different.

4.2 Identification of sample products, samples, rough specimens and test pieces

Sample products, samples, rough specimens and test pieces shall be marked to ensure traceability to the original product and their location and orientation in that product. For this purpose, if, during the preparation of the sample, rough specimen and/or test pieces, removal of the marks cannot be avoided, transfer of these marks shall be carried out before the existing marks are removed or in the case of automatic preparation equipment before the test piece is removed from the equipment. In the case of specific inspection and testing and where requested by the purchaser the transfer of the marks shall be carried out in the presence of the purchaser's representative.

In the case of fully automatic in line preparation and testing systems, marking of samples, rough specimens and test pieces is not necessary if an adequate control system exists, which clearly defines the procedures to be followed in the event of system failure.

5 Preparation of samples and selection of test pieces

5.1 Selection and dimensions of samples and location of test pieces

The sample shall be selected so that the test piece can be located as indicated in annex A. The sample shall have sufficient dimensions to allow sufficient test pieces required for carrying out specified tests, and for any retests which may be necessary.

5.2 Direction of axis of test pieces

The direction of the test piece axis relative to the principle direction of working shall be as specified in the appropriate product standard or order. The designation of the test piece axis shall be in accordance with ISO 3785.