



**SLOVENSKI STANDARD**  
**oSIST prEN ISO 772:2007**  
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Hydrometric determinations - Vocabulary and symbols (ISO/DIS 772:2007)

Déterminations hydrométriques - Vocabulaire et symboles (ISO/DIS 772:2007)

**Ta slovenski standard je istoveten z: prEN ISO 772**

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**ICS:**

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Fizikalni pojavi (Slovarji) Physical phenomena (Vocabularies)

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**oSIST prEN ISO 772:2007**

**en**



October 2007

ICS 01.040.17; 17.120.20

Will supersede EN ISO 772:2000

English Version

## Hydrometric determinations - Vocabulary and symbols (ISO/DIS 772:2007)

Déterminations hydrométriques - Vocabulaire et symboles  
(ISO/DIS 772:2007)

This draft European Standard is submitted to CEN members for parallel enquiry. It has been drawn up by the Technical Committee CEN/TC 318.

If this draft becomes a European Standard, 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.

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## Foreword

This document (prEN ISO 772:2007) has been prepared by Technical Committee ISO/TC 113 "Hydrometric determinations" in collaboration with Technical Committee CEN/TC 318 "Hydrometry" the secretariat of which is held by BSI.

This document is currently submitted to the parallel Enquiry.

This document will supersede EN ISO 772:2000.

### Endorsement notice

The text of ISO/DIS 772:2007 has been approved by CEN as a prEN ISO 772:2007 without any modification.

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## DRAFT INTERNATIONAL STANDARD ISO/DIS 772

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

# Hydrometry — Vocabulary and symbols

*Hydrométrie — Vocabulaire et symboles*

[Revision of ISO 772:1996, ISO 772:1996/Amd 1:2002 and ISO 772:1996/Amd 2:2004]

ICS 01.040.17; 17.120.20

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The CEN Secretary-General has advised the ISO Secretary-General that this ISO/DIS covers a subject of interest to European standardization. **In accordance with the ISO-lead mode of collaboration as defined in the Vienna Agreement, consultation on this ISO/DIS has the same effect for CEN members as would a CEN enquiry on a draft European Standard.** Should this draft be accepted, a final draft, established on the basis of comments received, will be submitted to a parallel two-month FDIS vote in ISO and formal vote in CEN.

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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 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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. 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.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

ISO 772 was prepared by Technical Committee ISO/TC 113, *Hydrometry*, Subcommittee SC 3, *Terminology and symbols*.

The 4th Edition of ISO 772 was brought out in 1996. Thereafter two amendments FDAM1 and FDAM2 were issued and some comments were received from the members. In view of the above, during the last ISO/TC 113/SC3 held on 20th May, 2004 at Tsukuba, Japan, it was decided to revise ISO 772:1996. The Subcommittee also decided to prepare the revised document in English only.

This fifth edition cancels and replaces the fourth edition (ISO 772:1996) which has been technically revised.

Annex A forms an integral part of this international standard. Annex B and C are for information only.

## Introduction

In the preparation of this International Standard, the following three principles were adopted wherever possible.

- a) to standardize suitable terms and symbols without perpetuating unsuitable ones;
- b) to discard any term or symbol with differing meanings in different countries, or by different people, or by the same person at different times, and to replace that term or symbol by one which has an unequivocal meaning;
- c) to exclude terms which are self-evident.

It is recognized that it is not possible to produce a complete set of definitions which will be universally acceptable, but it is hoped that the definitions provided and the symbols used will find widespread acceptance and that their use will lead to better understanding of the practice of hydrometric determinations.

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# Hydrometry — Vocabulary and symbols

## 1 Scope

This International Standard gives terms, definitions and symbols in English and used in the field of hydrometric determinations.

### Structure of the Vocabulary

The terminology entries are presented in systematic order, grouped into sections according to particular methods of determination or in relation to particular subjects. Annex A lists the symbols used in this international Standard. Annex B refers the user to ISO 3454 for statistical terminology, and to ISO 5168 for more extensive information about the evaluation of uncertainties. An alphabetical index is included at the end.

The structure of each entry is in accordance with ISO 10241, International terminology standards – Preparation and layout. Country codes are in accordance with ISO 3166, Codes for the representation of names of countries.

### General terms

#### 1.1

##### liquid flow

movement of a volume of a substance that is neither a solid nor a gas, that is practically incompressible, that offers insignificant resistance to change of shape and that flows freely

Example:

Water or water with sediment.

#### 1.2

##### flow regime

state of flow in alluvial streams characterized by a bed configuration of ripples, dunes (lower regime), plane bed (transition), standing waves and antidunes (upper regime)

NOTE The lower regime flow is sub-critical; the upper regime flow is supercritical.

#### 1.3

##### steady flow

condition in which the discharge does not change in magnitude with respect to time

#### 1.4

##### unsteady flow

condition in which the discharge changes in magnitude with respect to time

#### 1.5

##### uniform flow

flow, in an open channel, in which the depth and velocity remain constant along the open channel

NOTE For uniform flow, the velocity vector is constant along every stream line. Uniform flow is possible only in an open channel of constant cross-section.

**1.6**

**critical flow**

flow in an open channel, in which the specific energy is a minimum for a given discharge

NOTE Under this condition the Froude number is equal to unity and small surface disturbances cannot travel upstream.

**1.7**

**subcritical flow**

flow in an open channel at less than critical velocity, that has a Froude number of less than unity, and in which small surface disturbances can travel upstream

**1.8**

**supercritical flow**

flow in an open channel at more than critical velocity, that has a Froude number of greater than unity, and in which small surface disturbances cannot travel upstream

**1.9**

**transverse flow**

flow horizontally perpendicular to the main direction of flow parallel to the axis of the open channel(s)

NOTE 1 Transverse flow is frequently associated with secondary flow.

NOTE 2 Transverse flow in open channel(s) with a curved plan form causes super elevation of the water surface at the outside of the bend.

**1.10**

**stratification of flow**

state of a fluid that consists of two or more layers arranged according to their density, the lightest layer being on top and the heaviest at the bottom

**1.11**

**critical depth**

depth of flow at which critical flow occurs

**1.12**

**critical velocity**

velocity at critical flow

**1.13**

**channel**

deep part of a river or other waterway

NOTE The term can be qualified adjectivally to describe a particular type of channel, such as a low-water channel, a main channel, or an artificial channel.

**1.14**

**open channel**

longitudinal boundary surface consisting of the bed and banks or sides within which the liquid flows with a free surface

**1.15**

**canal**

man-made channel, usually of regular cross-sectional shape