



# SLOVENSKI STANDARD

## SIST EN ISO 4375:2015

01-februar-2015

Nadomešča:

SIST EN ISO 4375:2004

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### Hidrometrične določbe - Žičniški sistemi za merjenje toka (ISO 4375:2014)

Hydrometric determinations - Cableway systems for stream gauging (ISO 4375:2014)

Hydrometrische Messungen - Seilkrananlagen für Messungen in Fließgewässern (ISO 4375:2014)

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Déterminations hydrométriques - Systèmes de suspension par câbles aériens pour le jaugeage en rivière (ISO 4375:2014)

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#### **ICS:**

17.120.20      Pretok v odprtih kanalih      Flow in open channels

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EUROPEAN STANDARD

EN ISO 4375

NORME EUROPÉENNE

EUROPÄISCHE NORM

November 2014

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Supersedes EN ISO 4375:2004

English Version

## Hydrometry - Cableway systems for stream gauging (ISO 4375:2014)

Hydrométrie - Systèmes de suspension par câbles aériens  
pour le jaugeage en rivière (ISO 4375:2014)

Hydrometrische Messungen - Seilkrananlagen für  
Messungen in Fließgewässern (ISO 4375:2014)

This European Standard was approved by CEN on 20 September 2014.

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This European Standard exists 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 CEN-CENELEC Management Centre has the same status as the official versions.

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COMITÉ EUROPÉEN DE NORMALISATION  
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## Foreword

This document (EN ISO 4375:2014) has been prepared by Technical Committee ISO/TC 113 "Hydrometry" in collaboration with Technical Committee CEN/TC 318 "Hydrometry" the secretariat of which is held by BSI.

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of an identical text or by endorsement, at the latest by May 2015, and conflicting national standards shall be withdrawn at the latest by May 2015.

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

This document supersedes EN ISO 4375:2004.

According to the CEN-CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

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The text of ISO 4375:2014 has been approved by CEN as EN ISO 4375:2014 without any modification.

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INTERNATIONAL  
STANDARD

ISO  
4375

Third edition  
2014-11-15

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**Hydrometry — Cableway systems for  
stream gauging**

*Hydrométrie — Systèmes de suspension par câbles aériens pour le  
jaugeage en rivière*

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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.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2. [www.iso.org/directives](http://www.iso.org/directives)

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. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received. [www.iso.org/patents](http://www.iso.org/patents)

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT), see the following URL: [Foreword - Supplementary information](#)

The committee responsible for this document is ISO/TC 113, *Hydrometric determinations*, Subcommittee SC 5, *Instruments, equipment and data management*.

This third edition cancels and replaces the second edition (ISO 4375:2000), which has been technically revised.

# Hydrometry — Cableway systems for stream gauging

## 1 Scope

This International Standard defines the requirements for equipment, anchorage, supports and accessories for cableway systems for use in stream gauging. Systems which are operated either entirely from the river bank or from a suspended personnel carriage (also called a “cable car”) are discussed. This International Standard is only applicable to the cableway systems to be used for hydrometric measurements. Should the cableway installation be required to be certified as lifting equipment, other standards or regulations may apply. This International Standard does not concern methods for making a discharge measurement which are described in ISO 748.

## 2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 772, *Hydrometry — Vocabulary and symbols*

ISO 80000-4, *Quantities and units — Part 4: Mechanics*

## 3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 772, ISO 80000-4 and the following apply.

### 3.1

#### **cable**

wire rope of simple or complex structure or wire cord, fixed or moving in a cableway system

## 4 General description of a cableway system

### 4.1 Elements of a cableway system

A cableway system can be designed to be operated from the river bank (see [Figures 1](#) and [2](#)) or be designed to be operated from a suspended personnel carriage (see [Figure 3](#)). The general arrangement of the following elements are common to both systems:

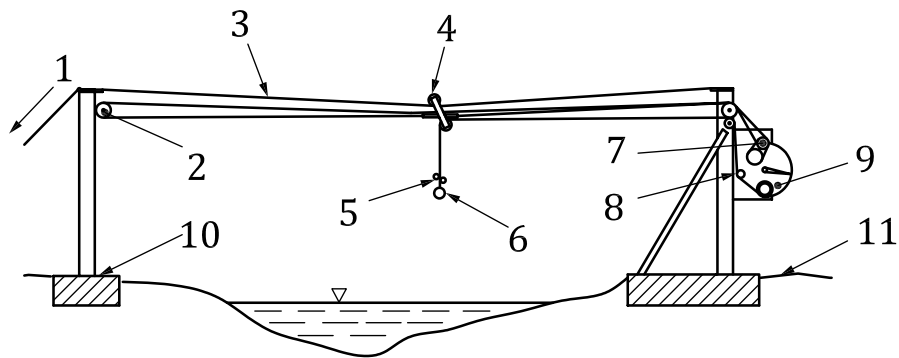
- a) towers or cableway supports;
- b) track or main cable;
- c) anchorage;
- d) backstays;
- e) suspension cable.

The main differences are:

- the carriage of a bankside system requires a tow cable;
- a bankside system requires a more complicated winch arrangement;

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- the personnel carriage has to provide a safe platform for the operator;
- more stringent design requirements may apply to a system which employs a personnel carriage.

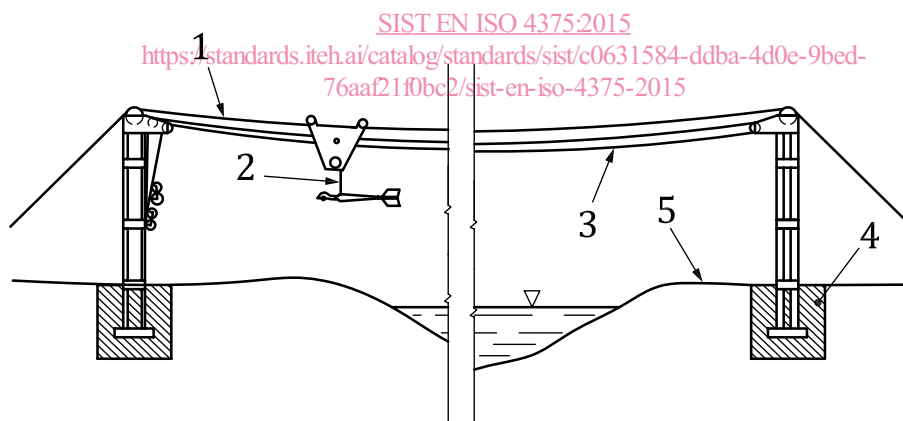


## Key

1	backstay	7	distance measurement
2	traversing cable return pulley	8	depth measurement
3	track or main cable	9	cable drum
4	traveller and/or instrument carriage	10	footing
5	current meter	11	ground level
6	sinker or sounding weight		

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Figure 1 — Cableway system — Bankside operation, with loop-traversing cable and spooled sounding cable



## Key

1	track or main cable	4	footing
2	suspension cable	5	ground level
3	tow cable		

Figure 2 — Cableway system — Bankside operation, with spooled tow cable and spooled sounding cable