PD ISO/TR 9210:2017

BSI Standards Publication

Hydrometry — Measurement in meandering river and in streams with unstable boundaries

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National foreword

This Published Document is the UK implementation of ISO/TR 9210:2017.

The UK participation in its preparation was entrusted to Technical Committee CPI/113/1, Hydrometric methods and instrumentation.

A list of organizations represented on this committee can be obtained on request to its secretary.

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Published by BSI Standards Limited 2017

ISBN 978 0 580 85264 0

ICS 17.120.20

Compliance with a British Standard cannot confer immunity from legal obligations.

This Published Document was published under the authority of the Standards Policy and Strategy Committee on 31 December 2017.

Amendments/corrigenda issued since publication

Date	Text affected

PD ISO/TR 9210:2017

TECHNICAL REPORT

ISO/TR 9210

Second edition
2017-11-15

Hydrometry — Measurement in meandering river and in streams with unstable boundaries

Hydrométrie — Mesurage en rivières à méandres et en cours d'eau à limites instables

Reference number
ISO/TR 9210:2017(E)

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Foreword

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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 (see www.iso.org/directives).

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For an explanation on the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see the following URL: www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 113, *Hydrometry*, Subcommittee SC 1, *Velocity area methods*.

This second edition cancels and replaces the first edition (ISO/TR 9210:1992), which has been technically revised.

Introduction

Various methods of measurements of discharge in open channels are available, of which the velocity-area method is most extensively used. The principles of this method are published in ISO 748.

However, there are rivers and streams, in which there are no river sections with constant bed levels and constant flow conditions. This document deals specifically with measurements of flow in meandering and braided rivers, and elaborates some of the provisions in ISO 748.

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TECHNICAL REPORT **ISO/TR 9210:2017(E)**

Hydrometry — Measurement in meandering river and in streams with unstable boundaries

1 Scope

This document provides guidelines for discharge measurements in meandering and braided rivers, and from bridges, following the provisions of ISO 748.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. 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*

3 Terms and definitions

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

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at http://www.iso.org/obp

— IEC Electropedia: available at http://www.electropedia.org/

3.1
alluvial river
river, which flows through alluvium, formed from its own deposits

Note 1 to entry: The sediment carried by an alluvial river, except for the wash load, is similar to that in the bed.

3.2
braided river
river characterized by a wide and shallow open channel, in which flow passes through a number of small-interlaced channels separated by shoals

Note 1 to entry: Frequently, there is little or no erosion of the main banks of a braided river.

Note 2 to entry: Generally, there is little or no meandering of the main channel of a braided river, but meandering in the minor channels is usual.

3.3
meandering river
channel following a sinuous path, characterized by curved flow leading to bank erosion alternating with shoaling

3.4
transition
crossover
inflection reach between two meander loops in which the main flow crosses from one side of the channel to the other

Note 1 to entry: The depth of flow in a transition is usually reduced from normal depth and is more uniform than in the curved reach.