Australian Standard™

Measurement of water flow in open channels

Part 2.5: General—Guidelines for the selection of flow-gauging structures

[ISO title: Hydrometric determinations—Flow measurements in open channels using structures—Guidelines for selection of structure]

Standards Australia

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Australian Water and Wastewater Association

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Department of Land and Water Conservation, New South Wales

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Part 2.5: General—Guidelines for the selection of flow-gauging structures

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PREFACE

This Standard was prepared by the Standards Australia Committee CE-024, Measurement of Water Flow in Open Channels and Closed Conduits.

This Standard is identical to and is reproduced from ISO 8368:1999, *Hydrometric determination — Flow measurements in open channels using structures — Guidelines for selection of structure.*

This Standard is Part 2.5 of AS 3778, *Measurement of water flow in open channels*, which is published in parts as follows:

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3778		Measurement of water flow in open channels
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3778.2	Part 2:	General
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References to International Standards should be replaced by references to equivalent Australian

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General— Guidelines for the selection of flow gauging structures

1 Scope

This International Standard gives guidelines for selection of a particular type of flow-gauging structure for measurement of liquid flow in open channels. It sets out the factors, and summarizes the parameters which may influence such a selection.

NOTE In general, a flow-gauging structure is used when high accuracy is required for continuous records of flow.

2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this International Standard. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent editions of the normative documents listed below. For undated references, the latest edition of the normative document referred to applies. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 772, *Hydrometric determinations — Vocabulary and symbols.*

ISO 1438-1, *Water flow measurement in open channels using weirs and Venturi flumes — Part 1: Thin-plate weirs.*

ISO 3846, *Liquid flow measurement in open channels by weirs and flumes — Rectangular broad-crested weirs.*

ISO 3847, *Liquid flow measurement in open channels by weirs and flumes — End-depth method for estimation of flow in rectangular channels with a free overfall.*

ISO 4359, *Liquid flow measurement in open channels — Rectangular, trapezoidal and U-shaped flumes.*

ISO 4360, *Liquid flow measurement in open channels by weirs and flumes — Triangular-profile weirs.*

ISO 4362, *Measurement of liquid flow in open channels — Trapezoidal profile weirs.*

ISO 4371, *Measurement of liquid flow in open channels by weirs and flumes — End depth method for estimation of flow in non-rectangular channels with a free overfall (approximate method).*

ISO 4374, *Liquid flow measurement in open channels — Round-nose horizontal broad-crested weirs.*

ISO 4377, *Liquid flow measurement in open channels — Flat-V weirs.*

ISO 8333, *Liquid flow measurement in open channels by weirs and flumes — V-shaped broad-crested weirs.*

ISO 9826:1992, *Measurement of liquid flow in open channels — Parshall and SANIIRI flumes.*

ISO 9827, *Measurement of liquid flow in open channels by weirs and flumes — Streamlined triangular-profile weirs.*

ISO 13550 , *Hydrometric determinations — Flow measurements in open channels using structures — Use of vertical underflow gates and radial gates.*

ISO 14139, *Hydrometric determinations — Flow measurements in open channels using structures — Compound gauging structures.*