

# V-Notch Weirs and Tanks



## Overview



Geosense® V-Notch Weirs and Tanks are used to measure seepage water flows in open streams, channels or tanks and are used mainly as part of Dam Safety Monitoring programs.

Made from high quality stainless steel or other corrosion & abrasion resistant materials they are available in a wide range of sizes and angles to suit project requirements.

### OPERATING PRINCIPLE

The V-notch weir uses the principle of flow of water over a triangular or rectangular notched weir plate. For a given profile size and shape, discharge is a function of the head of water at the weir.

Standard experimentally determined formulae (e.g. Kindsvater-Carter) are available which calculate the head of water to the rate of discharge.

A V-notch weir system comprises a stainless steel plate with a chosen notch profile to suit expected flow rates and a means of measuring the head on the weir plate.

The weir plate is mounted at the exit of a channel, tank or stilling basin through which the flow to be measured is channelled. The measuring point for the head of water is located upstream of the weir plate within the channel or basin.

Measurement can be carried out using a stainless steel scale or staff gauge fixed to the basin wall, from where manual readings for head above the vortex of the notch may be read.

### APPLICATIONS

Measuring water flows in:

Dams

Rivers & streams

Open Channels

### FEATURES

Made in accordance with BS 3680 Pt 4

Available in 90, 45, 22.5 degrees

Flows from 10 to 60 litres/second

Simple principle

Very low maintenance

High accuracy & sensitivity

Made from corrosion resistant materials

Can be easily automated

Compatible with data acquisition systems

Portable or fixed



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