

## Synopsis

Doc: WRD1(12868)

IS ...../ ISO 8316: 1987

**Title:** Measurement of liquid flow in closed conduits - Method by collection of the liquid in a volumetric tank

**Scope:** This International Standard specifies methods for the measurement of liquid flow in closed conduits by determining the volume of liquid collected in a volumetric tank in a known time interval. It deals in particular with the measuring apparatus, the procedure, the method for calculating the flow-rate and the assessment of uncertainties associated with the measurements.

The method described may be applied to any liquid provided that

a) its vapour pressure is sufficiently low to ensure that any escape of liquid by vaporization from the volumetric tank does not affect the required measurement accuracy;

b) its viscosity is sufficiently low so as not to alter or delay unduly the measurement of the level in the volumetric tank

c) it is non-toxic and non-corrosive.

**Salient features of content:** This standard covers Principle of static and dynamic gauging method, apparatus, procedure, Calculation of flow-rate and Calculation of the Overall uncertainty in the flow-rate measurement. Annexes in the standard cover Corrections to the measurement of filling time, Density of pure water at Standard atmospheric pressure of 101.325 kPa, Example of a volumetric flow-rate installation using the dynamic gauging method, Example of a volumetric flow-rate installation using the standing start and finish method and Student's t-distribution.

**And Type BTypes/grades/classes, if any covered in the standard :**

None

**Disclaimer (to be automatically provided by the program/software)**