
**Plastics piping systems — Glass-reinforced thermosetting plastics (GRP) pipes and fittings —
Determination of the resistance to chemical attack for the inside of a section in a deflected condition**

*Systèmes de canalisations en matières plastiques — Tubes et raccords en plastiques thermodurcissables renforcés de verre (PRV) —
Détermination de la résistance à une attaque chimique à l'intérieur d'un tronçon de tube soumis à déflexion*



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Contents

	Page
Foreword	iv
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 Principle	2
5 Test liquid	2
6 Apparatus	2
7 Test pieces	3
7.1 Preparation	3
7.2 Number	4
8 Determination of the dimensions of the test piece	4
8.1 Length	4
8.2 Mean wall thickness	4
8.3 Mean diameter	4
9 Conditioning	4
10 Test procedure using deflection measurement	4
11 Test procedure using strain measurement	6
12 Calculation of extrapolated value	7
13 Test report	7

Foreword

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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 138, *Plastics pipes, fittings and valves for the transport of fluids*, Subcommittee SC 6, *Reinforced plastics pipes and fittings for all applications*.

This third edition cancels and replaces the second edition (ISO 10952:2008), of which it constitutes a minor revision.

Plastics piping systems — Glass-reinforced thermosetting plastics (GRP) pipes and fittings — Determination of the resistance to chemical attack for the inside of a section in a deflected condition

1 Scope

This International Standard specifies a method for determining the chemical resistance properties of glass-reinforced thermosetting plastics (GRP) pipes and fittings in a deflected condition for nominal sizes DN 100 and larger.

In conjunction with ISO 10928, this International Standard provides a method for evaluating the effect of a chemical environment on the interior of a pipe or fitting after a specified period of time. Test conditions and requirements are specified in the referring International Standard. ISO 10467 references this International Standard.

NOTE It has been found that the effect of chemical environments can be accelerated by strain induced from deflection; hence, it is frequently referred to as strain corrosion.

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 10467, *Plastics piping systems for pressure and non-pressure drainage and sewerage — Glass-reinforced thermosetting plastics (GRP) systems based on unsaturated polyester (UP) resin*

ISO 10928, *Plastics piping systems — Glass-reinforced thermosetting plastics (GRP) pipes and fittings — Methods for regression analysis and their use*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

3.1

mean diameter

d_m

diameter of the circle corresponding with the middle of the pipe wall cross section

Note 1 to entry: The mean diameter is given by either of the following formulae:

$$d_m = d_i + e_m$$

$$d_m = d_e - e_m$$

where