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AMENDMENT 1
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**Glass-reinforced thermosetting plastics
(GRP) pipes and fittings — Test methods
to prove the design of cemented or
wrapped joints**

AMENDMENT 1

*Tubes et raccords en plastiques thermodurcissables renforcés de
verre (PRV) — Méthodes d'essai pour confirmer la conception des
assemblages scellés ou enrobés*

AMENDEMENT 1



Reference number
ISO 8533:2003/Amd.1:2012(E)

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Foreword

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Amendment 1 to ISO 8533:2003 was prepared by Technical Committee ISO/TC 138, *Plastics pipes, fittings and valves for the transport of fluids*, Subcommittee SC 6, *Reinforced plastics pipes and fittings for all applications*.

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AMENDMENT 1

Title

Correct the title to the following:

Plastics piping systems for pressure and non-pressure drainage and sewerage — Glass-reinforced thermosetting plastics (GRP) systems based on unsaturated polyester (UP) resin — Test methods to prove the design of cemented or wrapped joints

Page 1, Scope

Replace the first sentence with the following:

This International Standard specifies methods of test for cemented or wrapped joints intended to be used in plastics piping systems for pressure and non-pressure drainage and sewerage made of glass-reinforced thermosetting plastics (GRP) based on unsaturated polyester (UP) resin.

Page 6, 7.4.7

Replace the subclause with the following:

Steadily increase the hydrostatic pressure to 2,0 times the nominal pressure of the joint, expressed in bars, and maintain within ± 2 % for not less than 24 h.

Page 6, 7.5.1

Replace the subclause with the following:

Steadily increase the hydrostatic pressure to 2,0 times the nominal pressure of the joint, expressed in bars, and maintain within ± 2 % for not less than 24 h (see Table 1).

Page 7, 7.5.7

Replace the subclause with the following:

Either increase the pressure to 2,5 times the nominal pressure of the joint, expressed in bars, and maintain that pressure within ± 2 % for 100 h (see Table 1) or increase the pressure to 3 times the nominal pressure of the joint, expressed in bars, and maintain that pressure within ± 2 % for 6 min. During either of these times the joint shall not fracture. Leakage of the joint does not constitute a failure.

Page 8, Table 1

Replace Table 1 with the following, in which some of the table headings have been updated and the test pressure for the resistance to bending and internal pressure and resistance to internal pressure have changed from 1,5 times PN to 2,0 times PN:

Table 1 — Summary of test requirements

Property to be tested	Test to be performed	Test pressure	Duration	Subclause number
External pressure differential	Negative pressure	-0,8 bar (-0,08 MPa)	1 h	7.2 and Figure 1
Initial leakage	Initial pressure	$1,5 \times PN$	15 min	7.3 and Figure 1
Resistance to bending and internal pressure	Preliminary pressure	$1,5 \times PN$	15 min	7.4.1 to 7.4.6 and Figure 2
	Maintained pressure	$2,0 \times PN$	24 h	7.4.7 to 7.4.11 and Figure 2
Resistance to internal pressure	Maintained pressure	$2,0 \times PN$	24 h	7.5.1 to 7.5.3 and Figure 1
	Positive cyclic pressure	atmospheric to $1,5 \times PN$ and back to atmospheric	10 cycles of 1,5 to 3,0 min each	7.5.4 to 7.5.6 and Figure 1 or Figure 2
	Maintained pressure	$2,5 \times PN$ or $3,0 \times PN$	100 h 6 min	7.5.7 to 7.5.9 and Figure 1

NOTE 1 Nominal pressure (PN) is an alphanumeric designation of pressure related to the resistance of a component of a piping system to internal pressure. For the purposes of this table, PN is expressed in bars.

NOTE 2 A test sequence different from that given in this table may be used.