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**Glass-reinforced thermosetting plastics
(GRP) pipes and fittings — Test methods
to prove the design of bolted flange joints**

AMENDMENT 1

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

AMENDEMENT 1



Reference number
ISO 8483:2003/Amd.1:2012(E)

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Amendment 1 to ISO 8483:2003 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 read as follows:

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 bolted flange joints

Page 1, Scope

Replace the first sentence as follows:

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

Page 7, 7.4.2.1

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 $\pm 2\%$ for not less than 24 h (see Table 1).

Page 7, 7.5.8

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 $\pm 2\%$ for not less than 24 h (see Table 1).

Page 10, Table 1

Replace Table 1 with the following in which some of the table headings have been updated as well as the test pressure for resistance to internal pressure and end thrust:

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 2 a)
Initial leakage	Initial pressure	$1,5 \times PN$	15 min	7.3 and Figure 2 a)
Resistance to internal pressure and end thrust	Preliminary pressure	$1,5 \times PN$	15 min	7.4.1.1 to 7.4.1.2 and Figure 2 a)
	Positive cyclic pressure	atmospheric to $1,5 \times PN$ and back to atmospheric	10 cycles of 1,5 to 3,0 min each	7.4.1.3 to 7.4.1.5 and Figure 2 a)
	Maintained pressure	$2,0 \times PN$	24 h	7.4.2.1 to 7.4.2.3 and Figure 2 a)
Resistance to bending with end thrust	Preliminary pressure	$1,5 \times PN$	15 min	7.5.1 to 7.5.7 and Figure 3
	Maintained pressure	$1,5 \times PN$	24 h	7.5.9 to 7.5.11 and Figure 3
Short-duration resistance	Maintained pressure	$2,5 \times PN$ or $3,0 \times PN$	100 h 6 min	7.6.5 and Figure 2 a)
Bolt-tightening torque	Visual inspection	Not applicable	Not applicable	7.7 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 to be expressed in bars.

NOTE 2 A test sequence other than that given in this table may be used.