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

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 ± 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 ± 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 × PN	15 min	7.3 and Figure 2 a)
Resistance to internal pressure and end thrust	Preliminary pressure	1,5 × PN	15 min	7.4.1.1 to 7.4.1.2 and Figure 2 a)
	Positive cyclic pressure	atmospheric to 1,5 × 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 × 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 × PN	15 min	7.5.1 to 7.5.7 and Figure 3
	Maintained pressure	1,5 × PN	24 h	7.5.9 to 7.5.11 and Figure 3
Short-duration resistance	Maintained pressure	2,5 × PN or 3,0 × 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.

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