Unplasticized polyvinyl chloride (PVC) injection-moulded solvent-welded socket fittings for use with pressure pipe — Hydraulic internal pressure test

Raccords moulés en polychlorure de vinyle (PVC) non plastifié, à joints collés, pour canalisations avec pression – Essai à la pression hydraulique intérieure

First edition - 1974-05-01

UDC 621.643.4:678.743:620.17

Ref. No. ISO 2044-1974 (E)

Descriptors: plastic pipes, pipe fittings, pipe joints, polyvinyl chloride, pressure pipes, tests, high pressure tests.

Price based on 1 page

013460

FOREWORD

ISO (the International Organization for Standardization) is a worldwide federation of national standards institutes (ISO Member Bodies). The work of developing International Standards is carried out through ISO Technical Committees. Every Member Body interested in a subject for which a Technical Committee has been set up has the right to be represented on that Committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work.

Draft International Standards adopted by the Technical Committees are circulated to the Member Bodies for approval before their acceptance as International Standards by the ISO Council.

International Standard ISO 2044 was drawn up by Technical Committee ISO/TC 138, *Plastics pipes and fittings for the transport of fluids*, and circulated to the Member Bodies in June 1970.

It has been approved by the Member Bodies of the following countries:

Australia Greece **Poland Portugal** Austria Hungary Belgium India South Africa, Rep. of Czechoslovakia Ireland Spain Denmark Israel Sweden **Switzerland** Egypt, Arab Rep. of Italy **Finland** Netherlands Thailand France **New Zealand** U.S.S.R. Germany Norway

The Member Bodies of the following countries expressed disapproval of the document on technical grounds:

Canada United Kingdom

© International Organization for Standardization, 1974 •

Printed in Switzerland

Unplasticized polyvinyl chloride (PVC) injection-moulded solvent-welded socket fittings for use with pressure pipe — Hydraulic internal pressure test

1 SCOPE AND FIELD OF APPLICATION

This International Standard specifies a test for checking the resistance to internal pressure of injection-moulded unplasticized polyvinyl chloride (PVC) fittings for connecting, by means of solvent welding, to unplasticized polyvinyl chloride (PVC) pressure pipe of 160 mm (6 in) maximum diameter.

2 APPARATUS

Equipment which permits the application of an internal hydraulic pressure of 4,2 $^+$ 0 ,2 times the nominal pressure, for at least 1 h on the fitting to be tested.

3 TEST SPECIMENS

Each test specimen shall consist of a fitting, solvent welded to a section of pipe having a minimum length of 250 mm and capable of withstanding an internal pressure of at least 4,2 times the nominal pressure of the fitting. A period of at least 10 days shall be allowed to ensure satisfactory setting of the joint.

4 PROCEDURE

The free end of one of the pipe sections shall be connected to the hydraulic pressure equipment. The other pipe(s) of the remaining section(s) shall be closed by any appropriate means.

The test specimen thus assembled shall be subjected for 60 min to an internal pressure of $4.2^{+0.2}_{0}$ times the nominal pressure of the fitting, at a temperature of 20 ± 2 °C.

Throughout the test, the specimen must be suspended or placed so that the induced stress in the assembly is not limited by external forces.

5 INTERPRETATION OF RESULTS

A fitting shall be considered as having passed the test if it shows no sign of deterioration, leakage, fracture or other failure under the specified conditions. The test shall be repeated if the pipe bursts or if the solvent-welded joints leak.

