
**Plastics piping and ducting systems —
Thermoplastics pipes — Determination of
ring flexibility**

*Systèmes de canalisations et de gaines en matières plastiques — Tubes
en matières thermoplastiques — Détermination de la flexibilité annulaire*



Foreword

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International Standard ISO 13968 was prepared by Technical Committee ISO/TC 138, *Plastics pipes, fittings and valves for the transport of fluids*.

It has also been published (with minor deviations) as EN 1446.

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Plastics piping and ducting systems — Thermoplastics pipes — Determination of ring flexibility

1 Scope

This standard specifies a method for testing the ring flexibility of a thermoplastics pipe having a circular cross section.

The method enables determination of the deflection, and necessary force, at which physical damage, if any (see 7.2), occurs within 30 % diametric deflection.

2 Normative reference

The following standard contains provisions which, through reference in this text, constitute provisions of this International Standard. At the time of publication, the edition indicated was valid. All standards are subject to revision, and parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent edition of the standard indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 9969:1994, *Thermoplastics pipes — Determination of ring stiffness*.

3 Principle

The ring flexibility of a pipe is tested by measuring the force and the deflection while deflecting a ring section from the pipe diametrically at a constant speed until a deflection of at least 30 % is achieved or prior fracture has occurred.

Each test piece is monitored during testing and subsequently inspected for signs of several specific types of mechanical failure.

4 Apparatus

4.1 Compression testing machine, conforming to that required for ISO 9969:1994 but capable of producing at least 30 % diametric deflection of the test piece at the applicable speed (see table 1 of ISO 9969:1994).