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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 9647-2015

Replacing GB/T 9647-2003

Thermoplastics pipes -- Determination of ring stiffness

热塑性塑料管材 环刚度的测定

(English Translation)

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Foreword

This standard was drafted in accordance with GB/T 1.1-2009 given rules.

This standard replaces GB/T 9647-2003 "thermoplastic pipe ring stiffness determination." this standard and GB/T 9647-2003 compared to technical changes as follows.

--- Table 1 the nominal diameter of the pipe $400 \leq DN \leq 1000$ mm $400 \leq DN \leq 710$ mm; DN ≥ 1000 mm modify DN > 710 mm, the compression rate of (50 ± 5) mm/min revised to $(0.03 \times di) \pm 5\%$ mm/min;

--- Specifies the sampling length of large diameter pipe wall structure of the specimen;

--- Increased use of the inner diameter of the inner diameter of the pipe pi tape measure;

--- Test increased preload F_0 ;

--- Relates to the ring flexibility test related content;

--- The test as ec changes more than 10% of wall thickness measurement of the inner diameter of the sample changes, modifications such as variable wall thickness of ec More than 5% of the measured change in the inner diameter of the sample.

This standard uses the translation method identical with ISO 9969:2007 "thermoplastic pipe ring stiffness determination." Correspondence between the consistency of the standards of international documents and normative references of the following documents.

--- GB/T 8806-2008 "Plastic piping systems for plastic parts Size Determination" (ISO 3126:2005, IDT) Please note that some of the content of this document may involve patents. The issuing authority of this document should not bear the responsibility to identify these patents.

The standard proposed by China National Light Industry Council.

This standard by the National Plastics Standardization Technical Committee (SAC/TC48)

centralized.

This standard was drafted. Light Industry Institute of Plastics Processing Applications, Liansu Technology Industrial Limited.

1 Scope

This standard specifies the method for measuring a circular cross-section of thermoplastic pipe ring stiffness.

2 Normative references

The following documents for the application of this document is essential. For dated references, only the dated version suitable for use herein Member. For undated references, the latest edition (including any amendments) applies to this document.

Determination of ISO 3126 Plastics piping systems for plastic parts size
(Plasticspipingsystems-Plastics components-Determinationofdimensions)

3 Symbol

This standard uses the following symbols.

Male DN pipe diameter, in millimeters;

Di average inner diameter of the pipe, in millimeters;

ec structural wall thickness, in millimeters;

F load, in units of kN;

The length L of the sample, in millimeters;

P ribs or pitch of the helix, in millimeters;

S ring stiffness, in units of kN per square meter;

y vertical deformation, in millimeters.

Principle 4

To load and deformation of the pipe at a constant rate deformation measured to determine the ring stiffness.

With two mutually parallel plate placed on a horizontal pipe at a constant rate of compression in the vertical direction, the rate is determined by test Determining the diameter of the pipe to obtain a load - deformation curve, the pipe diameter direction in a deformation of 3% when calculated load ring stiffness.

5.1 Compression testing machine

Can according to Table 1 for different nominal pipe diameter of the specimen provide a constant rate of movement of the beam, parallel to each other by two Flat line (see 5.2) applied to the specimen enough load reaches a predetermined amount of deformation and diameter (see Chapter 8). Load measuring device capable of measuring when a given sample to produce the desired 1% to 4% of the amount of deformation in the diameter direction of the load, to accurately test load of 2%.