

ISO

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION

ISO RECOMMENDATION R 160

ASBESTOS CEMENT PRESSURE PIPES

1st EDITION

June 1960

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Printed in Switzerland

Also issued in French and Russian. Copies to be obtained through the national standards organizations.

BRIEF HISTORY

The ISO Recommendation R 160, *Asbestos Cement Pressure Pipes*, was drawn up by Technical Committee ISO/TC 77, *Products in Asbestos Cement*, the Secretariat of which is held by the Association Suisse de Normalisation (SNV).

The ISO/TC 77 Secretariat prepared the first draft proposal, which it circulated, in July 1952, to the Members of the Technical Committee. In the light of the results of this consultation, the Secretariat set up a second draft proposal, which was discussed during the first meeting of ISO/TC 77, held in Zurich, in May 1954. Pursuant to decisions adopted during that meeting, the Secretariat prepared a third draft proposal, which was circulated in December 1954.

The observations sent in by various Members of the Technical Committee induced the ISO/TC 77 Secretariat to put forward a fourth draft proposal, which the Technical Committee accepted by correspondence as a Draft ISO Recommendation, in June 1956.

This Draft ISO Recommendation (No. 149) was submitted on 31 October 1956 to all the ISO Member Bodies for enquiry. The results of this consultation having been deemed unsatisfactory, the Technical Committee presented a second Draft ISO Recommendation, which was submitted to all the ISO Member Bodies on 26 June 1959, and which was approved, subject to a few editorial modifications, by the following 26 Member Bodies :

Australia	Ireland	Romania
Austria	Israel	Spain
Belgium	Italy	Sweden
Burma	Japan	Switzerland
Chile	Netherlands	Union of
Czechoslovakia	New Zealand	South Africa
Denmark	Norway	United Kingdom
France	Poland	U.S.S.R.
Germany	Portugal	Yugoslavia

Three Member Bodies opposed the approval of the Draft :

Brazil India Mexico

The Draft ISO Recommendation was then submitted to the ISO Council, which decided, during its meeting of June 1960, to accept it as an ISO RECOMMENDATION.

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ASBESTOS CEMENT PRESSURE PIPES

1. PURPOSE AND SCOPE

This ISO Recommendation applies to pipes and joints in asbestos cement intended for use under pressure.

It specifies certain conditions of manufacture, the classification, dimensions and acceptance tests applicable to these products.

2. PIPES

2.1 Composition

Pipes should be made from a close and homogeneous mixture essentially consisting of cement, conforming to the national standards of the producing country, asbestos fibre and water, and excluding material liable to cause ultimate deterioration in the quality of the pipes.

2.2 Finish

The interior surface of the pipes should be regular and smooth.

Since pipes are to be laid with rubber ring joints, the surface on which the rings rest should satisfy the tolerances for the exterior diameters, set out in clause 2.5.1, for a sufficient length to suit the type of joint adopted.

2.3 Marking

Pipes should be marked legibly and indelibly as follows:

Manufacturer's mark,
Date of manufacture,
Nominal diameter,
Class.

The method of marking should conform to the national standards of the producing country.

2.4 Classification and dimensions

2.4.1 Classification. Pipes are classed according to the tightness test pressure. Either of the following series of classes * may be chosen:

Classes: Series I

Feet head	kgf/cm ² (approximately)
200	6
400	12
600	18
800	24

Classes: Series II

kgf/cm ²	Feet head (approximately)
5	165
10	330
15	495
20	660
25	825

* The choice of the class of the pipes is determined by the purchaser's engineer, who alone is qualified to judge the conditions of laying and using the pipes. Nevertheless, it is recommended that a class be selected such that the working pressure does not exceed half the tightness test pressure (see clause 2.6.1) given for that class.