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ISO

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION

ISO RECOMMENDATION

R 955

FLATTENING TEST

ON ALUMINIUM AND ALUMINIUM ALLOY TUBES

1st EDITION
January 1969

ISO 8492

For each individual country the only valid standard is the national standard of that country.

Printed in Switzerland

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

BRIEF HISTORY

The ISO Recommendation R 955, *Flattening test on aluminium and aluminium alloy tubes*, was drawn up by Technical Committee ISO/TC 79, *Light metals and their alloys*, the Secretariat of which is held by the Association Française de Normalisation (AFNOR).

Work on this question led, in 1966, to the adoption of a Draft ISO Recommendation.

In March 1967, this Draft ISO Recommendation (No. 1135) was circulated to all the ISO Member Bodies for enquiry. It was approved, subject to a few modifications of an editorial nature, by the following Member Bodies :

Belgium	Israel	Switzerland
Canada	Italy	Thailand
Chile	Japan	Turkey
Czechoslovakia	Netherlands	U.A.R.
France	New Zealand	United Kingdom
Germany	Norway	U.S.A.
Greece	Poland	U.S.S.R.
Hungary	South Africa, Rep. of	Yugoslavia
India	Sweden	

No Member Body opposed the approval of the Draft.

The Draft ISO Recommendation was then submitted by correspondence to the ISO Council, which decided, in January 1969, to accept it as an ISO RECOMMENDATION.

ISO Recommendation R 955 January 1969

FLATTENING TEST

ON ALUMINIUM AND ALUMINIUM ALLOY TUBES

1. SCOPE

This ISO Recommendation applies to aluminium and aluminium alloy tubes. Individual material specifications may specify the maximum diameter and thickness of tube to which this test is to be applied.

2. PRINCIPLE OF TEST

The test consists in flattening the end of a tube or test piece of specified length cut from a tube in a direction perpendicular to the longitudinal axis of the tube.

When the test is carried out so that, after the test, the internal surfaces of the test piece are in contact over at least half of the internal width of the flattened test piece, the test is called "close-flattened".

In other cases, the test is carried out until the distance between platens measured under load in the direction of flattening reaches a value fixed by the relevant material specification.

The test piece should be removed from the testing machine for examination.

The test is carried out at ambient temperature unless otherwise specified.

3. SYMBOLS AND DESIGNATIONS

Reference number	Symbol	Designation
1	D	External diameter of test piece
2	a	Wall thickness of test piece
3	b	Internal width of flattened test piece
4	d	Internal diameter of test piece
5	z	Distance between platens measured under load
	L	Length of test piece

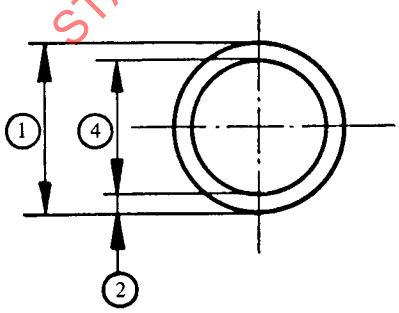

FIG. 1 – Test piece

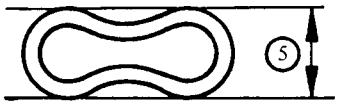

FIG. 2 – Distance between platens measured under load

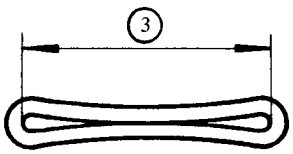

FIG. 3 – Close-flattened