

ISO

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION

ISO RECOMMENDATION R 145

WRAPPING TEST FOR STEEL WIRE

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BRIEF HISTORY

The ISO Recommendation R 145, *Wrapping Test for Steel Wire*, was drawn up by Technical Committee ISO/TC 17, *Steel*, the Secretariat of which is held by the British Standards Institution (B.S.I.).

During the meeting held in London in 1954 by Working Group ISO/TC 17/WG 1, *Methods of Mechanical Testing for Steel*, the Danish Member Body submitted a proposal for this test. This proposal served as the basis for the draft proposal which was submitted to the Technical Committee during its plenary meeting, held in Stockholm, in June 1955.

In the light of comments by the Technical Committee, the draft proposal was referred back to Working Group No. 1 for modifications, and was again submitted to the Technical Committee during its plenary meeting, held in London, in March 1957. As a result of decisions reached at that meeting, a second draft proposal was prepared by the Secretariat and submitted to all the Members of the Technical Committee for approval. After some minor amendments had been made, it was found acceptable and a revised version incorporating these amendments was adopted as a Draft ISO Recommendation.

On 11 July 1958, the Draft ISO Recommendation (No. 207) was distributed to all the ISO Member Bodies and was approved, subject to some editorial amendments, by the following Member Bodies:

Australia	France	Norway
Austria	Germany	Poland
Belgium	Hungary	Romania
Bulgaria	India	Spain
Burma	Israel	Sweden
Chile	Italy	Switzerland
Czechoslovakia	Japan	United Kingdom
Denmark	Netherlands	U.S.S.R.
Finland	New Zealand	Yugoslavia

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 February 1960, to accept it as an ISO RECOMMENDATION.

WRAPPING TEST FOR STEEL WIRE

1. PRINCIPLE OF TEST

The test consists in winding the wire a specified number of turns round a core of diameter specified by the standard for the product. It may also include the unwinding of a specified number of turns.

2. TEST PIECE

The test piece consists of a piece of wire of sufficient length to enable the test to be made.

3. TESTING MACHINE

The testing machine should be so constructed that the coils can be wound tight and close around the core. A piece of the wire to be tested may be used as the core, provided it is of the specified core diameter.

4. PROCEDURE

- 4.1 The test piece should be close coiled round the core at a constant speed, not exceeding one turn per second, but in any case sufficiently slowly to prevent any rise in temperature likely to affect the result of the test. To ensure close coiling a tensile stress not exceeding 2 per cent of the nominal tensile strength of the wire may be applied during wrapping.
- 4.2 If unwrapping is specified, the rate of unwrapping should not exceed one turn per second, but in any case it should be sufficiently slow to prevent any rise in temperature likely to affect the result of the test. At the end of unwrapping, at least one coil should not be unwrapped.

5. TEST REQUIREMENTS

- 5.1 The test is made at ambient temperature, unless otherwise specified.
- 5.2 At the end of the test, the test piece is examined.
- 5.3 The interpretation of the appearance of the wrapped or unwrapped portion is a matter for the material specification.