

ISO

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION

ISO RECOMMENDATION R 726

CALIBRATION OF STANDARDIZED BLOCKS
TO BE USED FOR BRINELL HARDNESS TESTING MACHINES

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BRIEF HISTORY

The ISO Recommendation R 726, *Calibration of standardized blocks to be used for Brinell hardness testing machines*, was drawn up by Technical Committee ISO/TC 17, *Steel*, the Secretariat of which is held by the British Standards Institution (BSI).

Work on this question by the Technical Committee began in 1961 and led, in 1965, to the adoption of a Draft ISO Recommendation.

In March 1966, this Draft ISO Recommendation (No. 926), replacing Draft ISO Recommendation No. 525, 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 :

Argentina	Israel	Sweden
Australia	Italy	Switzerland
Austria	Japan	Turkey
Belgium	Korea, Rep. of	U.A.R.
Canada	Netherlands	United Kingdom
Czechoslovakia	New Zealand	U.S.A.
Denmark	Norway	U.S.S.R.
Finland	Poland	Yugoslavia
France	Romania	
Germany	South Africa,	
Hungary	Rep. of	
India	Spain	

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 May 1968, to accept it as an ISO RECOMMENDATION.

CALIBRATION OF STANDARDIZED BLOCKS TO BE USED FOR BRINELL HARDNESS TESTING MACHINES

INTRODUCTION

Blocks standardized according to this ISO Recommendation are adequate for the verification of all Brinell hardness testing machines. Any machine verified by these blocks may be employed, without any additional verification, for tests on a modified Brinell scale, for example using a tungsten carbide ball.

1. SCOPE

This ISO Recommendation applies to the calibration of standardized blocks for the indirect verification of hardness testing machines as described in ISO Recommendation R 156 (2nd edition), *Verification of Brinell hardness testing machines*. It does not necessarily apply to the calibration of test blocks which are used in the routine checking of the testing machine by the user, but it is not intended to preclude the use of blocks calibrated in accordance with this ISO Recommendation for the routine checking of a machine.

NOTE. — Test blocks that are used in routine checking of the testing machine may be calibrated using the load duration specified in clause 4.2 of ISO Recommendation R 79 (2nd edition), *Brinell hardness test for steel*.

2. MANUFACTURE

2.1 Each metal block to be standardized should be of a thickness not less than

16 mm (5/8 in) for 10 mm balls,
12 mm (1/2 in) for 5 mm balls,
6 mm (1/4 in) for smaller balls.

2.2 The block should be specially prepared and the attention of the manufacturer is drawn to the need to use a manufacturing process which will give the necessary homogeneity, stability of structure and uniformity of surface hardness. It is recommended that the fineness and regularity of grain and the uniformity of the metallurgical structure be verified by microscopical examination. A microscopical examination may also be made by the standardizing authority.

2.3 The standardized blocks should not be magnetized. It is recommended that the manufacturer should ensure that the blocks, if of steel, have been demagnetized at the end of the manufacturing process.