

Transformed

ISO

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION

ISO RECOMMENDATION R 238

REDUCTION SLEEVES AND EXTENSION SOCKETS FOR TOOLS WITH MORSE TAPER SHANKS

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BRIEF HISTORY

The ISO Recommendation R 238, *Reduction Sleeves and Extension Sockets for Tools with Morse Taper Shanks*, was drawn up by Technical Committee ISO/TC 29, *Small Tools*, the Secretariat of which is held by the Association Française de Normalisation (AFNOR).

Work on this question by the Technical Committee began in 1952 and led, in 1958, to the adoption of a Draft ISO Recommendation.

In September 1959, this Draft ISO Recommendation (No. 304) 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	India	Romania
Burma	Italy	Sweden
Czechoslovakia	Mexico	Switzerland
France	Netherlands	United Kingdom
Germany	Pakistan	U.S.S.R.
Greece	Poland	
Hungary	Portugal	

One Member Body opposed the approval of the Draft: U.S.A.

The Draft ISO Recommendation was then submitted by correspondence to the ISO Council, which decided, in December 1961, to accept it as an ISO RECOMMENDATION.

REDUCTION SLEEVES AND EXTENSION SOCKETS FOR TOOLS WITH MORSE TAPER SHANKS

INTRODUCTION

I. SCOPE

This ISO Recommendation relates to the following two pieces of equipment:

1. Reduction sleeves for tools with Morse taper shanks Tables 1.1 and 1.2,
2. Extension sockets for tools with Morse taper shanks Tables 2.1 and 2.2.

For each of them, the ISO Recommendation comprises two tables giving respectively:

- (1) the dimensions in millimetres and
- (2) the corresponding dimensions in inches.

II. INTERCHANGEABILITY

The numerical values given in this ISO Recommendation, whether in millimetres or in inches, automatically ensure interchangeability with the corresponding machines and tools, whatever the system of units employed.

The mating dimensions of the sleeves and sockets are in fact in accordance with those specified in the ISO Recommendation R . . . * for Morse taper shanks, which were determined so as to give the same guarantee of interchangeability.

III. REDUCTION SLEEVES

In the reduction sleeves dealt with in Tables 1.1 and 1.2, in millimetres and in inches, the inside taper is always strictly the same as the standard Morse taper of the same number, even in its length.

The same applies to the outside taper, except for the length, however, which is sometimes equal to, sometimes greater than, that of the standard taper of the same number.

IV. EXTENSION SOCKETS

The statements made above concerning the Morse taper dimensions of the reduction sleeves are equally applicable to the extension sockets, under the same conditions.

Tables 2.1 and 2.2, in millimetres and in inches, also specify for the latter the diameter of the parallel portion and the minimum value for the total length l_2 .

Lengths l_2 above this minimum should be selected to suit requirements, but preference should be given to multiples of 5 mm or $\frac{1}{4}$ inch, or even 10 mm or $\frac{1}{2}$ inch**.

* In course of preparation.

** It is the responsibility of each ISO Member Body to specify this minimum in its national standard, giving either the minimum value shown in the tables or the slightly larger one indicated in the relevant note as "Reinforced minimum".