

Revised.

**ISO**

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION

**ISO RECOMMENDATION**  
**R 65**

**STEEL TUBES**  
**FOR GAS LIST THREADING**

2nd EDITION

August 1971

This second edition supersedes the first edition.

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## BRIEF HISTORY

The ISO Recommendation R 65, *Steel tubes for gas list threading*, was drawn up by Technical Committee ISO/TC 5, *Pipes and fittings*, the Secretariat of which is held by the Association Suisse de Normalisation (SNV).

Work on this question led to the adoption of Draft ISO Recommendation No. 162, which was circulated to all the ISO Member Bodies for enquiry in April 1957.

The Draft has been approved, subject to a few modifications of an editorial nature, by the following Member Bodies :

|                |             |                       |
|----------------|-------------|-----------------------|
| Australia      | Germany     | Norway                |
| Austria        | Greece      | Portugal              |
| Belgium        | Hungary     | South Africa. Rep. of |
| Canada         | India       | Spain                 |
| Czechoslovakia | Ireland     | Sweden                |
| Denmark        | Italy       | Switzerland           |
| Finland        | Netherlands | United Kingdom        |
| France         | New Zealand |                       |

No Member Body opposed the approval of the Draft.

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

## BRIEF HISTORY RELATING TO THE SECOND EDITION

A draft revision of this Recommendation was then studied by Technical Committee ISO/TC 5 and, in 1971, the P-Members of the Committee instructed the Secretariat to submit the Draft to the ISO Council under the abbreviated procedure provided for in clause F.7.1 of the Directives for the technical work of ISO.

This draft revision was then submitted by correspondence to the ISO Council which decided to accept it as the second edition of ISO Recommendation R 65.

## STEEL TUBES FOR GAS LIST THREADING

### 1. SCOPE

This ISO Recommendation establishes the dimensions and the characteristics of seamless and welded steel tubes for four separate series, namely :

- (1) **heavy series** : for seamless and welded steel tubes.
- (2) **medium series** : for seamless and welded steel tubes.
- (3) **light series I** : for seamless and welded steel tubes.
- (4) **light series II** : for welded steel tubes.

The dimensions in millimetres and in inches, given in the tables, are considered to be "corresponding values", although some of them are not exact equivalents. In all cases, however, the dimensions ensure practical interchangeability.

### 2. METHOD OF CALCULATION

The values of the masses per unit length, to at least five significant figures, have been calculated by the following formulae :

$$\text{-- for the metric system : } m = (D - a) \cdot a \cdot 0.024\,661\,5^* \text{ kg/m} \dots (A)$$

$$\text{-- for the inch system : } m = (D - a) \cdot a \cdot 10.681\,42^{**} \text{ lb/ft} \dots (B)$$

where

- $m$  is the mass per unit length;
- $D$  is the specified outside diameter;
- $a$  is the specified wall thickness.

The lb/ft value (B) is then converted to the kg/m value (C) by multiplying it by 1.4882.

$$\text{The mean value in kg/m (D) } = \frac{(A) + (C)}{2}$$

If this value does not differ by more than 1.5 % from either (A) or (C), the tube dimensions are considered to be "corresponding" and the value (D) is the agreed value for tubes of the dimensions concerned, whether these dimensions be metric or inch. The mean value in kg/m (D) is rounded to three significant figures.

The equivalent mean lb/ft value (E) is found by dividing the rounded value (D) by 1.4882. This value (E) is then rounded to three significant figures.

The values given in the tables are those of (D) and (E). If value (D) differs by more than 1.5 % from either (A) or (C), the tubes are shown in separate columns.

\* This coefficient takes into account a density equal to 7.85 kg/dm<sup>3</sup>.

\*\* This coefficient takes into account a density equal to 489.6 lb/ft<sup>3</sup>.