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Revised

ISO

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION

ISO RECOMMENDATION
R 134

NON-SCREWED STEEL TUBES FOR GENERAL PURPOSES

2nd EDITION

December 1962

This second edition supersedes the first edition

Printed in Switzerland

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

BRIEF HISTORY

The ISO Recommendation R 134, *Non-Screwed Steel Tubes for General Purposes*, 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).

A first draft proposal entitled "ISO Seamless Non-Screwed Tubes: Class N, General Purpose Tubes (Commercial)", was submitted to the third plenary meeting of ISO/TC 5, held in Stockholm, in June 1955, but was referred back to Sub-Committee ISO/TC 5/SC 1, *Gas List Tubes and Other Steel Pipes*, for further consideration, in conjunction with the standardization of a series of outside diameters of steel tubes and also steel tubes suitable for screwing in accordance with ISO Recommendation R 7.

After having completed the consideration of a general series of outside diameters (see ISO Recommendation R 64) and also tubes which may be screwed (see ISO Recommendation R 65), Sub-Committee ISO/TC 5/SC 1 appointed a group of experts to prepare new proposals. These proposals enabled the Secretariat of ISO/TC 5/SC 1 to establish a second new document, which was adopted by the Sub-Committee during its seventh meeting, held in Amsterdam, in April 1957, as a second draft proposal. This document was circulated to all the members of the Technical Committee and approved by a majority as a Draft ISO Recommendation.

On 22 August 1958, the Draft ISO Recommendation (No. 225) was distributed to all the ISO Member Bodies and was approved, subject to some modifications, by the following Member Bodies:

Australia	Hungary	Pakistan
Belgium	India	Poland
Chile	Israel	Spain
Denmark	Italy	Sweden
Finland	Japan	Switzerland
France	Netherlands	United Kingdom
Germany	Norway	

One Member Body opposed the approval of the draft: U.S.S.R.

The Draft ISO Recommendation was then submitted by correspondence to the ISO Council, which decided, in September 1959, to accept it as an ISO RECOMMENDATION.

BRIEF HISTORY DEALING WITH THE 2ND EDITION

As manufacturing techniques had developed, Sub-Committee ISO/TC 5/SC 1, at its meeting in Gleneagles (Scotland) in 1960, considered that it might be necessary to undertake a revision of this Recommendation, so as to insert therein the modifications specified in the table below (indicating the new values proposed to replace the values struck out).

Outside diameter		Thickness		Conventional mass	
Corresponding values		Corresponding values			
millimetres	inches	millimetres	inches	kg/m	lb/ft
108.0	4 ¼	~~4.0~~ 3.6	~~0.160~~ 0.144	~~10.3~~ 9.33	~~6.92~~ 6.27
114.3	4 ½	~~4.0~~ 3.6	~~0.160~~ 0.144	~~11.0~~ 9.90	~~7.39~~ 6.65
...	...	...	...	...	...
139.7	5 ½	~~4.5~~ 4.0	~~0.176~~ 0.160	~~14.9~~ 13.5	~~10.0~~ 9.07
...	...	...	...	...	...

This proposal having been accepted by Technical Committee ISO/TC 5, a Draft Revision of ISO Recommendation R 134 was circulated in October 1961 to all the ISO Member Bodies, and was approved by 21 Member Bodies.

Two Member Bodies opposed the approval of the Draft Revision:

U.S.A. U.S.S.R.

The Draft Revision of this ISO Recommendation was then submitted by correspondence to the ISO Council, which decided, in December 1962, to accept it. The present edition (2nd edition) embodies this revision.

ISO Recommendation R 134 December 1962

NON-SCREWED STEEL TUBES FOR GENERAL PURPOSES

1. SCOPE

This ISO Recommendation specifies the outside diameters, thicknesses and conventional masses of a series of seamless and welded steel tubes for general purposes. These tubes are not intended for screwing.

2. DIMENSIONS AND CONVENTIONAL MASSES

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

The conventional masses have been determined by taking the arithmetical mean between the theoretical masses calculated with the formulae:

$m = (D-t)t \times 0.024\,661\,5$ kg/m for the metric system,
$m = (D-t)t \times 10.681\,42$ lb/ft for the inch system,

where m = mass by unit of length,
D = mean outside diameter,
t = mean wall thickness,

and the conservation factor 1 lb/ft = 1.488 16 kg/m.

TABLE

Outside diameter		Thickness		Conventional mass	
Corresponding values		Corresponding values			
millimetres	inches	millimetres	inches	kg/m	lb/ft
10.2	13/32	1.6	0.064	0.344	0.231
13.5	17/32	1.8	0.072	0.522	0.351
17.2	11/16*	1.8	0.072	0.688	0.462
21.3	27/32	2.0	0.080	0.962	0.646
26.9	1 1/16	2.0	0.080	1.24	0.833
30.0	1 3/16	2.3	0.092	1.59	1.07
33.7	1 11/32**	2.3	0.092	1.79	1.20
38.0	1 1/2	2.6	0.104	2.29	1.54
42.4	1 11/16***	2.6	0.104	2.57	1.73
44.5	1 3/4	2.6	0.104	2.70	1.81
48.3	1 29/32	2.6	0.104	2.95	1.98
54.0	2 1/8	2.6	0.104	3.32	2.23
57.0	2 1/4	2.9	0.116	3.90	2.62
60.3	2 3/8	2.9	0.116	4.14	2.78
70.0	2 3/4	2.9	0.116	4.83	3.23
76.1	3	2.9	0.116	5.28	3.55
88.9	3 1/2	3.2	0.128	6.81	4.58
101.6	4	3.6	0.144	8.76	5.89

(Continued overleaf)

* Tolerance to be based on 0.677 in. ** Tolerance to be based on 1.327 in. *** Tolerance to be based on 1.669 in.