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## **IRISH STANDARD SPECIFICATION**

# COPPER DIRECT CYLINDERS FOR DOMESTIC PURPOSES

I.S. 161 : 1975

INSTITUTE FOR INDUSTRIAL RESEARCH AND STANDARDS Ballymun Road, Dublin 9 Telegrams: Research, Dublin Telephone: 370101 This is a free page sample. Access the full version online.

# CONTENTS

	DECLARATION	¥ •	••	••		••	Page 4
		Clau	ises				
1.	SCOPE	••	• •	•••		••	5
2.	DEFINITIONS	••	••	* 4	e •	••	5
3.	MANUFACTURE	••	••	* e		••	5
4.	MATERIALS	••	••	••		••	7
5.	DESIGNATION	••	••	••	••	••	7
6.	SIZES AND GRADES	••	••	۰.	• •		7
7.	TOLERANCES	* •	••	••	• •	••	9
8.	RADIUS OF CURVATUR	Е	••	• •	• •	••	9
9.	HAND HOLES	• •	••	••		••	10
10.	SCREWED CONNECTION	IS FOR	PIPES	••			10
11.	FIXING PROVISION FOR	AN ELE	CTRIC II	MMERSI	ON HEA	ATER	10
12.	FIXING PROVISION FOR	A GAS	CIRCUI	LATOR	<b>6</b> 6		12
13.	PRESSURE TESTS	• •	••		••		12
14.	MARKING	* •	••	••	• •		12

# Figures

1.	Radius of curvature	8
2.	Position of screwed pipe connections for cylinder sizes 1 to 6 and position	11
	of connection for a top entry immersion heater for cylinders of all sizes	
3.	Position of screwed pipe connections for cylinder size 7 and position of	
	connection for a side entry immersion heater for cylinders of all sizes	13

## Tables

1.	Dimensions and details of copper cylinders	••	••		6
2.	Tolerances on thickness of copper sheet	••	• •	٠ ټ	9

### DECLARATION

OF

**SPECIFICATION** 

ENTITLED

#### COPPER DIRECT CYLINDERS FOR DOMESTIC PURPOSES

AS

THE IRISH STANDARD SPECIFICATION FOR

COPPER DIRECT CYLINDERS FOR DOMESTIC PURPOSES

The Institute for Industrial Research and Standards in exercise of the power conferred by section 20 of the Industrial Research and Standards Act, 1961 (No. 20 of 1961), and with the consent of the Minister for Industry and Commerce, hereby declares as follows:

1. This instrument may be cited as the Standard Specification (Copper Direct Cylinders for Domestic Purposes) Declaration, 1975.

2. (1) The Specification set forth in the Schedule to this declaration is hereby declared to be the standard specification for Copper Direct Cylinders for Domestic Purposes.

(2) The said standard specification may be cited as Irish Standard 161:1975 or as I.S. 161:1975.

3. (1) The Standard Specification (Copper Cylinders for Domestic Purposes) Declaration, 1968, is hereby revoked.

(2) Reference in any other standard specification to the Instrument hereby revoked and to Irish Standard 161:1968, thereby prescribed, shall be construed, respectively. as references to this Instrument and to Irish Standard 161:1975.

#### SCHEDULE

# **Copper Direct Cylinders for Domestic Purposes**

#### 1. Scope

1.1 This specification covers requirements for copper direct cylinders of three grades and seven sizes, for storage of hot water. The capacities are from 98 to 370 litres. The cylinders are intended for fixing in the vertical position and are all of the type in which the bottom is domed inwards.

#### 2. DEFINITIONS

2.1 For the purposes of this specification the following definitions apply:

Cylinder: A closed cylindrical vessel with domed ends.

Screwed connection. Any threaded connection to which pipes or apparatus can be fitted.

Working head. The working head is the vertical distance from the bottom of the cylinder to the water line of the cistern supplying it.

#### 3. MANUFACTURE

3.1 As far as is practicable, after manufacture, the copper forming the cylinder shall be in the work-hardened condition. All seams shall be jointed by one of the following methods:

(i) Welting, in a manner which gives four times the thickness of metal at the seam, and brazing.

(ii) Over-lapping. not less than 5 mm wide, and brazing with full penetration.

(iii) Butt welding.

3.2 The body of a cylinder shall be plain sided except that it may have not more than two circumferential swage marks or corrugations. These shall be rounded and not sharp edged. The bottom of a cylinder may have a spinning location recess.

3.3 In forming the top and bottom of the cylinder a reduction in thickness of the sheet used of not more than 25% is permissible. Alternatively,



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