
INTERNATIONAL STANDARD



864

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION • МЕЖДУНАРОДНАЯ ОРГАНИЗАЦИЯ ПО СТАНДАРТИЗАЦИИ • ORGANISATION INTERNATIONALE DE NORMALISATION

Solid wires for gas-shielded metal-arc welding of mild steel — Dimensions of wires, spools, rims and coils

Fils utilisés dans le soudage à l'arc de l'acier doux, avec fil-électrode nu sous protection gazeuse — Dimensions des fils, bobines, jantes et couronnes

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FOREWORD

ISO (the International Organization for Standardization) is a worldwide federation of national standards institutes (ISO Member Bodies). The work of developing International Standards is carried out through ISO Technical Committees. Every Member Body interested in a subject for which a Technical Committee has been set up has the right to be represented on that Committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work.

Draft International Standards adopted by the Technical Committees are circulated to the Member Bodies for approval before their acceptance as International Standards by the ISO Council.

International Standard ISO 864 was drawn up by Technical Committee ISO/TC 44, *Welding*, and circulated to the Member Bodies in October 1973.

It has been approved by the Member Bodies of the following countries:

Australia	France	Spain
Austria	India	Sweden
Belgium	Ireland	Switzerland
Bulgaria	Israel	Thailand
Canada	Italy	Turkey
Chile	Netherlands	United Kingdom
Czechoslovakia	Portugal	U.S.S.R.
Egypt, Arab Rep. of	Romania	Yugoslavia
Finland	South Africa, Rep. of	

The Member Bodies of the following countries expressed disapproval of the document on technical grounds:

Germany
Japan
U.S.A.

This International Standard cancels and replaces ISO Recommendation R 864-1968, of which it constitutes a technical revision.

Solid wires for gas-shielded metal-arc welding of mild steel —
Dimensions of wires, spools, rims and coils

1 SCOPE AND FIELD OF APPLICATION

This International Standard specifies dimensions and tolerances of wires, spools, rims and coils.
It only deals with solid wires for gas-shielded metal-arc welding of mild steel.

2 DIMENSIONS OF WIRES — NOMINAL DIAMETERS AND TOLERANCES

The nominal diameters and tolerances of wires are given in table 1.

TABLE 1

Dimensions in millimetres	
Nominal diameters	Tolerances
0,5 0,6	$\left. \begin{array}{l} + 0,01 \\ - 0,03 \end{array} \right\}$
0,8 0,9 1,0 1,2 1,6	$\left. \begin{array}{l} + 0,01 \\ - 0,04 \end{array} \right\}$
2,0 (2,4) ¹⁾ 2,5 3,2	$\left. \begin{array}{l} + 0,01 \\ - 0,07 \end{array} \right\}$

1) Non-preferred diameter.

3 DIMENSIONS OF SPOOLS, RIMS AND COILS WITH FORMER

3.1 Dimensions of spools

The dimensions of spools are given in table 2.

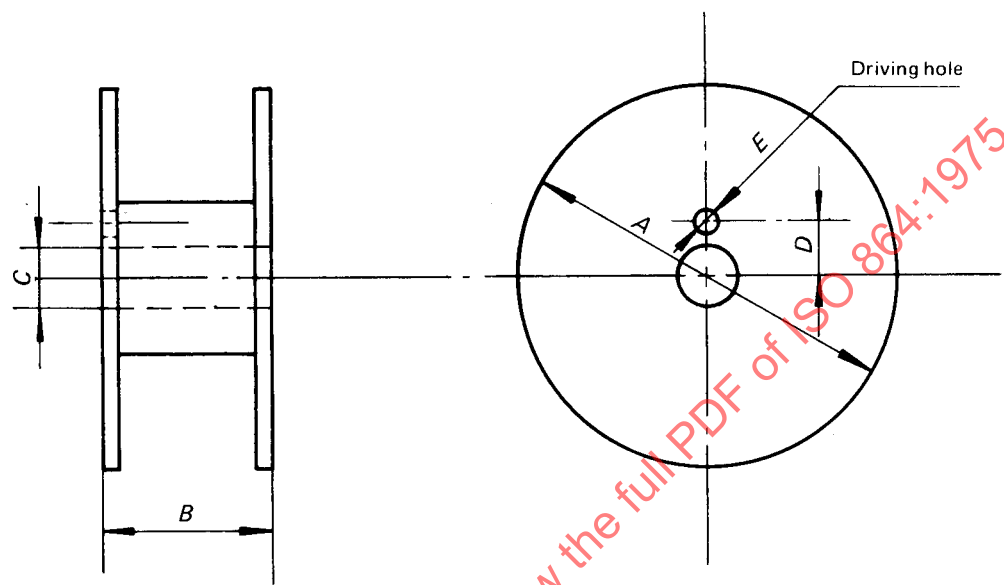


TABLE 2

Dimensions in millimetres

A		B		C		D		E	
Diameter	Tolerance	Width	Tolerance	Diameter	Tolerance	Distance between axes	Tolerance	Diameter	Tolerance
100	± 2	45	$\begin{smallmatrix} 0 \\ -2 \end{smallmatrix}$	16,0	$\begin{smallmatrix} +1 \\ 0 \end{smallmatrix}$	—	—	—	—
200	± 3	55	$\begin{smallmatrix} 0 \\ -3 \end{smallmatrix}$	50,5	$\begin{smallmatrix} +2,5 \\ 0 \end{smallmatrix}$	44,5	$\pm 0,5$	10	$\begin{smallmatrix} +1 \\ 0 \end{smallmatrix}$
300	± 5	103	$\begin{smallmatrix} 0 \\ -3 \end{smallmatrix}$	50,5	$\begin{smallmatrix} +2,5 \\ 0 \end{smallmatrix}$	44,5	$\pm 0,5$	10	$\begin{smallmatrix} +1 \\ 0 \end{smallmatrix}$
350	± 5	103	$\begin{smallmatrix} 0 \\ -3 \end{smallmatrix}$	50,5	$\begin{smallmatrix} +2,5 \\ 0 \end{smallmatrix}$	44,5	$\pm 0,5$	10	$\begin{smallmatrix} +1 \\ 0 \end{smallmatrix}$
435	± 5	103	$\begin{smallmatrix} 0 \\ -3 \end{smallmatrix}$	50,5	$\begin{smallmatrix} +2,5 \\ 0 \end{smallmatrix}$	44,5	$\pm 0,5$	10	$\begin{smallmatrix} +1 \\ 0 \end{smallmatrix}$

3.2 Dimensions of rims

The dimensions of rims are given in table 3.

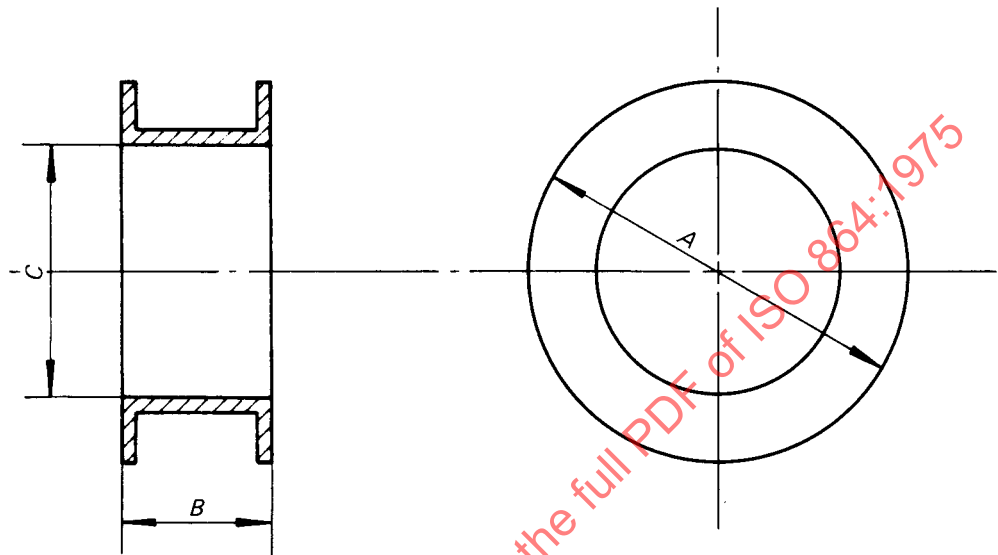


TABLE 3

Dimensions in millimetres

A		B		C	
Diameter	Tolerance	Width	Tolerance	Diameter	Tolerance
300	± 5	90	$\begin{matrix} 0 \\ -15 \end{matrix}$	200	$\begin{matrix} +10 \\ 0 \end{matrix}$
		120	$\begin{matrix} 0 \\ -20 \end{matrix}$		
350	± 5	90	$\begin{matrix} 0 \\ -15 \end{matrix}$	300	$\begin{matrix} +15 \\ 0 \end{matrix}$
		120	$\begin{matrix} 0 \\ -20 \end{matrix}$		
435	± 5	90	$\begin{matrix} 0 \\ -15 \end{matrix}$	300	$\begin{matrix} +15 \\ 0 \end{matrix}$
		120	$\begin{matrix} 0 \\ -20 \end{matrix}$		

3.3 Dimensions of coils with former/supports

The dimensions of coils with former/supports are given in table 4.

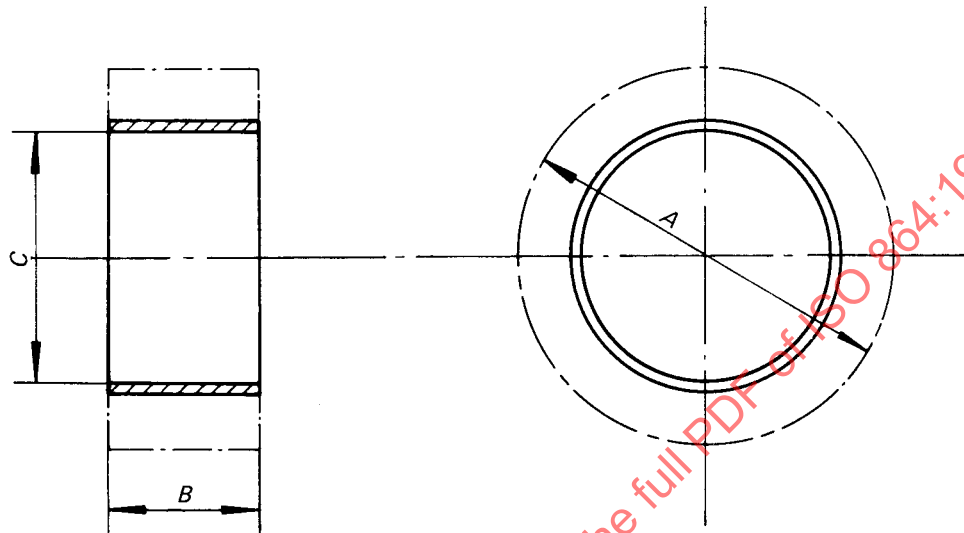


TABLE 4

Dimensions in millimetres

A ¹⁾			C	
Diameter	Width	Tolerance	Diameter	Tolerance
300 max.	90	0 - 15	200	+ 10 0
	120	0 - 20		
350 max.	90	0 - 15	300	+ 15 0
	120	0 - 20		
435 max.	90	0 - 15	300	+ 15 0
	120	0 - 20		

1) Preferred sizes.