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INTERNATIONAL ORGANIZATION FOR STANDARDIZATION
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МЕЖДУНАРОДНАЯ ОРГАНИЗАЦИЯ ПО СТАНДАРТИЗАЦИИ

Arc welding — Solid and tubular cored wires which deposit carbon and carbon manganese steel — Dimensions of wires, spools, rims and coils

Soudage à l'arc — Fils nus massifs et fourrés déposant un acier au carbone et un acier au carbone-manganèse — Dimensions des fils, bobines, jantes et couronnes

Reference number
ISO 864 : 1988 (E)

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established 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. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

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. They are approved in accordance with ISO procedures requiring at least 75 % approval by the member bodies voting.

International Standard ISO 864 was prepared by Technical Committee ISO/TC 44, *Welding and allied processes.*

This second edition cancels and replaces the first edition (ISO 864 : 1975), of which it constitutes a technical revision.

Printed in Switzerland

Arc welding — Solid and tubular cored wires which deposit carbon and carbon manganese steel — Dimensions of wires, spools, rims and coils

1 Scope

This International Standard specifies dimensions and tolerances of wires, spools, rims and coils.

It deals with solid and tubular cored wires used for arc welding of non-alloyed steel, with or without gas shielding or with powder flux.

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

<table>
<tr><th rowspan="3">Nominal diameter</th><th colspan="2">Solid wires</th><th colspan="3">Tubular cored wires</th></tr>
<tr><th colspan="2"></th><th colspan="2">Drawn | Rolled</th><th></th></tr>
<tr><th>Gas-shielded welding</th><th>Submerged arc welding</th><th colspan="2">With or without gas shielding</th><th>Submerged arc welding</th></tr>
<tr><th colspan="5">Tolerances on nominal diameter</th></tr>
<tr><td>0,6</td><td rowspan="2">+ 0,01
− 0,03</td><td rowspan="2">—</td><td rowspan="4">+ 0,02
− 0,05</td><td rowspan="4">± 0,05</td><td rowspan="4">—</td></tr>
<tr><td>0,8</td></tr>
<tr><td>0,9</td><td rowspan="9">+ 0,01
− 0,04</td></tr>
<tr><td>1,0</td><td rowspan="3">± 0,04</td></tr>
<tr><td>1,2</td></tr>
<tr><td>1,4</td><td rowspan="5">+ 0,04
− 0,05</td></tr>
<tr><td>1,6</td><td rowspan="4">+ 0,02
− 0,06</td><td rowspan="5">± 0,08</td></tr>
<tr><td>1,8</td></tr>
<tr><td>2,0</td></tr>
<tr><td>2,4</td></tr>
<tr><td>2,5</td></tr>
<tr><td>2,8</td><td rowspan="4">+ 0,01
− 0,07</td><td rowspan="5">± 0,06</td></tr>
<tr><td>3,0</td></tr>
<tr><td>3,2</td><td>+ 0,02
− 0,07</td></tr>
<tr><td>4,0</td><td rowspan="2">+ 0,06
− 0,08</td></tr>
<tr><td>5,0</td><td>—</td><td colspan="2">—</td></tr>
<tr><td>6,0</td><td></td><td></td><td></td></tr>
</table>

3 Dimensions of spools, rims and coils with former

3.1 Dimensions of spools

The dimensions of spools are given in table 2.

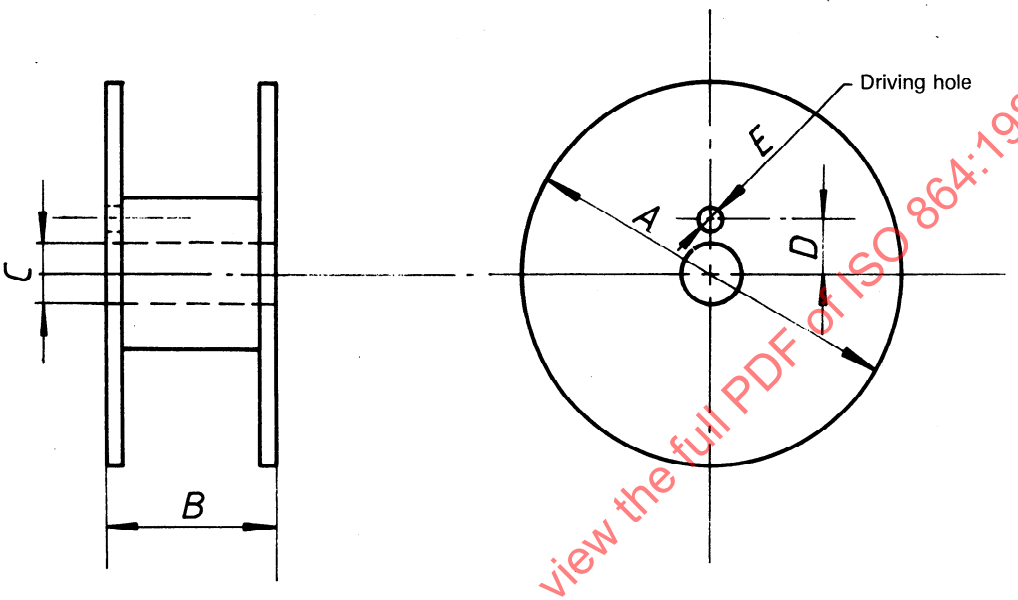

Table 2

Dimensions in millimetres

A	tol.	*B*	tol.	*C*	tol.	*D*	tol.	*E*	tol.
100	± 2	45	$^{0}_{-2}$	16	$^{+1}_{0}$	—	—	—	—
200	± 3	55	$^{0}_{-3}$	50,5	$^{+2,5}_{0}$	44,5	± 0,5	10	$^{+1}_{0}$
300	± 5	103							
350									
435									

3.2 Dimensions of rims

The dimensions of rims are given in table 3.

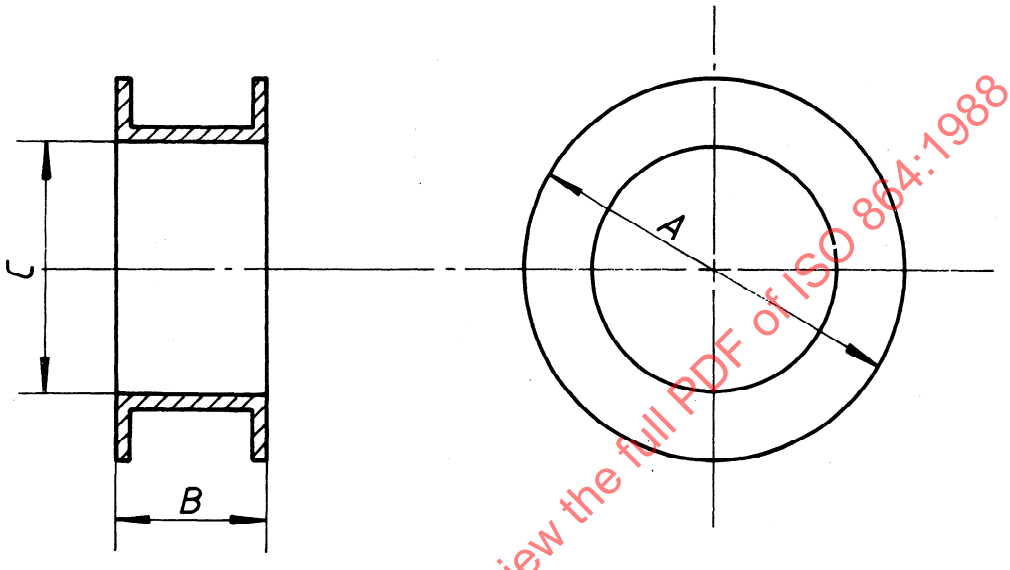

Table 3

Dimensions in millimetres

A	tol.	*B*	tol.	*C*	tol.
300	± 5	90	0 − 15	200	+ 10 0
		120	0 − 20		
350		90	0 − 15	300	+ 15 0
		120	0 − 20		
435		90	0 − 15		
		120	0 − 20		

3.3 Dimensions of coils with former/supports

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

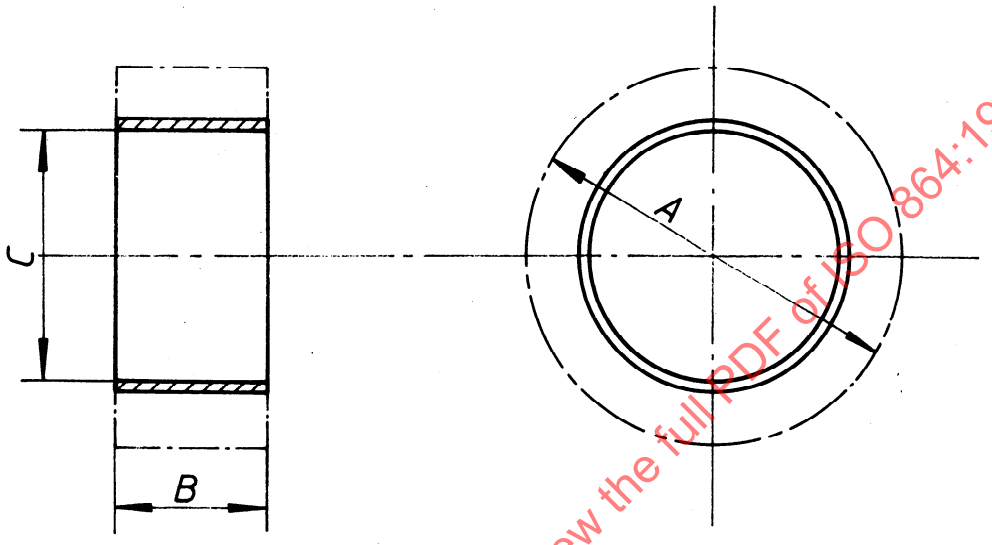

Table 4

Dimensions in millimetres

A [1] max.	*B*	tol.	*C*	tol.
300	90	0 / − 15	200	+ 10 / 0
	120	0 / − 20		
350	90	0 / − 15	300	+ 15 / 0
	120	0 / − 20		
435	90	0 / − 15		
	120	0 / − 20		

1) Preferred sizes.