
International Standard



5019/6

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

Refractory bricks — Dimensions — Part 6 : Basic bricks for oxygen steel-making converters

Briques réfractaires — Dimensions — Partie 6 : Briques basiques pour convertisseurs à oxygène

First edition — 1984-09-15

STANDARDSISO.COM : Click to view the full PDF of ISO 5019-6:1984

UDC 666.76-43

Ref. No. ISO 5019/6-1984 (E)

Descriptors : steel converters, refractory materials, bricks, dimensions, designation.

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. Every 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.

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 5019/6 was prepared by Technical Committee ISO/TC 33, *Refractories*.

Refractory bricks — Dimensions — Part 6: Basic bricks for oxygen steel-making converters

0 Introduction

This document provides for twelve thicknesses of lining, rising from a minimum of 250 mm to a maximum of 800 mm in steps of 50 mm.

For each lining thickness there is a rectangular brick (i.e. a brick with zero taper) and bricks with either four rates of taper (for the five smallest thicknesses) or five (for the seven largest thicknesses). All the bricks have a constant median dimension of 150 mm.

The course height is uniformly 100 mm.

1 Scope and field of application

1.1 This part of ISO 5019 specifies the dimensions of basic refractory bricks for use in oxygen steel-making converters.

1.2 For information, the calculated volume of each size of brick is shown in the table, and also the internal diameter of lining for which each size is suitable, if used alone. These diameters have been calculated with no allowance for joint thickness.

2 Dimensions

The dimensions of basic bricks for use in oxygen steel-making converters shall be as shown in the table.

The letters designating the dimensions in the table are shown in the figure. The letters do not necessarily apply to tables and figures in other International Standards.

3 Bricks designations

Each brick size has a conventional designation, as shown in the first column of the table. Each designation consists of two

groups of digits separated by a solidus (slash). The first group, of two digits, before the solidus, shows the brick length (or lining thickness) in centimetres; the second group, after the solidus, shows the difference between the cold and hot face dimensions in millimetres (i.e. the rate of taper). In the case of a rectangular brick the second group is a single zero.

4 Tolerances

Tolerances on the dimensions specified in the table shall be the subject of agreement between the purchaser and the supplier.

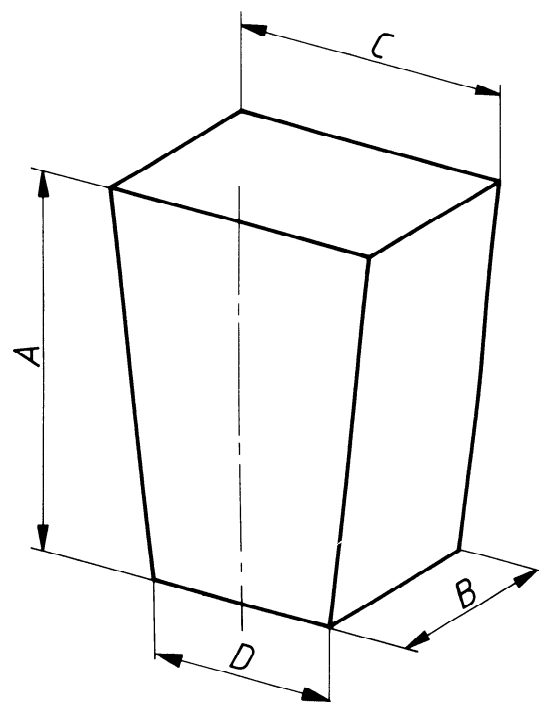


Figure — Brick for oxygen steel-making converters

Table — Dimensions of basic bricks for oxygen steel-making converters

Designation	Dimensions mm			Internal diameter m	Volume dm ³
	<i>A</i>	<i>B</i>	<i>C/D</i>		
25/60 25/30 25/16 25/8 25/0	250	100	180/120	1,000	3,75
			165/135	2,250	
			158/142	4,438	
			154/146	9,125	
			150/150	—	
30/70 30/40 30/20 30/8 30/0	300	100	185/115	0,986	4,50
			170/130	1,950	
			160/140	4,200	
			154/146	10,950	
			150/150	—	
35/80 35/40 35/20 35/8 35/0	350	100	190/110	0,963	5,25
			170/130	2,275	
			160/140	4,900	
			154/146	12,775	
			150/150	—	
40/80 40/40 40/20 40/8 40/0	400	100	190/110	1,100	6,00
			170/130	2,600	
			160/140	5,600	
			154/146	14,600	
			150/150	—	
45/90 45/40 45/20 45/8 45/0	450	100	195/105	1,050	6,75
			170/130	2,925	
			160/140	6,300	
			154/146	16,425	
			150/150	—	
50/100 50/60 50/36 50/20 50/8 50/0	500	100	200/100	1,000	7,50
			180/120	2,000	
			168/132	3,667	
			160/140	7,000	
			154/146	18,250	
			150/150	—	

Table — Dimensions of basic bricks for oxygen steel-making converters (*concluded*)

Designation	Dimensions mm			Internal diameter m	Volume dm ³
	<i>A</i>	<i>B</i>	<i>C/D</i>		
55/110 55/60 55/36 55/20 55/8 55/0	550	100	205/95	0,950	8,25
			180/120	2,200	
			168/132	4,033	
			160/140	7,700	
			154/146	20,075	
			150/150	—	
60/120 60/60 60/36 60/20 60/8 60/0	600	100	210/90	0,900	9,00
			180/120	2,400	
			168/132	4,400	
			160/140	8,400	
			154/146	21,900	
			150/150	—	
65/120 65/60 65/36 65/20 65/8 65/0	650	100	210/90	0,975	9,75
			180/120	2,600	
			168/132	4,767	
			160/140	9,100	
			154/146	23,725	
			150/150	—	
70/120 70/60 70/36 70/20 70/8 70/0	700	100	210/90	1,050	10,50
			180/120	2,800	
			168/132	5,133	
			160/140	9,800	
			154/146	25,550	
			150/150	—	
75/120 75/60 75/36 75/20 75/8 75/0	750	100	210/90	1,125	11,25
			180/120	3,000	
			168/132	5,500	
			160/140	10,500	
			154/146	27,375	
			150/150	—	
80/120 80/60 80/36 80/20 80/8 80/0	800	100	210/90	1,200	12,00
			180/120	3,200	
			168/132	5,867	
			160/140	11,200	
			154/146	29,200	
			150/150	—	

This page intentionally left blank

STANDARDSISO.COM : Click to view the full PDF of ISO 5019-6:1984