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МЕЖДУНАРОДНАЯ ОРГАНИЗАЦИЯ ПО СТАНДАРТИЗАЦИИ

Refractory bricks for use in rotary kilns — Hot-face identification marking

Briques réfractaires à utiliser dans les fours rotatifs — Marquage de la face chaude

Reference number
ISO 9205 : 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 9205 was prepared by Technical Committee ISO/TC 33, *Refractories*.

Printed in Switzerland

Introduction

A draft International Standard on this subject was originally prepared as a part of ISO/DIS 5417, which failed to obtain the necessary voting approval because of its association with certain standard sizes.

This International Standard has been separated from consideration of standard sizes, and now contains two methods for marking bricks: the principal method and a supplementary or optional method.

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Refractory bricks for use in rotary kilns — Hot-face identification marking

1 Scope

This International Standard specifies a system of marking the working face of refractory bricks for use in rotary kilns.

The method is intended to provide a quick and easy way of checking that each brick has been installed with the taper in the correct direction, and also to assist in brick identification for turning circles.

The sizes of the bricks are given in ISO 5417.

2 Normative reference

The following standard contains provisions which, through reference in this text, constitute provisions of this International Standard. At the time of publication, the edition indicated was valid. All standards are subject to revision, and parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent edition of the standard indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 5417 : 1986, *Refractory bricks for use in rotary kilns — Dimensions.*

3 Requirements

The "notch" system (clause 4) shall be used as the principal method of marking. The colour coding system (clause 5) shall be used as an additional extra system where requested.

NOTE — The need for colour coding should be agreed between manufacturer and purchaser.

4 Marking by the "notch" system

4.1 Types of notch

Each notch shall be distinct and shall penetrate into the brick so that it is easily recognized. The notches shall have rounded edges. Three types of notches are illustrated in figure 1, and one of these types shall be used. The dimensions of the notch are not critical.

4.2 Position

Each notch shall be either on the centre-line of the hot face of the brick, or on a line approximately 66 mm from that centre-line, as shown in figure 1.

4.3 Identification of turning circles

The five combinations of notches and their significance in terms of the turning circle shall be as shown in figure 2.

5 Marking by colour coding

5.1 The use of colour coding is additional to the system of notches described in clause 4.

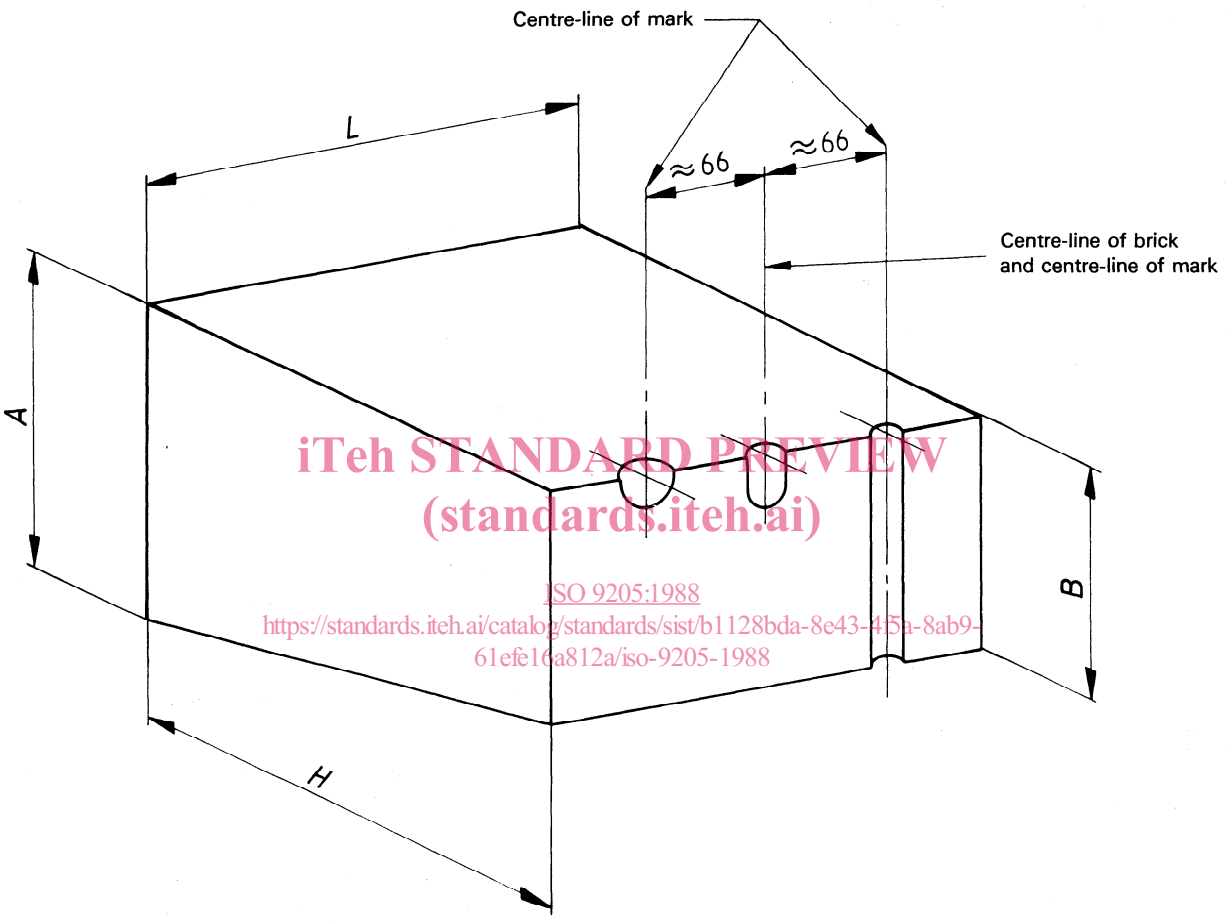
Coding is achieved by a system of different coloured marks which designate turning circles. Such coloured marks shall be applied to the hot face of the bricks prior to despatch. The intensity and extent of the colour shall be sufficient to clearly indentify the bricks.

5.2 The colours used for each turning circle shall be as given in table 1.

Table 1 — Colour coding for turning circles

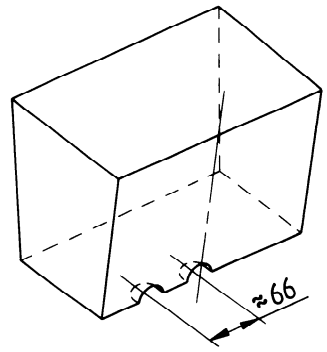
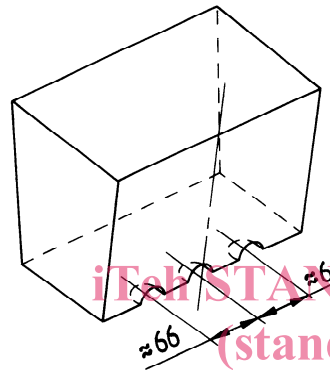
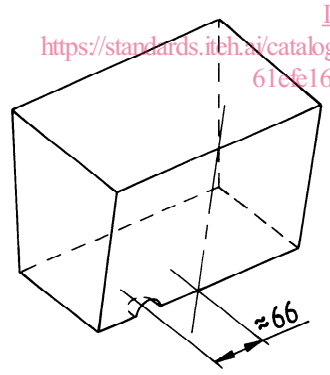
Inside diameter of kiln shell m	Colour of marks on bricks
2	white
3	lilac
4	yellow
5	brown
6	red
7	grey
8	green
Closing bricks	blue

Dimensions in millimetres



NOTE — The letters A, B, H and L have the same meanings as in ISO 5417.

Figure 1 — Positions and types of notches

Inside diameter of kiln shell	Notch arrangement Distances between notches in millimetres
2 m	
3 m	
4 m	

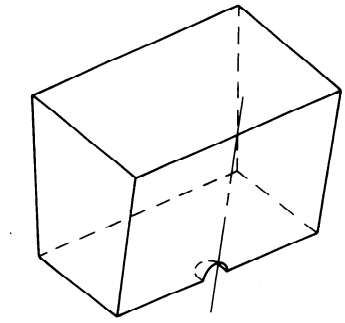
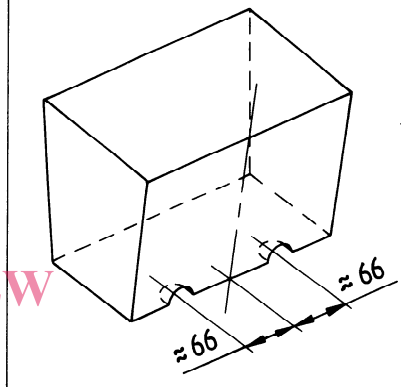
Inside diameter of kiln shell	Notch arrangement Distances between notches in millimetres
5 m and 6 m	
7 m and 8 m	

Figure 2 — Identification notches for turning circles

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Descriptors : kilns, refractory materials, bricks, marking.

Price based on 3 pages