
International Standard



7806

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

Industrial plate screens — Codification for designating perforations

Tôles perforées pour tamisage industriel — Codification pour la désignation des perforations

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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (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 authorized 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 7806 was developed by Technical Committee ISO/TC 24, *Sieves, sieving and other sizing methods*, and was circulated to the member bodies in November 1982.

It has been approved by the member bodies of the following countries :

Australia	India	South Africa, Rep. of
Belgium	Italy	Spain
Canada	Japan	Switzerland
Egypt, Arab Rep. of	Korea, Dem. P. Rep. of	United Kingdom
France	Netherlands	USSR
Germany, F. R.	Romania	

No member body expressed disapproval of the document.

Industrial plate screens — Codification for designating perforations

0 Introduction

The system laid down in this International Standard codifies the designation of perforated plate in order to facilitate communication between purchaser and supplier. It is based on work carried out in 1968 by the European association of manufacturers of perforated plate (EUOPERF). It is recommended that this system be applied worldwide, in order to discourage the development and use of a diversity of national codes.

1 Scope and field of application

This International Standard specifies the code for designating various kinds of perforations and their arrangements in perforated plate. It applies to perforated plate regardless of the plate material.

2 Reference

ISO 2395, *Test sieves and test sieving — Vocabulary*.

3 Definitions

For the purpose of this International Standard, the definitions given in ISO 2395 apply.

4 Designation

The perforation of a plate is designated by

- shape of the holes;
- aperture size w , or aperture sizes w_1 and w_2 in case of slots;
- mutual arrangements of holes;
- pitch p , or pitches p_1 and p_2 in cases where the pitches are different in directions parallel to the edges of the plate;
- orientation of the arrangement of the perforations relative to the edges of the plate.

The codification expresses the items of designation by symbols and magnitudes in the sequence used above.

NOTES

1 Examples are given in figures 1 to 20 of each type of designation. To ensure easy readability of codifications, it is essential

- to separate clearly codifications for hole and codifications for pitch, and
- to state codification magnitudes which are combined with "x" without spacing between.

(See figures 7 to 14 and 17 to 20.)

2 The purchaser should specify the size, thickness and material of the perforated plate for his purpose in addition to the codification.

5 Codification

5.1 Shape of holes

The shape of holes shall be designated by the following symbols:

R : circular (round)

C : square, with sides parallel to the edges of the plate

CD : square, with diagonals parallel to the edges of the plate

H : hexagonal

LR : slots with round ends

LC : slots with square ends

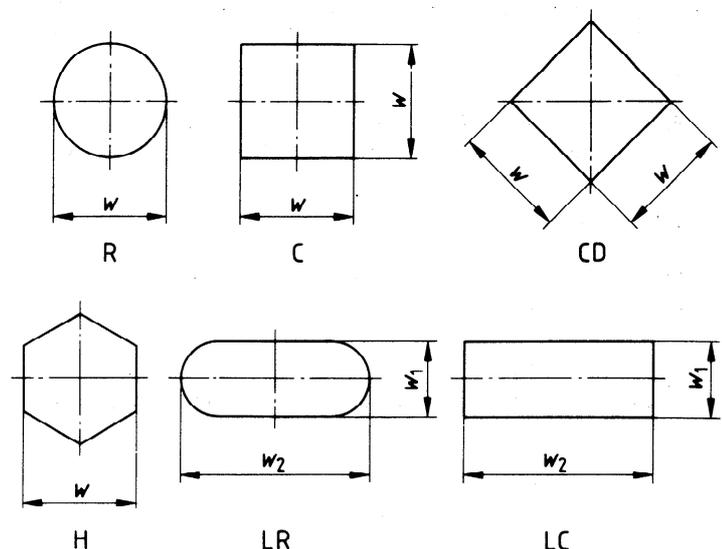


Figure 1 — Code for shape of holes

5.2 Aperture size

Following the symbol for shape of hole, the aperture size shall be stated in millimetres.

The width of a slot, w_1 , combined with its length, w_2 , by the sign \times shall be stated in that order.

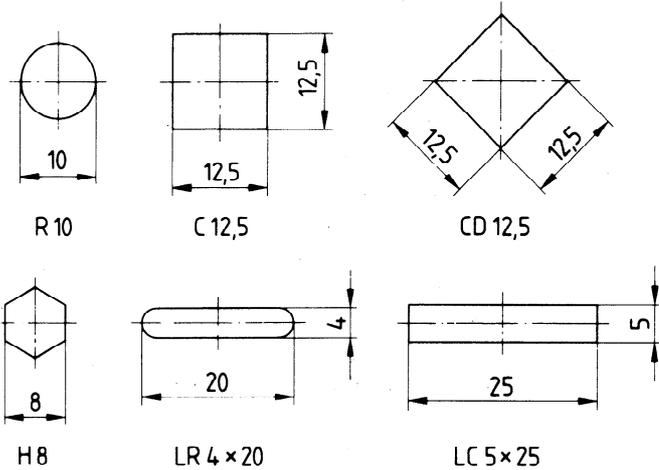


Figure 2 — Examples of coded shape of hole and aperture size

5.3 Arrangement of holes

Following aperture size, the appropriate symbol for the arrangement of holes shall be stated, as follows :

5.3.1 An arrangement of holes with their midpoints at the vertices of rectangles shall be coded U (see figure 3).

5.3.2 An arrangement of holes with their midpoints at the vertices of rectangles and at the intersection of their diagonals shall be coded Z (see figure 4).

5.3.3 An arrangement of holes with their midpoints at the vertices of squares and at the intersection of their diagonals may be coded M (see figure 5).

5.3.4 An arrangement of holes with their midpoints at the vertices of equilateral triangles shall be coded T (see figure 6).

5.4 Pitch

Following the symbol for arrangement of holes, their pitch or pitches shall be stated in millimetres.

5.4.1 For shapes R, C, CD or H in U- or Z-arrangements, both pitches shall be stated, the shorter one, p_1 , first, and combined

by the sign \times (see figures 7 and 8). In the case of a U-arrangement, when $p_1 = p_2$, only p shall be stated (see figure 11).

5.4.2 For shapes LR or LC (slots) in U- or Z-arrangements, the pitch parallel to the width of the slots, p_1 , shall be stated first (see figures 9 and 10). In the case of a U-arrangement, when $p_1 = p_2$, only p shall be stated (see figure 12).

5.4.3 For M- or T-arrangements, only p shall be stated (see figures 13 and 14).

5.5 Orientation of the perforation on the plate

There are operating conditions in which the orientation of the perforations with the edges of the plate affects the performance as an industrial screen. Choice of orientation is stated as Orientation 1 or Orientation 2 as follows :

5.5.1 With the T-arrangement, Orientation 1 shall be with pitch p parallel to the longer edge (see figure 15); Orientation 2 with p parallel to the shorter edge (see figure 16).

5.5.2 With shapes R, C, CD and H in U- and Z-arrangements, Orientation 1 shall be with the shorter pitch p_1 parallel to the longer edge (see figure 17); Orientation 2 shall be with the shorter pitch parallel to the shorter edge (see figure 18).

5.5.3 With shapes LR and LC (slots) in U- or Z-arrangements, Orientation 1 shall be with the width w_1 parallel to the longer edge (see figure 19); Orientation 2 shall be with the width parallel to the shorter edge (see figure 20).

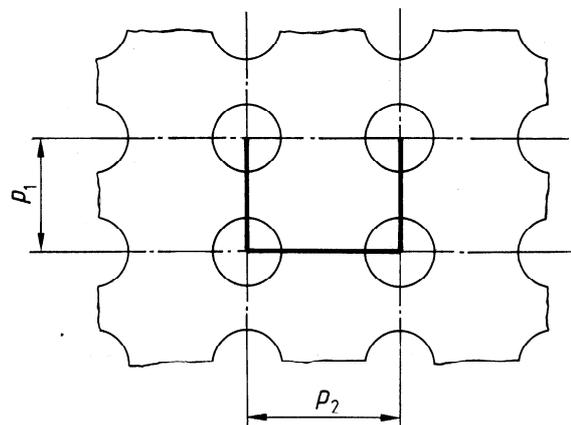


Figure 3 — U-arrangement

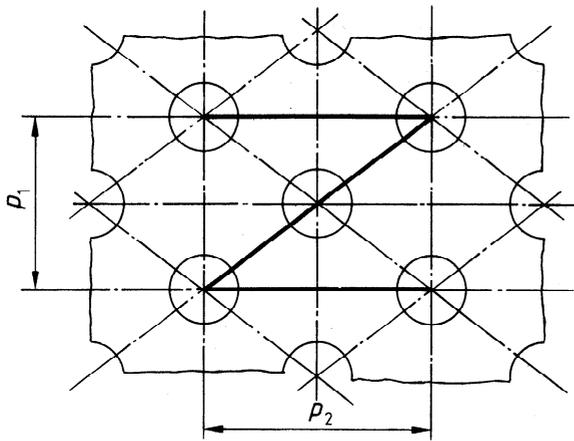


Figure 4 – Z-arrangement

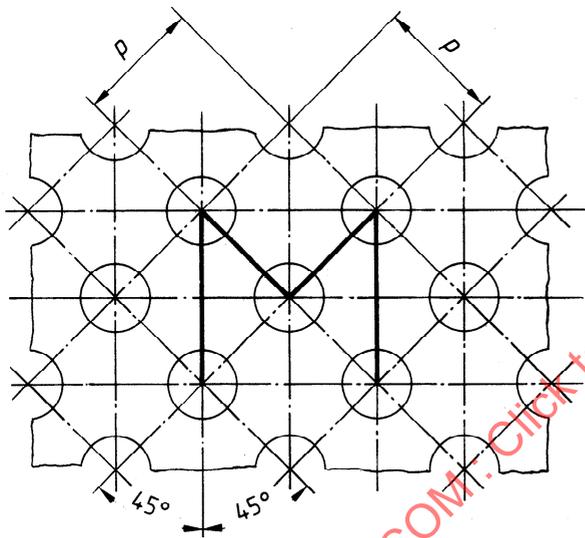


Figure 5 – M-arrangement

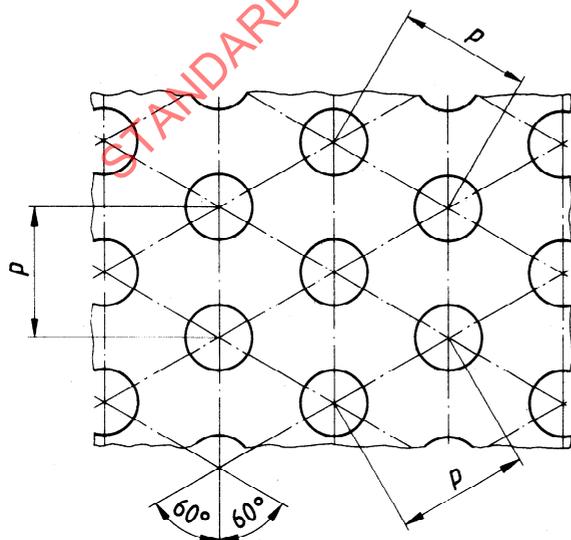


Figure 6 – T-arrangement

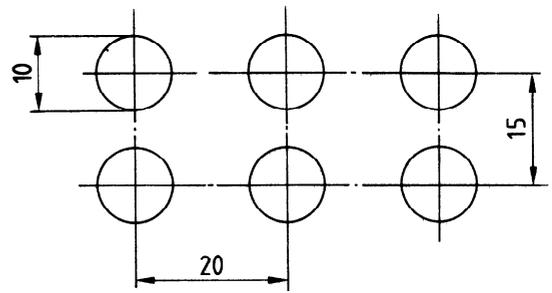


Figure 7 – Example R10 U15×20

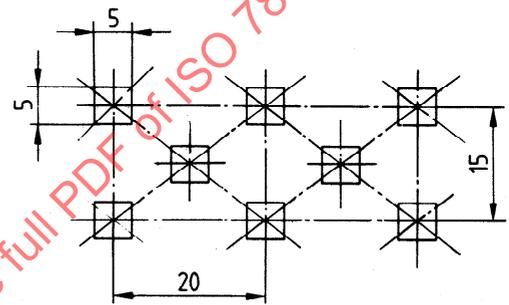


Figure 8 – Example C5 Z10×20

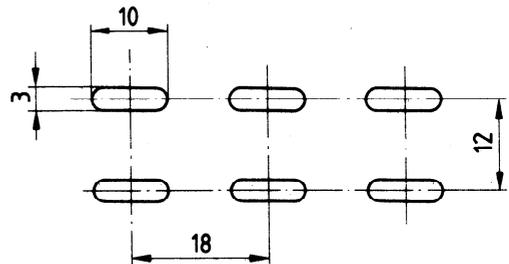


Figure 9 – Example LR3×10 U12×18

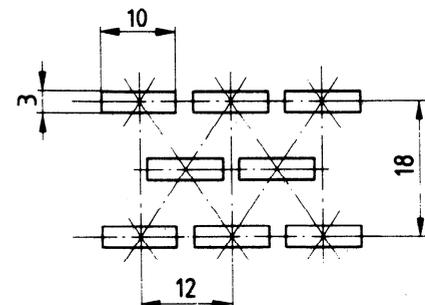


Figure 10 – Example LC3×10 Z18×12

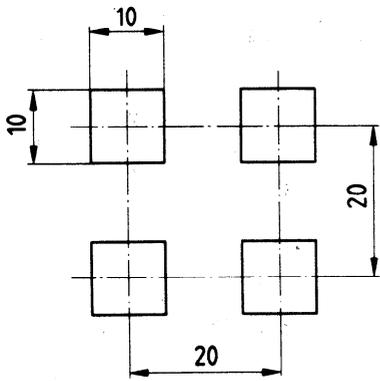


Figure 11 — Example C10 U20

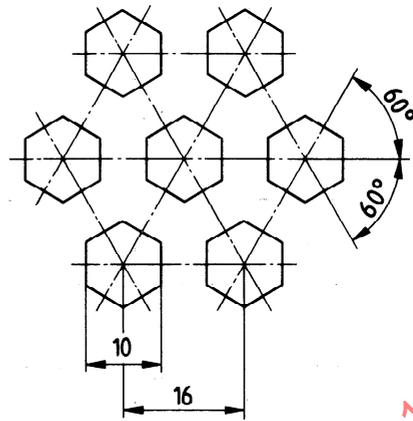


Figure 14 — Example H10 T16

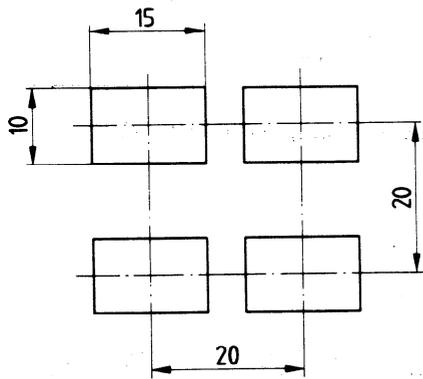


Figure 12 — Example LC10x15 U20

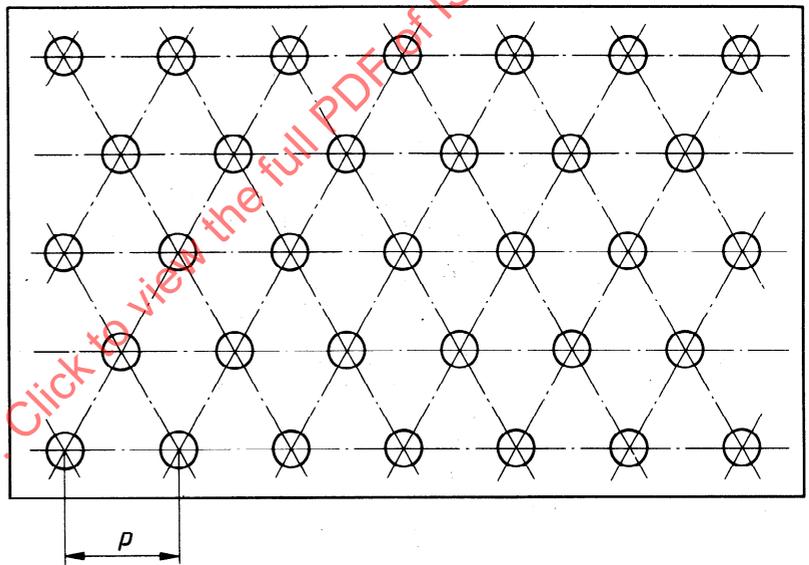


Figure 15 — T-arrangement, Orientation 1

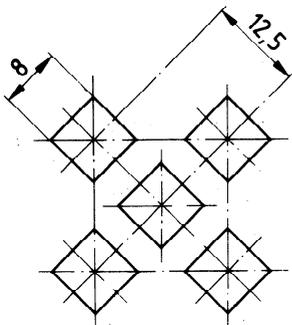


Figure 13 — Example CD8 M12,5

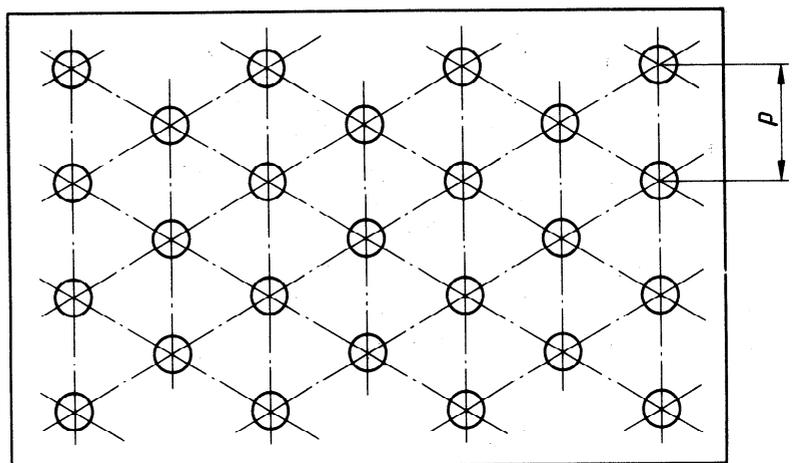


Figure 16 — T-arrangement, Orientation 2