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Fishing nets — Netting — Basic terms and definitions

Filets de pêches — Nappes de filet — Termes fondamentaux et définitions

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Foreword

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ISO 1107 was prepared by the European Committee for Standardization (CEN) in collaboration with Technical Committee ISO/TC 38, *Textiles*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

Throughout the text of this document, read "...this European Standard..." to mean "...this International Standard...".

This second edition cancels and replaces the first edition (ISO 1107:1974), which has been technically revised.

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Foreword

This document (EN ISO 1107:2003) has been prepared by Technical Committee CEN/TC 248 "Textiles and textile products", the secretariat of which is held by BSI, in collaboration with Technical Committee ISO/TC 38 "Textiles".

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by December 2003, and conflicting national standards shall be withdrawn at the latest by December 2003.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Slovakia, Spain, Sweden, Switzerland and the United Kingdom.

1 Scope

This European Standard gives the principal terms relating to netting for fishing nets, together with their definitions or, in some cases, the method of expressing dimensions.

2 Normative references

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

EN ISO 1530:2003, *Fishing nets — Description and designation of knotted netting (ISO 1530:2002).*

ISO 858, *Fishing nets — Designation of netting yarns in the Tex System.*

ISO 1139, *Textiles — Designation of yarns.*

3 Terms and definitions

For the purposes of this European Standard the following terms and definitions apply.

3.1
netting
a meshed structure of indefinite shape and size composed of one yarn or of one or more systems of yarns interlaced or joined, or obtained by other means, for example by stamping or cutting from sheet material or by extrusion

3.2
netting yarn
all types of yarns[1] suitable for the manufacture of netting

NOTE 1   The principal types of netting yarns are twines. The latter are defined below.

The size of netting yarn is indicated by its linear density expressed in the unit tex of the Tex system in accordance with ISO 858. The size of the final product is expressed by the "resultant linear density" in accordance with ISO 1139.

NOTE 2   The resultant linear density is the reciprocal of "runnage" which expresses the length per unit mass, in metres per gram or per kilogram, for example.

3.2.1
netting twine
the product of one twisting operation embracing two or more single yarns or monofilaments

3.2.2
cabled netting twine
the product of further twisting operations embracing two or more netting twines

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1) The definition in ISO 1139 denotes "yarn" folded yarn and cabled yarn as a general term embracing a single yarn (including monofilament) multiple wound yarns.

3.2.3
braided netting twine
the product of braiding or plaiting netting yarns and/or netting twines

3.3
mesh
a design formed opening, surrounded by netting material. There are several types of mesh shapes:

3.3.1
diamond mesh
a mesh composed of four sides of the same length

3.3.2
square mesh
a diamond mesh in which adjacent sides are at right angles

3.3.3
hexagonal mesh
a mesh composed of six sides, out of which the length of one pair of opposite sides can be different from that of the other four sides, in case of an irregular hexagon

3.4
size of mesh

3.4.1
length of mesh side (also referred to as half mesh)
the distance between two sequential knots or joints, measured from centre to centre when the yarn between those points is fully extended as shown in Figure 1
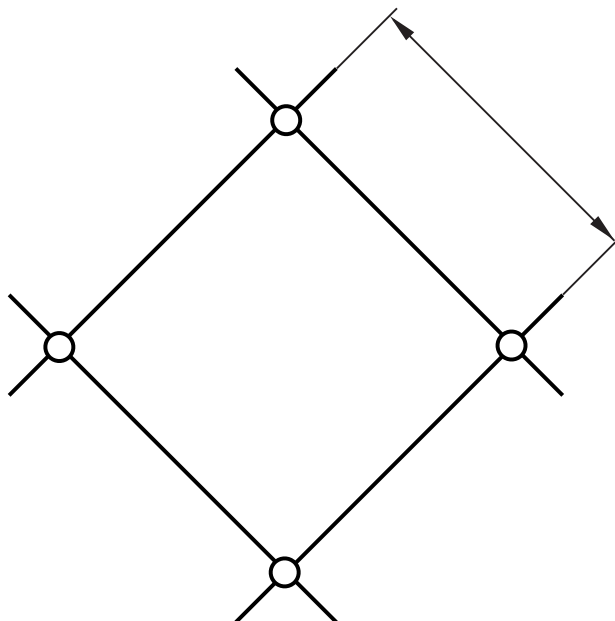
Figure 1 — Length of mesh side

NOTE   In hexagonal meshes two different values are possible in case of an irregular hexagon.

3.4.2
length of mesh
(see Figure 2)

a) for knotted netting, the distance between the centres of two opposite knots in the same mesh when fully extended in the N-direction (see definition 3.5.1.1);

b) for knotless netting, the distance between the centres of two opposite joints in the same mesh when fully extended along its longest possible axis (see definition 3.6.1.1).
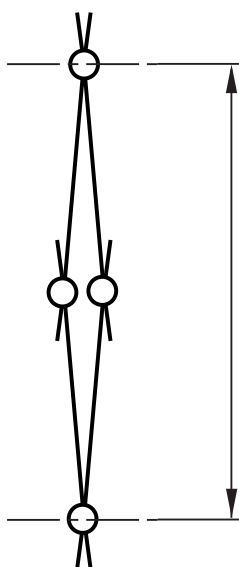

Figure 2 — Length of mesh

3.4.3
opening of mesh
(see Figure 3)

a) for knotted netting, the longest distance between two opposite knots in the same mesh when fully extended in the N-direction (see definition 3.5.1.1);

b) for knotless netting, the inside distance between two opposite joints in the same mesh when fully extended along its longest possible axis (see definition 3.6.1.1).
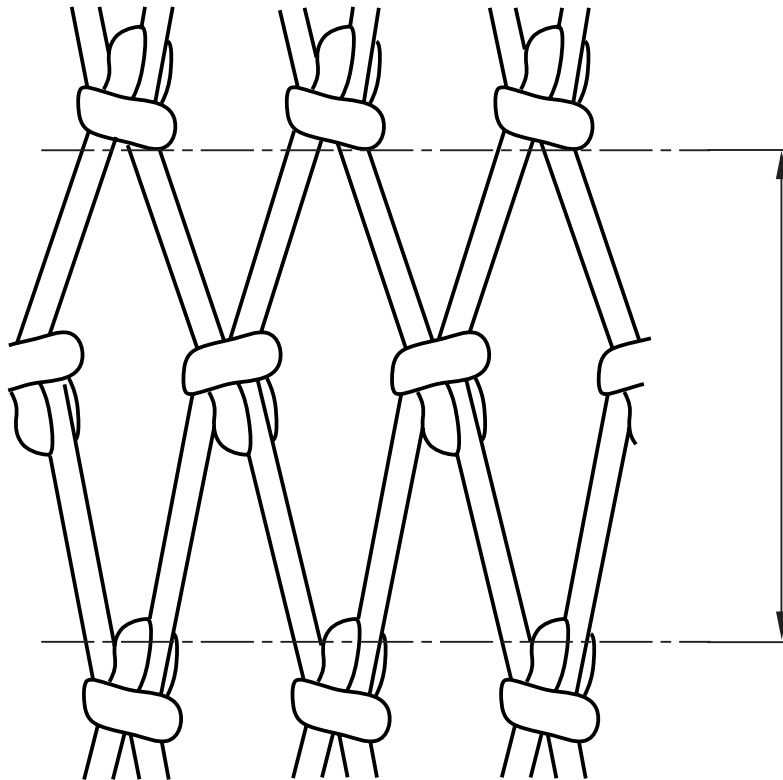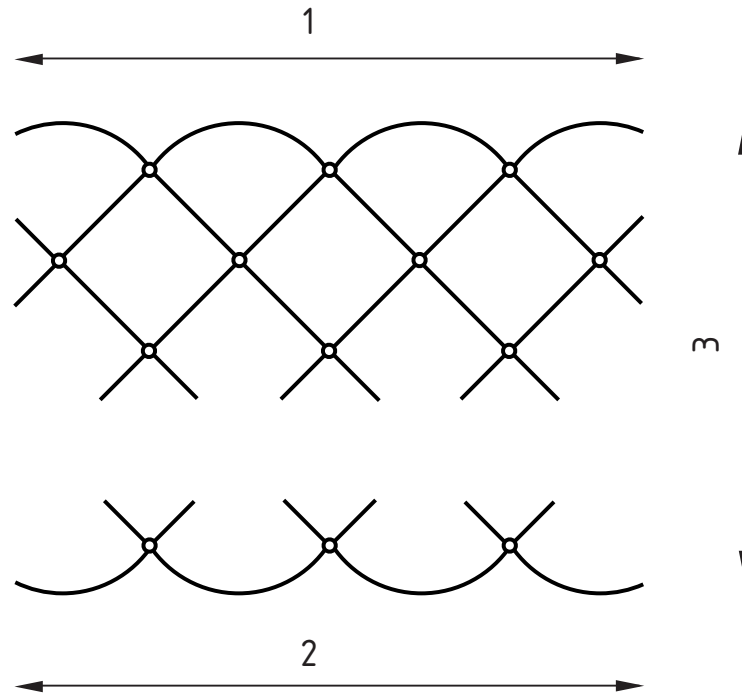
Figure 3 — Opening of mesh

3.5
knotted netting

3.5.1
general direction of the netting yarn

3.5.1.1
N-direction (depthwise)
the direction at right angles (Normal) to the general course of the netting yarn as shown in Figure 4

3.5.1.2
T-direction, (lengthwise)
the direction parallel to the general course of the netting yarn (Twinewise) as shown in Figure 4

Key

1 T-direction (lengthwise)
2 General course of the netting yarn
3 N-direction (depthwise)

Figure 4 — N-Direction ("Depthwise") and T-Direction ("Lengthwise")

3.5.2
independent of the general direction of the netting yarn

3.5.2.1
AB-directions
the directions parallel to a rectilinear sequence of mesh bars, each from adjacent meshes as shown in Figure 5

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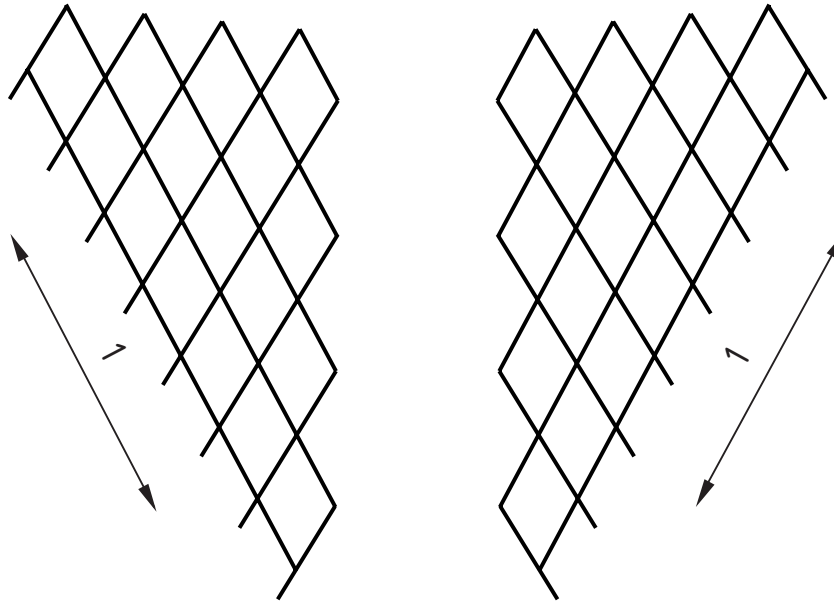
Key

1 AB direction

Figure 5 — AB-directions

3.6
knotless netting
netting constructed by joining together the filaments in the twines to form meshes without external knots

3.6.1
general direction of the netting yarn or longest axis of the mesh

NOTE   Direction in knotless netting can usually be related to the general course of the netting yarn, but this is not always so because the general course of the netting yarn cannot in every case be determined. Usually, the direction of the longest possible axis of the mesh is parallel to the general course of the netting yarn. If the two axes are equal, the direction of the netting cannot be determined and the mesh size may be determined in either direction.

3.6.1.1
N-direction (depthwise)
the direction at right angles to the general course of the netting

3.6.1.2
T-direction (lengthwise)
the direction parallel to the general course of the netting

3.6.2
independent of the general direction of the netting yarn

3.6.2.1
AB-directions
the directions parallel to a rectilinear sequence of mesh bars, each from adjacent meshes

3.7
size of netting
the number of meshes in the T-direction (meshes long (ML)) and the number of meshes in the N-direction (meshes deep (MD)) multiplied together, or the number of meshes in one direction and the length indicated in a recognized unit, for example metres, of the other direction, the netting being fully extended while the measurement is made

Examples:

1 000 ML	×	100 MD	or	1 000 T	×	100 N
1 000 ML	×	5 m	or	1 000 T	×	5 m
10 m	×	200 MD	or	10 m	×	200 N

A complete designation of the size of the netting requires, in addition, the indication of characteristics in accordance with 3.6 and 5.5 of EN ISO 1530:2003.

3.8
average length of mesh
with the netting fully extended in either the N direction for knotted netting or the direction of the longest axis of the mesh for knotless netting, the depth or length of the netting in metres divided by the number of meshes deep (MD) or meshes long (ML) respectively

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