INTERNATIONAL STANDARD

ISO 16663-1

First edition
2003-06-01

Fishing nets — Method of test for the determination of mesh size —

Part 1: Opening of mesh

Filets de pêche — Méthode d'essai pour la détermination des dimensions de la maille —

Partie 1: Ouverture de maille

Reference number
ISO 16663-1:2003(E)

ISO copyright office
Case postale 56 • CH-1211 Geneva 20
Tel. + 41 22 749 01 11
Fax + 41 22 749 09 47
E-mail copyright@iso.org
Web www.iso.org

Published in Switzerland

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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

ISO 16663-1 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...".

ISO 16663 consists of the following parts, under the general title *Fishing nets — Method of test for the determination of mesh size*:

— *Part 1: Opening of mesh*

— *Part 2: Length of mesh*

Contents

Foreword

This document (EN ISO 16663-1:2003) 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.

In this European Standard annex A is informative.

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 specifies a method for the determination of size of opening of the mesh of fishing nets using a flat wedge gauge. It is applicable to active fishing gears.

2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this European Standard. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this part of this European Standard are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. For undated references, the latest edition of the normative document referred to applies (including amendments).

EN ISO 1107 *Fishing nets - Netting - Basic terms and definitions (ISO 1107:2003)*

ISO 139 *Textiles - Standard atmospheres for conditioning and testing*

3 Terms and definitions

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

3.1
active fishing gear
fishing gear requiring movement to catch the fish

NOTE In general a mobile fishing equipment (i.e mobile relative to the ground or water column) led into the path of the fish to pursue and catch it. All trawls, dredges, seine nets, purse seines and other surrounding nets are examples of active gears.

3.2
trawl
towed net consisting of a cone-shaped body, closed by a bag or codend extended at the opening by wings.

NOTE Net may be towed by one or two boats and, according to the type, is used on the botton or in midwater (pelagic).

3.3
Danish seine
funnel-shaped net (with wings and codend) with very long ropes set out on the sea bed and hauled to a vessel in the open sea.

3.4
purse seine
large single panel multisection net used to encircle pelagic fish, the bottom of which is then drawn together to enclose them.

4 Principle

A flat wedge gauge is inserted perpendicularly to the netting plane in the N-direction for knotted netting or along the longest possible axis for knotless netting in accordance with EN ISO 1107, by applying a constant force. The mesh size corresponds to the graduation on the gauge.

5 Apparatus

5.1 The mesh gauges shall be made of an aluminium alloy with a surface coating (see Figure 1).

The gauges shall be 2 mm thick, flat and shall have 2 tapering edges with a taper of one to eight. They shall have a hole at the narrow end. The edges of the gauges shall be rounded with a radius of 1 mm.

5.2 Either printed or engraved markers ending 2 mm from the edges shall be used. The scale shall be graduated in intervals of 1 mm and 5 mm and 10 mm. No markers shall be used on the last 50 mm at the narrow end of the gauge.

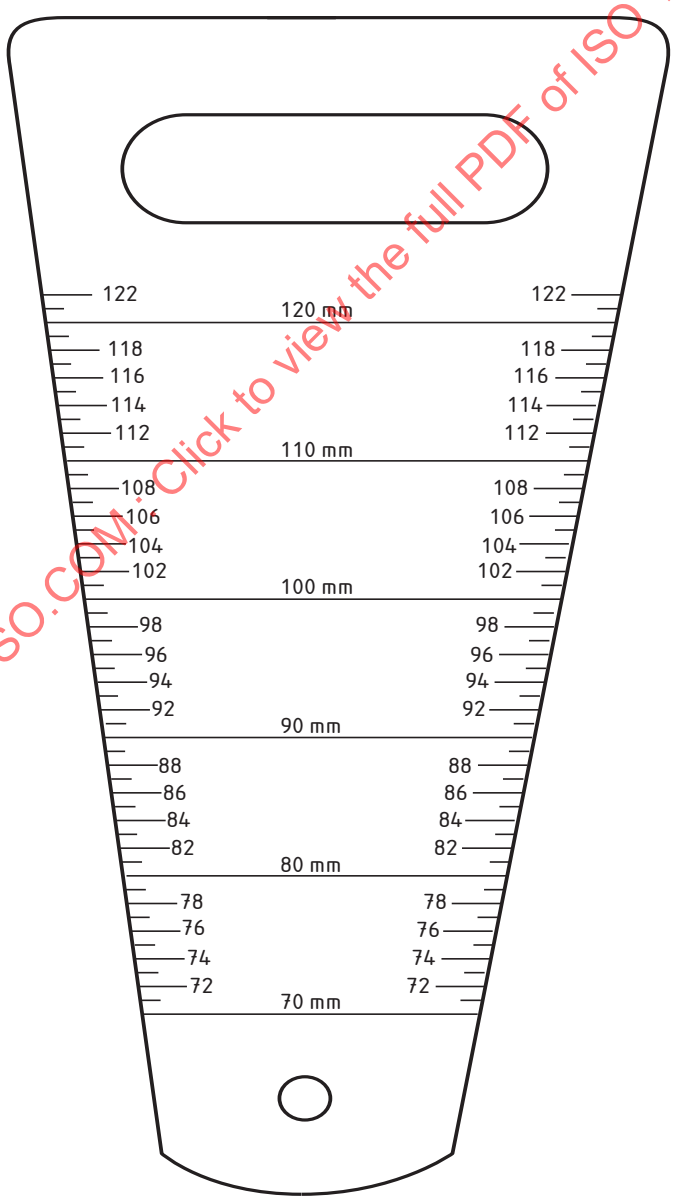

Figure 1 — Mesh gauge

5.3 Four sizes of gauge are required to cover the full range of codend mesh sizes:

size from 10 mm to 70 mm

size from 60 mm to 120 mm

size from 110 mm to 170 mm

size from 150 mm to 250 mm

6 Measuring force

For netting of a mesh size of 50 mm or less, a force equivalent to a mass of 2 kg shall be applied. For netting of a mesh size above 50 mm up to 120 mm, a force equivalent to a mass of 5 kg shall be applied and for netting of a mesh size above 120 mm, a force equivalent to a mass of 8 kg shall be applied.

NOTE This force can be applied by using a weight corresponding to the mass described above or any other device as agreed between the interested parties.

7 Requirements for testing

7.1 General

NOTE Tests may be carried out in both the dry and wet states, but tests in the wet state are considered to be particularly appropriate in indicating the behaviour of the netting in use.

7.2 Atmosphere for testing

All specimens to be tested in the dry state shall be exposed to the standard atmosphere for testing specified in ISO 139, until they have reached equilibrium. Where it is not possible to carry out the tests in the standard atmosphere the tests shall be carried out immediately after removal of the samples from the standard atmosphere.

7.3 Testing in the wet state

Specimens to be tested in the wet state shall either be:

a) immersed in tap water of (20 ± 2)°C for not less than 12 hours; or

b) immersed in a solution of wetting agent at a temperature of (20 ± 2)°C for not less than 1 hour.

8 Procedure

8.1 Straighten the netting in the N-direction for knotted netting and in the direction of the longest axis for knotless netting according to EN ISO 1107.

8.2 Insert a gauge (**5.1**) by its narrow end into the mesh opening in the N-direction for knotted netting and in the direction of the longest axis for knotless netting perpendicular to the stretched netting plane.

8.3 Insert the gauge into the mesh at its widest opening using a measuring force (**6**) until it is stopped by the resistance of the mesh.

8.4 Measure a minimum of 20 consecutive meshes.