INTERNATIONAL STANDARD

**ISO 17745**

First edition
2016-05-01

# Steel wire ring net panels — Definitions and specifications

*Panneaux de filet en anneaux de fil d'acier — Définitions et spécifications*

Reference number
ISO 17745:2016(E)

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# Foreword

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For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT) see the following URL: Foreword - Supplementary information

The committee responsible for this document is ISO/TC 17, *Steel*, Subcommittee SC 17, *Steel wire rod and wire products*.


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# Steel wire ring net panels — Definitions and specifications

## 1 Scope

This International Standard specifies the characteristics of steel wire ring net panel for retaining of unstable slopes controlling and preventing rockfalls and loose debris flow along roads, highways and railway, urban areas, mines and quarries, and for snow avalanche protection produced from metallic-coated steel wire or advanced metallic coating.

It is not applicable to anchors or soil nails for fixing of steel mesh to an unstable slope.

## 2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 7500-1, *Metallic materials — Calibration and verification of static uniaxial testing machines — Part 1: Tension/compression testing machines — Calibration and verification of the force-measuring system*

ISO 7989-2:2007, *Steel wire and wire products — Non-ferrous metallic coatings on steel wire — Part 2: Zinc or zinc-alloy coating*

ISO 10474, *Steel and steel products — Inspection documents*

ISO 22034-1, *Steel wire and wire products — Part 1: General test methods*

ISO 22034-2:2007, *Steel wire and wire products — Part 2: Tolerances on wire dimensions*

## 3 Terms and definitions

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

**3.1**
**wire ring**
steel ring obtained by looping a single steel wire with ends inserted into the thread or secured by one or more than one ferrules

**3.2**
**nominal wire diameter**
diameter used to designate the wire

Note 1 to entry: It is expressed in millimetres (mm).

**3.3**
**real wire diameter**
average value of the minimal and the maximal diameter, measured in the same section of a straight piece of wire, by means of a micrometer to 0,01 mm

**3.4**
**wire ring size**
average value of the diameter of the single ring

Note 1 to entry: See Figure 1.

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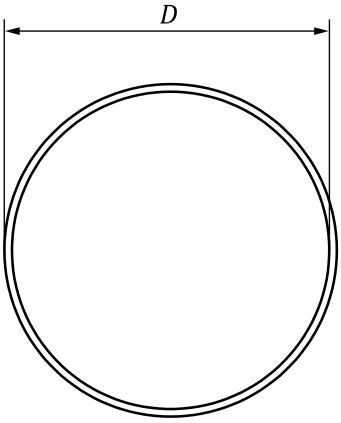



**Figure 1 — Ring size**

**3.5**
**wire ring net panel**
structure of the panel net, made by rings connected with the contiguous rings

**3.6**
**advanced metallic coating**
metallic coating with a non-specified composition and having a superior corrosion resistance

**3.7**
**dimensions of a panel**
length and width expressed in metres or in number of rings

Note 1 to entry: See Annex D.

**3.8**
**ring structure**
way that the ring is manufactured and constituted

## 4 Description of use and applications

The typical use for the considered products is retaining of unstable slopes, controlling and preventing rockfalls and loose debris flow along roads, highways and railway, urban areas, mines and quarries, and for snow avalanche protection.

## 5 Wire ring net panels

Wire ring net panels are ring panels where each ring is made by several loop bindings, each one obtained by looping a single steel wire. Each ring is connected with four or six contiguous rings in order to create a net as shown in Figure 2.

For the connection of the panels, shackles or wire rope shall be used. The strength of the connection formed shall be equal to or greater than the tensile strength of the ring net panel.


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