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Steel wire rope net panels and rolls — Definitions and specifications

Panneaux et rouleaux de filet en câble d'acier — Définitions et spécifications

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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 rope net panels and rolls — Definitions and specifications

1 Scope

This International Standard specifies the characteristics of steel wire rope net panels and rolls 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.

Steel wire rope net panels and rolls are produced from metallic-coated wire ropes.

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 2408, *Steel wire ropes for general purposes — Minimum requirements*

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 7989-1, *Steel wire and wire products — Non-ferrous metallic coatings on steel wire — Part 1: General principles*

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*

EN 10204, *Metallic products — Types of inspection documents*

3 Terms and definitions

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

3.1
wire rope net panel
panel made from *wire rope* (3.2) or ropes arranged in a plain structure and connected at the points of overlapping by wire knots, by interlinking of the wire ropes or by metallic *clips* (3.5)

3.2
wire rope
standard steel wire ropes according to ISO 2408

3.3
wire rope net sizes
average value of the net dimensions

Note 1 to entry: Distance between two ropes in the same direction.

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3.4
knot
point of connecting, overlapping or crossing of the net wire ropes

Note 1 to entry: A knot can be released using wires, *clips* (3.5) or by twisting the wrapping ropes.

3.5
clips
metallic shell-like elements with fastening tabs to be used for forming connections between adjacent ropes

3.6
knot without clips
knot (3.4) of panel in which the overlapping points of the wrapping ropes are connected by twisting the *wire ropes* (3.2)

3.7
nominal net size
distance between two junctions when measured along any single rope

3.8
dimensions of a panel
length and width expressed in metres

3.9
advanced metallic coating
metallic coating with a not specified composition having a superior corrosion resistance

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.

Figure 1 shows some relevant examples of applications of wire rope net panels.

5 Wire rope net panels

5.1 General

Wire rope net panels are made of square nets or other shapes (e.g. triangular, jersey, rhomboidal, etc.) of nets manufactured with one or more than one rope as shown in Figure 1.

Wire rope net can be manufactured both in panels and in rolls.

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