

STEEL WIRE ROPES FOR ROCKFALL PROTECTION WORKS

A steel rope cable consists of a group of strands laid helically around a core. The strands of a wire rope, or cable, consist of a number of individual wires laid around a central wire.

Various types of wire rope have been designed to meet a wide range of uses and operating conditions. These types are designated by the kind of core; the number of strands; the number, sizes and arrangement of the wires in each strand; the way in which the wires and strands are wound, or laid, about each other.

In rockfall protection applications, ropes are the main part of rockfall protection kits (guy and support ropes, ropes used in the manufacturing of the interception structure).

Furthermore steel cables are widely used both in simple drapery systems - to fix the nets at the top and at the base of the slope - and in surficial reinforcing systems - to form an armoured mesh that is then fixed along the slope with anchors.

The more suitable cables to be used with meshes along the slopes are ropes with synthetic core (FC): these ropes offer a good resistance in terms of breaking load, together with flexibility and easiness of installation, due to their lower weight. All the ropes supplied by Maccaferri meet the UNI EN 12385-4 (ISO 2408) standard, grade 1770 N/mm².

The more frequently steel ropes used in rockfall protection works are Class B Zinc coated as per UNI EN 10264-2. The standard coil length is 1000 m.

QUANTITY REQUEST

When a quotation is required, please specify:

- Cable diameter (in m)
- Core type (fiber core or steel core)
- Zinc coating (Class B)

Example 1: 1000 m, 8 mm Steel Cable 6x7+FC, Class B zinc coating.

Example 2: 1000 m, 16 mm Steel Cable 6x19+IWRC, Class B zinc coating.



Steel Rope used to armour the mesh and fix the net at the toe of the



Steel Rope used to fix the net at the base of the slope



STANDARD STEEL CABLES FOR ROCKFALL NETTING WORKS

CHARACTERISTIC DATA			FIBER CORE			STEEL CORE		
Rope nom. diameter Ø [mm]	Wire tensile strength (grade) [N/mm ²]	Construction type	Core	Weight [kg/m]	Breaking load [kN]	Core	Weight [kg/m]	Breaking load [kN]
8	1770	6x7	FC	0.230	37.4	WSC	0.256	40.3
10	1770	6x19	FC	0.359	58.4	IWRC	0.400	63.0
12	1770	6x19	FC	0.517	84.1	IWRC	0.576	90.7
14	1770	6X19	FC	0.704	114.0	IWRC	0.770	124.0
16	1770	6x19	FC	0.919	150.0	IWRC	1.020	161.0

WARNING: Install the product in accordance with National Security Requirements! If the job is done with suspension or security ropes, personal protective equipment against fall risk must be connected with anchor points in agreement with EN 795.

Maccaferri reserves the right to amend product specifications without notice and specifiers are requested to check as to the validity of the specifications they are using.

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