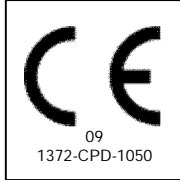


WIRAND® FIBRE FS9

DESCRIPTION:

Cold drawn steel wire fibre, for concrete reinforcement

TYPE: WIRAND® FS9



NOMINAL DIMENSIONS:

- Diameter D: 0.75 mm
- Length L: 37 mm
- Aspect ratio L/D: 49
- Number of fibre/Kg: 7700

MECHANICAL PROPERTIES

- R_m (Tensile strength of the wire): > 1100 MPa
- Δl (ultimate strain) < 4%

SHAPE

The double end hooks of WIRAND® FS9 fibres ensure perfect anchorage in concrete.

Effect on strength of concrete: 25kg/m³ to obtain 1,5 n/mm² at CMOD=0,5mm and 1N/mm² at CMOD=3,5mm.

Effect on consistence with 25kg/m³ of fibre: vebe time: 8 s

REFERENCE STANDARDS

- EN 14889-1: 2006 - Fibres for concrete ¼ Part 1: Steel fibres ¼ Definition, specifications and conformity;
- UNI EN 14845-2:2007 - Test method for fibres concrete¼ Part II: Effect on concrete;
- EN 14651-2005 - Test method for metallic fibre concrete - Measuring the flexural tensile strength (limit of proportionality (LOP), residual)
- UNI 11037: 2003 ½ Fibre d'acciaio da impiegare nel confezionamento di conglomerato cementizio rinforzato;
- UNI 11039: 2003 ½ Steel fibre-reinforced concrete¼ Part 1: definitions, classifications, specifics and conformity; Part II: Test method used to determine the early crack strength and ductility indexes;
- ASTM A820: 2001 - 1Standard Specification for Steel Fibers for Fiber-Reinforced Concrete;
- CNR ½ DT 204/2006 ½ Istruzioni per la progettazione, l'Esecuzione ed il Controllo di Strutture di Calcestruzzo Fibrorinforzato;
- RILEM, 2001 - 1Test and design methods for steel fibre reinforced: uniaxial tension test for steel fibre reinforced concrete^a, RILEM TC 162-TDF Recommendations, Materials and Structures.

PACKAGING

WIRAND® FS9 fibre are delivered in big bags of 600, 750, 950 kg or in carton boxes of 20 kg.

STORAGE: Preserve the pallets from atmospheric corrosion.



Fig. 1

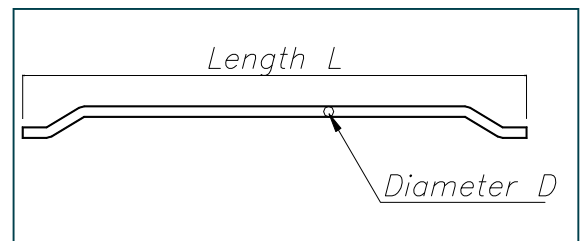
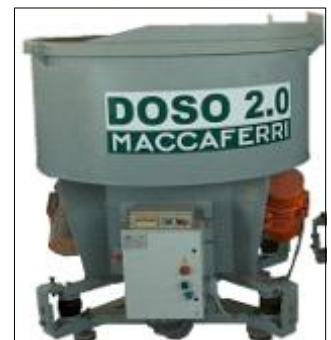


Fig. 2



Fig. 3



The producer, for his optimisation and improving process of the product's technical characteristics, has the faculty to modify the standards and the characteristics of the product without any pre-advise. All the information are given in base to our experience; in any case no responsibility for an incorrect use could be referred to the producer or one of his distributors.

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Bureau Veritas Certified Quality System Company
with SINCERT's and UKAS' s accreditation.