



FIBERTEK A

Structural fibers in steel with Better adhesion for fiber-reinforced concretes



DESCRIPTION

FIBERTEK A fibers are obtained by cold drawing of high-strength steel wire with particular hook shaping at the ends to obtain the best anchorage along their entire length, for structural reinforcement. The characteristics of the steel wire from which the FIBERTEK A fibers are obtained meet the reference standards relating to the type of use and can also be supplied in the galvanized type.

FEATURES

FIBERTEK A, made of high-strength steel, allow to obtain concretes and mortars with high resistance to:

- shock and vibration
- concentrated loads
- fatigue

The uniform distribution of fibertek A fibers in the dough also makes it possible to replace the secondary reinforcement and contain the propagation of any cracks.

FIBERTEK A fibers are available (on request) in different diameters and lengths depending on the needs of use.

FIELDS OF APPLICATION

FIBERTEK A fibers are used to make a widespread reinforcement reinforcement in concrete structures subject to particularly high stresses, shocks, heavy traffic, vibrations, etc.

In particular, they are used in:

- industrial floors, as an alternative to traditional reinforcements with electro-welded mesh
- squares and parking areas
- curbs of road joints
- gunitature (spritz beton) for galleries, walls, escarpments
- structural restorations
- metal pipe coating
- prefabricated elements
- spillways, hydraulic drains, dams
- bunkers, vaults, safes
- foundation slabs
- reinforcement to the cut in prestressed elements.

FIBERTEK A fibers improve the mechanical properties of concrete and materials, such as ductility, strength, energy absorption, durability and hardness.

This fiber helps above all to control the plastic shrinkage and cracking of concrete and helps to reduce or eliminate the need for conventional reinforcement.

ADVANTAGES

- More homogeneous distribution of the reinforcement throughout the cement paste,
- Structural reinforcement;



- Improvement of mechanical characteristics during the post-cracking phase;
- Increased concrete ductility;
- Increased impact resistance;
- Greater ease and speed of implementation.

SPECIFICATIONS



Length (mm)(L) $50 \pm 10\%$
 Wire diameter (mm)(de) $1 \pm 10\%$
 Aspect ratio(L/de) 50

Hooked format

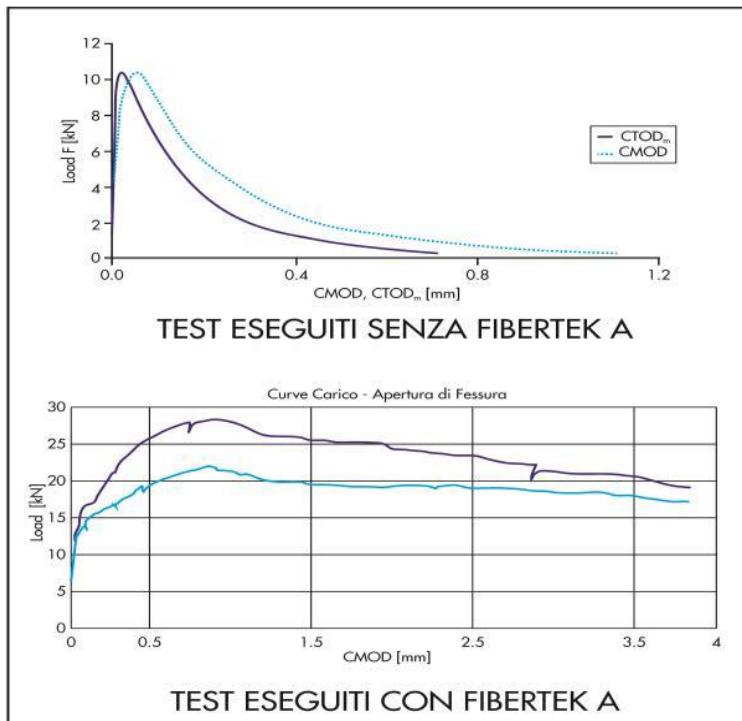
Circle cross section
 Tensile strength (N/mm²) 1100-2700
 Elongation at break < 4%

DOSAGE

The fibers must be introduced into the mixer in conjunction with the introduction of the aggregates and are dosed at the rate of 20/40 kg per cubic meter of concrete, depending on the project and the requests.

Effect of FIBERTEK A on concrete strength

25 kg/m³ to obtain 1.5 N/mm² at CMOD = 0.5 mm and 1N/mm² at CMOD = 3.5 mm.



SHEET

PACKAGING

Bags of Kg 20





STORAGE

Protect from rain and other bad weather.
Do not overlap pallets.

REFERENCE LEGISLATION

- EN 14889-1- Fibres for concrete Part 1: Steel fibres Definition, specifications and conformity;
- UNI EN 14845-2- Fiber test methods for concrete - Part 2: Effect on concrete;
- UNI EN 14651 - Test method for concrete with metal fibers Measurement of tensile strength by bending (proportionality limit (LOP), residual strength)
- UNI 11037- Steel fibres to be used in packaging of reinforced cement conglomerate;
- UNI 11039 – Concrete reinforced with steel fibers - Part I. Definitions, classification and designation; Part II. Test method for the determination of first cracking strength and ductility indices;
- ASTM A820- "Standard Specification for Steel Fibers for Fiber -Reinforced Concrete;
- CNR - DT 204- Instructions for the design, execution and control of fiber-reinforced concrete structures.
- RILEM - "Test and design methods for steel fibre reinforced: uniaxial tension test for steel fibre reinforced concrete", RILEM TC 162-TDF recommendations, materials and Structures

WARNINGS

It is necessary to ensure that the mixing of the fiber with your products (cement, additives and anything else introduced into the cement mixture) does not manifest any anomaly in chemical reaction.

LEGAL

The information contained in this technical sheet, although representing the most advanced stage of knowledge, does not exempt the user from performing accurate preliminary tests in their conditions of use and operation. We therefore decline any responsibility for the improper use of the product.

