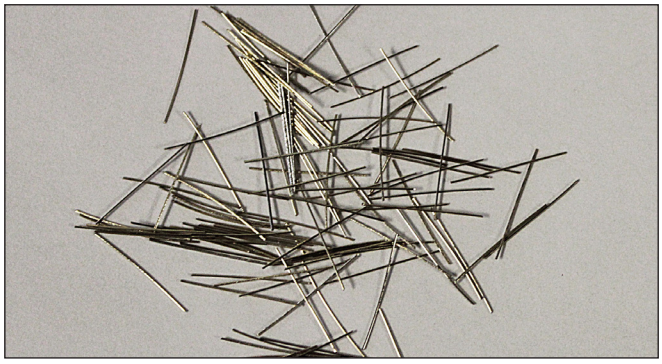
NYCON-SF TYPE I (NEEDLES)

High Performance Steel Fiber, ASTM A820

NYCON
OVER 25 YEARS OF REINFORCING FIBERS



NYCON-SF TYPE I STEEL FIBERS are low-carbon, drawn wire for reinforced concrete. NYCON-SF fibers distribute stresses within the concrete and provide improvement to ductility.

NYCON-SF TYPE I (NEEDLES) Physical Properties

Filament Diameter	0.008" (0.2 mm)
Fiber Length	0.5" (13mm)
Specific Gravity	7.8
Tensile Strength	285 ksi (1900 MPa)
Flexural Strength	29,000 ksi (203 GPa)
Melting Point	2760° F (1516° C)
Color	Copper
Water Absorption	Nil
Alkali Resistance	High
Corrosion Resistance	High

Description

NYCON-SF TYPE I "NEEDLES" fiber products are 0.2 mm diameter x 13mm monofilament steel fibers for use in reinforced concrete and shotcrete. NYCON-SF TYPE I "NEEDLES" are specifically designed for use in concrete products for the purpose of primary reinforcement.

NYCON-SF TYPE I "NEEDLES" meet the requirements of ASTM A820.

Applications

NYCON-SF TYPE I "NEEDLES" utilize the mixing activity to disperse the fibers into the mix and provide a multi-dimensional fiber network. NYCON-SF TYPE I steel fibers do not affect curing process chemically.

NYCON-SF TYPE I "NEEDLES" can be used in all types of concrete.

NYCON-SF TYPE I "NEEDLES" used in shotcrete applications will increase the compaction and density of shotcrete, reducing rebound and permitting thicker layers per pass.

800-456-9266 | **www.nycon.com** | **sales@nycon.com**

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Advantages/Benefits	• Provides multi-dimensional reinforcement. • Improves impact resistance of concrete. • Enhances durability and toughness of concrete. • Excellent finishability
Mixing	NYCON-SF TYPE I steel fibers can be added directly to the mixing system during or after the batching of the ingredients and mixed at high speed for a minimum of five minutes. Additional mixing does not adversely affect the distribution or overall performance of NYCON-SF TYPE I steel fibers. The addition of NYCON-SF TYPE I steel fibers at the normal recommended dosage rate does not require any mix design or application changes. A water reducer or super-plasticizer is recommended in concrete products where improved workability and finishability are desired.
Tooling & Finishing	Fiber reinforced concrete can be finished by most finishing techniques. NYCON-SF TYPE I steel fiber does not affect the finishing characteristics of concrete. NYCON-SF TYPE I steel fiber can be used in power/hand troweled concrete, colored and broom finished concrete. NYCON-SF TYPE I steel fiber can be pumped and placed using conventional equipment. Hand screeds can be used, but vibratory and laser screeds are recommended to provide added compaction and bury surface fibers.
Packaging	(50) 50 lb (22.7 kg) paper bags per pallet, 2500 lbs per pallet
Storage and Shelf Life	NYCON products should be stored in dry warehouse. Protect product from the rain.

KEEP CONTAINER TIGHTLY CLOSED • KEEP OUT OF REACH OF CHILDREN • NOT FOR INTERNAL CONSUMPTION • FOR INDUSTRIAL USE ONLY

All information provided by Nycon Corporation concerning Nycon products, including but not limited to, any recommendations and advice relating to the application and use of Nycon products, is given in good faith based on Nycon's current experience and knowledge of its products when properly stored, handled and applied under normal conditions in accordance with Nycon's instructions. In practice, the differences in materials, substrates, storage and handling conditions, actual site conditions and other factors outside of Nycon's control are such that Nycon assumes no liability for the provision of such information, advice, recommendations or instructions related to its products, nor shall any legal relationship be created by or arise from the provision of such information, advice, recommendations or instructions related to its products. The user of the Nycon product(s) must test the product(s) for suitability for the intended application and purpose before proceeding with the full application of the product(s).

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Nycon warrants this product for one year from date of shipment to be free from manufacturing defects and to meet the technical properties on the current Product Data Sheet if used as directed within shelf life. User determines suitability of product for intended use and assumes all risks. Buyer's sole remedy shall be limited to the purchase price or replacement of product exclusive of labor or cost of labor.

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