



Steel fibers for concrete reinforcement

Steel fibers are made of cold drawn steel wire with low content of carbon (C) or stainless steel wire (SS 302/ SS 304).

Steel fibers are manufactured in different types: hooked, undulated or flat, according to the construction project. These fibers are used in construction, for concrete reinforcement.

Fiber-reinforced normal concrete is mostly used for on-ground floors and pavements, but can be considered for a wide range of construction parts (beams, pillars, foundations etc) either alone or with hand-tied rebars.

Features

- fiber-reinforcement is mainly used in shotcrete, but can also be used in normal concrete fiber;
- steel fibers reinforced concrete is less expensive than hand-tied rebar, while still increasing the tensile strength many times;
- shape, dimension and length of fiber are important
- a normal size fibre for European shotcrete (1 mm diameter, 0.5 mm length—steel) will increase the concrete tensile strength;
- steel fibres can only be used on surfaces that can tolerate or avoid corrosion and rust stains;

Application

- tunnel lining
- airport runways
- highways pavements
- precast concrete
- shotcrete
- parkings
- anti-seismic builings





Technical details

Type of steel fiber	Size range (dia. of wire mm)	Length (mm)
flat	0.175 - 0.42	6, 12.5, 16, 25
hooked	0.4 - 1.05	25, 30, 50, 60
undulated	0.5 - 1.05	30, 40, 50, 60

Standards ASTM 820/96
ASTM C 1116/95
DIN 1045

Tensile strenght (T/S) 1.100 N/mm²

Shapes flat
hooked
undulated

Packing in paper bags or cardboard boxes of 20-25 kg, set on wooden pallets (IPPC standards) of about 1 MT, protected by polyethylene shrink, well tied with metalic strips.

Yearly production ± 3.000 tones