CONCRETE ADDITIVES

Kenal Steel Fiber



SFRS is mortar or concrete containing discontinuous discrete fibers

Introduction:

Steel fiber reinforced concrete is a new type of multiphase composite materials which is mixed in ordinary concrete and the short steel fiber. Steel fiber reinforced concrete can prevent the expansion of the internal micro cracks and the formation of macroscopic cracks. It can improve the concrete tensile, bending, impact and fatigue resistance. In the modern project construction is very broad. The end hook steel fiber, shearing steel fiber and milling steel fiber are most often used in the construction.

Advantages

- 1. Steel fibers can increase its impact resistance and abrasion resistance, also improve the fatigue strength and the toughness. Steel fiber can improve concrete durability. Reduce the loss of the surface during shock and friction.
- 2. The steel fiber has advantage in temperature changes. When the temperature rises and falls suddenly, concrete may peeling off, but there is high gripping force between steel fiber and the concrete. So steel fiber has advantage in this phenomenon.
- 3. Steel fibers ensure the quality and avoid the risk of uneven settlement of ground.
- 4. Improve construction safety security level. Avoid the accident caused by the steel fiber.
- 5. Under the same load conditions, using Kenal steel fiber can save more than tradition steel fiber.

Application





Pavement

Wearing floor





END HOOK TYPE STEEL FIBER

Introduction:

End hook type steel fiber with high performance of improving the ability of shock resistance, antifatigue and the impermeability of concrete. Because of its high tensile strength, good toughness and low price, it is often widely used in bridges, tunnels, airports, ports, iron tie, etc. It has two different types that are glued steel fiber and loose steel fiber.





Product Specifications (Glued Steel Fiber and Loose Steel Fiber)

Model	Length I _f (mm)	Diameter D _f (mm)	Aspect Ratio I _f (mm)	Tensile Strength (MPa)
KN30/85(Glued)	30	0.85	35	1100
KN35/75(Glued)	35	0.75	46.6	1100
KN37/50(Loose)	37	0.50	74	1300
KN6o/75(Glued)	60	0.75	80	1100
KN6o/9o(Glued)	60	0.90	66.66	1100

Remark: the size can be customized

Package: 10kg, 20kg, 1000kg/bag, 22-24mt/container

Directions for Use:

Pavement construction: 30-80 kg/m Bridge construction: 50-100 kg/m3,

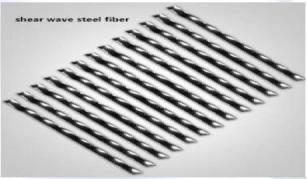
Steel fiber and reinforced concrete mixing process: according to the conventional construction, does not need to make special adjustment.

SHEARING STEEL FIBER

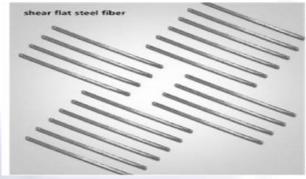
Introduction:

Shearing steel fiber is made by shearing and nicking the cold rolled steel strip. It has good performance of high tensile strength, easy dispersion, and the concrete bonding, etc. There are mainly used are shear wave steel fiber and the shear flat steel fiber.









Product Specifications

	Model	Length I _f (mm)	Diameter D _f (mm)	Aspect Ratio I _f (mm)	Tensile Strength (MPa)		
	KNS L/D	20-60	0.3-1.2	20~100	<u>></u> 600		
	Remark: 1. KN L/D inc	L/D indicate Length/Diameter 2. Size can be customized					

Directions for Use:

Pavement construction: 30-80 kg/m Bridge construction: 50-100 kg/m3,

Steel fiber and reinforced concrete mixing process: according to the conventional construction, does not need to make special adjustment.



MILLING STEEL FIBER

Introduction:

Milling steel fiber is produced by high strength steel wire with milling process. There's anchor end on both ends and one side is rough on the other side is smooth. It has good performance with high tensile strength, toughness, dispersibility, and bonding force with concrete. Combining hard with the cement paste because of it's rough surface and clean surface. It is the root cause to improve the performance of concrete.





Product Specifications

Model	Length I _f (mm)	Diameter D _f (mm)	Aspect Ratio I _f (mm)	Tensile Strength (MPa)		
KNS L/D	20-60	0.3-1.2	20~100	<u>></u> 600		
Remark: 1. KN L/D inc	Remark: 1. KN L/D indicate Length/Diameter 2. Size can be customized					

Directions for Use:

Pavement construction: 30-80 kg/m Bridge construction: 50-100 kg/m3,

Steel fiber and reinforced concrete mixing process: according to the conventional construction, does not need to make special adjustment.

Steel Fibre Packing:



