



Data Sheet

FibreX SF is a corrosion resistant Stainless Steel fibre that can be used at moderate thermal cycling and 1000°C continuous service. The fibre has been developed for use as an alternative to ME430 that offers the benefits of higher strength and toughness whilst still giving similar levels of oxidation and corrosion resistance.

Uses include refractory castable and spray lining reinforcement, spray & poured concrete applications (tunnelling, bridge construction, sea defences, road construction, industrial effluent containers).

The fibres conform to the requirements for fibres used in concrete as described in BS EN14889-1 and ASTM A820-11.

Chemical Composition (maximum unless stated):

C	Si	Mn	P	S	Cr	Fe
0.40	4.5	2.0	0.050	0.030	12.0-14.0	Balance

Melting Temperature: 1480-1530°C

Critical Oxidation Temperature:

Cyclic Heating: 820 °C

Continuous Service: 950 °C

Typical Tensile Properties:

Tensile Strength 570 MPa

Yield Strength 275 MPa

Elongation 20 %

Modulus of Elasticity (20°C): 200 GPa

Coefficient of Thermal Expansion (500°C): $11.6 \times 10^{-6} / ^\circ\text{C}$

Thermal Conductivity (500°C): 28.7 W/mK

ME Fibre – Typical Dimensions and Aspect Ratios

Fibre ^{*1} Length	Typical Equivalent Dia ^{*2}	Typical Aspect ^{*3} Ratio	Typical No/kg
12mm	0.34mm	40	151,000
20mm	0.47mm	50	51,000
25mm	0.50mm	50	26,000
25mm	0.60mm	42	18,100
35mm	0.60mm	58	13,000
35mm	0.70mm	50	9,500

^{*3} Aspect ratio is calculated as fibre length ÷ diameter

^{*1} Other fibre lengths can be manufactured on request

^{*2} Other fibre diameters can be manufactured on request

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