



Reinforcement for life

Data Sheet

ME330 Stainless Steel Fibres reinforce monolithic refractories against thermal and mechanical shock by reducing cracking and spalling susceptibility. The fibres can be used in refractory operating conditions of:

- Moderate thermal cycling, or
- Continuous fibre soaking temperature up to 1200°C in refractory
- Extreme mechanical shock
- Extreme high temperature corrosive atmospheres

Chemical Composition (maximum unless stated):

C	Si	Mn	P	S	Cr	Ni	others
0.50	3.5	2.0	0.050	0.030	17.0-20.0	34.0-37.0	-

Melting Temperature: 1345-1425°C

Critical Oxidation Temperature:

Cyclic Heating: 1050 °C

Continuous Service: 1150 °C

Tensile Strength:

20 °C 480 MPa

870 °C 31 MPa

Modulus of Elasticity (870°C): 196 GPa

Coefficient of Thermal Expansion (870°C): 17.6 x 10⁻⁶ /°C

Thermal Conductivity (540°C): 28.5 W/mK

ME Fibre – Typical Dimensions and Aspect Ratios

Fibre ^{*1} Length	Typical Equivalent Dia ^{*2}	Typical Aspect ^{*3} Ratio	Typical No/kg
12mm	0.30mm	40	151,000
20mm	0.40mm	50	51,000
25mm	0.50mm	50	26,000
25mm	0.50mm	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

