

**ME310 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:**

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

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**Chemical Composition (maximum unless stated):**

C	Si	Mn	P	S	Cr	Ni	others
0.50	3.5	2.0	0.050	0.030	24.0-26.0	19.0-22.0	-

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**Melting Temperature:** 1400-1455°C

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**Critical Oxidation Temperature:**

Cyclic Heating: 1040 °C

Continuous Service: 1200 °C

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**Tensile Strength:**

20 °C 540 MPa

870 °C 152 MPa

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**Modulus of Elasticity (870°C):** 125 GPa

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**Coefficient of Thermal Expansion (870°C):** 18.5 x 10<sup>-6</sup> /°C

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**Thermal Conductivity (540°C):** 20.1 W/mK

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**ME Fibre – Typical Dimensions and Aspect Ratios**

Fibre Length <sup>*1</sup>	Typical Equivalent Dia <sup>*2</sup>	Typical Aspect Ratio <sup>*3</sup>	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

<sup>\*3</sup> Aspect ratio is calculated as fibre length ÷ diameter

<sup>\*1</sup> Other fibre lengths can be manufactured on request

<sup>\*2</sup> Other fibre diameters can be manufactured on request

FIBRE