RIBTEC

TECHNICAL DATA SHEET

Fibrex® HT

Fibrex HT 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 up to 2900 ºF
- Continuous fibre soaking temperature up to 2200 ºF in the refractory
- Extreme mechanical shock
- Oxidising, sulphus, reducing atmospheres

Chemical Composition (%): maximum unless stated

C	Si	Mn	P	S	Cr	Ni	Others
0.40	3.5	2.0	0.050	0.030	18.0-21.0	0.5	-

Melting Temperature: 2600-2750 °F

Critical Oxidation Temperature:

Cyclic Heating (in refractory): 2900 °F
Cyclic Heating: 2000 °F
Continuous Service: 2200 °F

Tensile Strength (typical values):

68 °F 107,000 psi
1600 °F 9,100 psi

Modulus of Elasticity (1600 °F): 13,000 ksi

Coefficient of Thermal Expansion (1600 °F): 6.7 x 10^{-6} /ºF

Thermal Conductivity (1000ºF): 14.2 BTU/hr/ft/ºF

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ME Fibre – Typical Dimensions and Aspect Ratios

Fibre Length*1	Typical Equivalent Dia*2	Typical Aspect Ratio*3	Typical No/lb
0.50 in	0.013 in	40	68,500
0.75 in	0.016 in	50	23,000
1.00 in	0.020 in	50	12,000
1.375 in	0.025 in	55	5,500

*1 Other fibre lengths can be manufactured on request
*2 Other fibre diameters can be manufactured on request
*3 Aspect ratio is calculated as fibre length ÷ diameter

The data published in this datasheet is based on experimental test results and is presented in good faith but no guarantees are made implicitly or explicitly for the use of the above product in your specific application. We recommend you test the product to your satisfaction before committing to full-scale use. Rev.10/16