

Technical Data Sheet

ME 304 UOP 3-31-2

Metal Reinforcing Fibers

for

Abrasion Resistant Refractory Lining

S-Bar Reinforced, Petroleum Refinery

Vessels

Fibretech's ME 304 UOP 3-31-2 steel fibres are:

- Manufactured specifically to match the requirements of UOP 3-31-2
- for ¾" (20mm) Abrasion Resistant Linings S-Bar Reinforced.
- for Cyclones, Duct Work, Equipment, Piping and Vessels.
- for application by hand in a ¾" (20mm) lining, in one application
- type 304 stainless steel (i.e. minimum 18% Chrome – 8% Nickel)
- melt extract
- 20mil diameter (i.e. 0.5mm +/- 0.02mm)
- ¾ inch long (19mm)
- 780,000 fibres per tonne/refractory (i.e. as specified at 3% by weight).

Fibre chemistry, diameter and length are rigorously controlled for easy and uniform mixing with refractory before installation.

ME304 UOP3-31-2 is provided with full Certification and Analysis and is manufactured using approved systems conforming to the requirements of ISO 9001:2000 by TÜV UK Quality Assurance Ltd.

Chemical Composition (%): maximum unless stated

C	Si	Mn	P	S	Cr	Ni	others
0.50	3.5	2.00	0.045	0.030	18.0-20.0	8.0-10.5	-

Melting Temperature: 1400-1455°C

Critical Oxidation Temperature:

Cyclic Heating: 870 °C
 Continuous Service: 1100 °C

Tensile Strength (typical values):

20 °C 515 MPa
 870 °C 124 MPa

Modulus of Elasticity (870°C): 124 GPa

Coefficient of Thermal Expansion (870°C): 20.2 @10⁻⁶ /°C

Thermal Conductivity (540°C): 21.5 W/m²K

ME Fibre – Typical Dimensions and Aspect Ratios

Fibre Length *1	Typical Equivalent Dia *2	Typical Aspect Ratio (l/d)	Typical No/kg
20mm	0.50mm	40	26,000

*1 Other fibre lengths can be manufactured on request

*2 Other fibre diameters can be manufactured on request

