

# Technical Data Sheet

## ME 304 UOP 3-22-3

### Gunned Refractory Lining, V-Anchors, for Petroleum Refinery Vessels



Manufactured specifically to match the requirements of UOP 3-22-3, **Fibretech's ME 304 UOP 3-22-3 steel fibres are:**

- type 304 stainless steel (minimum 18% Chrome – 8% Nickel)
- melt extract
- 20mil diameter (i.e. 0.5mm +/- 0.02mm)
- 1 inch long (25mm)
- 780,000 fibres per tonne/refractory (at the specified 3% by weight addition)
- suitable for gunning as part of a refractory lining with V-anchors

In accordance with UOP 3-22-3 fibre chemistry, diameter and length are rigorously controlled to ensure this product mixes easily and uniformly with refractory before installation.

This product should be added at 3% by weight to refractory to give a minimum of 780,000 fibres per tonne of refractory.

ME304 UOP3-22-3 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<sup>-6</sup> /°C

---

**Thermal Conductivity (540°C):** 21.5 W/m<sup>2</sup>K

---

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

Fibre <sup>*1</sup> Length	Typical Equivalent Dia <sup>*2</sup>	Typical Aspect <sup>*3</sup> Ratio	Typical No/kg
25mm	0.50mm	50	26,000

\*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

TEL : +44 (0)1773 863100  
 FAX : +44 (0)1773 580287  
 Email: info@fibretech.com

12/08