

# Technical Data Sheet

## ME 310 UOP 3-23-2

### Refractory Lining

#### 5'-Gunned Lining without Metal Liner

Manufactured specifically to match the requirements of UOP 3-23-2, Fibretech's ME 310 UOP 3-23-2 steel fibres are:

- type 310 stainless steel (minimum 25 % Chrome – 20 % Nickel)
- melt extract
- 20mil diameter (i.e. 0.5mm +/- 0.02mm)
- 1 inch long (25mm)
- 780,000 fibres per MT/refractory (at the specified addition rate of 2.5lbs/ft<sup>3</sup>)
- suitable for gunning a 5inch ling in one single application.

Fibre chemistry, diameter and length are rigorously controlled to ensure this product mixes easily and uniformly with refractory before installation. In accordance with UOP 3-23-2 this product should be added at a rate of 2.5lbs/ft<sup>3</sup> to refractory to give a minimum of 780,000 fibres per tonne of refractory.

ME304 UOP3-23-2 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	24.0-26.0	19.0-22.0	-

**Melting Temperature:** 1400-1455°C

#### Critical Oxidation Temperature:

Cyclic Heating: 1040 °C

Continuous Service: 1200 °C

#### Tensile Strength (typical values):

20 °C 540 MPa

870 °C 152 MPa

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

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

**Thermal Conductivity (540°C):** 20.1 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

