

## Graphite Shapes

### Typical Properties

Composition		Electrode	HLM	ISO
Nominal Grain Size		Coarse ~ 5mm	Medium ~1.0mm	Fine ~0.01mm
Shaping Methods		Vibro-pressed / extruded	extruded	Isostatically pressed
Typical uses		Steelmaking electrodes	General purpose	Glass moulds EDM electrodes
Property				
Bulk Density	g/cm <sup>3</sup>	1.6	1.7	1.8
Porosity	%	20	15	12
Flexural Strength (room temp)	MPa	9	17	50
Compressive Strength (room temp)	MPa	17	35	100
Modulus of Elasticity	GPa	10	10	12
Electrical Resistivity	μΩm	7	8	12
Thermal Expansion (20-1000°C)	10 <sup>-6</sup> /K	2.7	2.2	5.0
Thermal Conductivity	W/mK	80	150	100
Ash Content	%	0.3	0.3	0.05

This information is given in good faith but does not constitute a specification or guarantee.