VESCONITE

WEAR PARTS FOR DRILL RIGS

WEAR RESISTANT
SELF-LUBRICATING
HIGH LOAD CAPACITY
REDUCED FRICTION

www.vesconite.com

LONG-LIFE, NO-GREASE WEAR PLATES

INTERNALLY LUBRICATED VESCONITE, THE IDEAL SOLUTION FOR DRILL RIG WEAR PARTS

Vesconite sliding wear plates have proven successful on drill rigs in mining and construction, having lasted over tens of thousands of drilled metres.
They are more durable than traditional wear materials.

INCREASE LIFE OF MATING PARTS

Shaft wear on drill rigs can be expensive due to the cost of metal components. Vesconite wear parts reduce shaft and guide replacement and refurbishment costs.

LOW FRICTION

The friction coefficient of Vesconite is less than half that of bronze or nylon. This makes it desirable in applications with many moving parts.

NO LUBRICATION REQUIRED

Vesconite is internally lubricated, eliminating or greatly reducing the need for greasing.

EXCELS IN HARSH ENVIRONMENTS

Vesconite wear parts give long life in dirty and wet environments, whether unlubricated or lubricated. They survive the abrasive materials encountered in construction and the corrosive underground water found in underground mines.

HIGH LOAD CAPACITY

Vesconite wear parts have a high load capacity and cope with the weights involved with loaded drill rig assemblies.

UP TO 10X THE LIFE OF BRONZE

Vesconite wear parts have a lifespan of up to 10 times that of soft bronze OEM parts (and also last longer than nylon and steel).

VESCONITE

TYPICAL PROPERTIES

		METRIC	IMPERIAL
Density (specific gravity)		1.38	
Melting point		260°C	500°F
Hardness - Shore D (ASTM D2240 / ISO 868)		83	
Compressive properties (ASTM D695 / ISO 604)	**Compressive strength @ yield**	93 MPa	13,500 psi
	Modulus of elasticity	2.3 GPa	333,600 psi
Tensile properties (ASTM D638 / ISO 527)	**Tensile strength @ yield**	66 MPa	9,600 psi
	Tensile strength @ break	63 MPa	9,100 psi
Tangent modulus of elasticity (ASTM D790)		3,726 MPa	540,400 psi
Water absorption - mass change (ASTM D570 / ISO 62)	**After 24 hours**	0.11%	
	After 28 days	0.12%	
Oil absorption - mass change (ASTM D570 / ISO 62)	**After 24 hours**	0.08%	
	After 28 days	0.09%	
Shear strength (ASTM D732)		49.1 MPa	7,100 psi
Flexural yield strength		120 MPa	17,400 psi
Deflection temperature at 1.85 MPa / 268 psi		93°C	200°F
Notched impact strength - Charpy (ASTM D6110 / ISO 179)		245 kJ/m^2	117 ft-lb/in^2
Notched impact strength IZOD		30 J/m	0.56 ft-lb/in
Heat conductivity		0.3 W/m.K	2 Btu-in/ft^2.hr.°F
Coefficient of linear thermal expansion		6x10^{-5} mm/mm.°C	3.3x10^{-5} in/in.°F
Dynamic friction coefficient on polished steel (no lubrication)		0.13 - 0.18	
Dielectric strength		14 kV/mm	360 kV/in
Gamma ray resistance 50% loss of properties		100 Mrads	

The above data should be taken for indicative purposes. Physical properties may be altered to some extent by processing conditions.

VESCONITE
BEARINGS

Founded in 1958, Vesconite Bearings is a world-leading manufacturer of low-friction, wear-resistant bearing materials for a wide range of industries. These include the pump, agriculture, railways, mining, heavy-transport, hydro, renewable-energy, earthmoving, marine and construction industries.

The story of Vesconite goes back to 1968, when founder and chemical engineer Alain Leger began the research and development of a bearing material for use in the ultra-deep gold mines of South Africa – a notoriously harsh environment characterised by extreme dirt and wetness.

The Vesconite Bearings factory spans 15,000 m^2 and features advanced extrusion, injection-moulding and CNC machining facilities. Both standard stock (rods, bushings and plates) and high-precision machined parts are produced. The company is ISO 9001:2015 certified.

EXTENSIVE PRODUCT RANGE

SHORT LEAD TIMES

QUICK GLOBAL DELIVERY

HOW CAN WE HELP YOU?

Get in touch with your enquiries or specific requirements.

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