TENMAT ADVANCED MATERIALS

FEROBIDE

Weldable Tungsten Carbide Wear Protection

Ferobide is a durable composite wear protection material. It yields a weldable tungsten carbide material, using the highest quality of very hard tungsten carbide particles.

Tungsten carbide particles are both chemically and mechanically bound, thus increasing the strength of the material.

Installed via welding, Ferobide exhibits abrasion resistance many times higher than that of traditional wear protection materials. This is coupled with high impact resistance and ability to cut plates to size.

Ferobide is made as standard as flat tiles either 4 mm, 6 mm, or 8 mm thick. Plates are 8x40 mm, 15x40 mm, 25x60 mm, 40x40 mm in size.

The proprietary formulation means that Ferobide is resistant to corrosive environments, and every batch of Ferobide is subject to our thorough QC regime.

The formulation is wholly non-hazardous, meaning Ferobide need not be classified as hazardous.

PROPERTY	UNITS	4 mm thick	6 mm thick
Compressive Strength	MPa	1,500	2,000
Flexural Strength	MPa	600	650
Tensile Strength	MPa	150	200
Proof Stress (typical value)	MPa	130	180
Weld Strength	MPa	200	220
Thermal Conductivity (typical value)	W / mK	50	35
Expansion Coefficient (typical value)	10^{-6} / K	10	11
Hardness	HRC	75	65

Technical Data Sheet