DURMAT® SFTC

Spherical Fused Tungsten Carbide

General characteristics:

DURMAT Sphercial Tungsten Carbide SFTC is the most wear resistant Fused Tungsten Carbide we can offer. These SFTC spherical fused tungsten carbide particles show a fine non acicular structure with a higher hardness than conventional FTC (>3000 $HV_{0.1}$). The increased apparent density combined with a better flowability enable an increase of hard particles in wear resistant coatings and components produced by infiltration.

Application:

Hard facing metallic surfaces exposed to extreme mechanical stress. Using powder metallurgical processes, it is possible to produce parts of nearly any shape, which can contain hard materials or diamonds together with a metal binder and SFTC. Reinforcing the hardness of diamond tools. FTC equalizes the matrices between the different harnesses of diamonds and binder in a diamond drilling, grinding and honing tools. Excellent for deep well drilling tools and rods, crusher jaws, mixers, concrete & stone saws, hot-pressed tools, screens & conveyors, extrusion housings, hard additives to diamond bits and saws.

Chemical composition (in wt-%):

C-total	C-free	O_2 sieve range	O_2- sub sieve range	Fe	Co
3.8 – 4.1	0.1max	0.05 max.	0.2 max.	0.3 max. *)	0.3 max. *)

Physical characteristics:

Hardness:	3000 $HV_{0.1}$
Structure:	fine
Melting point:	2860°C (5176°F)

Quality assurance:

The constant testing of our raw materials, production and pre-shipment procedures ensure the homogeneity of the compliance with the specifications of all powder grades that we deliver.

Sales Units:

PE-bottle:	5 kg **)

*) depend on grain size
**) others on request