FeCrBSi Data Sheet

Introduction

FeCrBSi wire with the coating is prepared by twin-wire arc spray processing. The chemical compositions of the coating as well as phase components were analyzed by energy dispersion spectroscopy and x-ray diffraction method. The surface roughness, porosity, and cross-sectional morphology were further identified and in- boiler test was also carried out. The low thickness loss of the tube indicates a promising application future in sludge boilers. The coating hardness is close to the commercial “Armacor M” and “Armacor C” materials.

Equivalent: TAFA 95MXC, Armacore M, PMET273

Chemical & Physical Properties

Cr%	B%	Mn%	Si%	Fe%	Density	Melting point °C
27-29	3-4	1.5-2	1-2	Bal.	7.3g/cm3	1538

Applications

- Boiler tubes & Tube shields, Yankee dryer rolls
- Anti-Skid
- Fan Blades
- Drill Collars

Deposit Characteristics

Typical Hardness	HRC 55-60
Bond Strength	6000 PSI
Deposit Rate	10 lbs/hr/100A
Deposit Efficiency	70%
Machine ability	Good

Standard Dimensions

	Diameter (mm)	Tolerance (mm)
Wire	1.6, 2.0, 3.17	+ 0 / - 0.05

Other sizes (diameter and wire weight) can be manufactured accordingly to the requirements of customers.

Packaging

Spool	15kgs / spool (D300 spool)
Coil	20 - 400kgs / coil