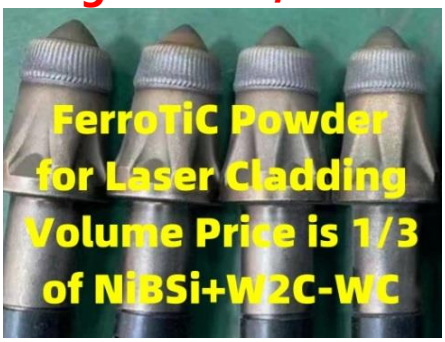
金属陶瓷碳化钛铁基合金粉用于耐磨耐腐蚀耐气蚀代替碳化钨溶射、激光熔覆

FerroTiC Titanium Carbide Hardmetal Powders for Brake Disc HVOF Coating or Laser Cladding of Wear, Corrosion, Cavitation Resist



1. 金属陶瓷碳化钛合金粉用于耐磨耐腐蚀耐气蚀代替碳化钨溶射、激光熔覆品规

Top Quality World Lowest Price FerroTiC Titanium Carbide Hardmetal Powders for Brake Disc HVOF Spraying or Laser Cladding Specifications

型号 Type	TiC	Cr+Ni	C+Mo+Nb	N+Mn+Co	Fe	密度 Density	硬度 Hardness	耐腐蚀 Corrosion Resist	耐高温 Temperature Resist	粒度 Powder Size	应用 Application	特点 Character
T60	59-61	12-14	1.0-3.0	7.0-9.0	Balance 13-21	≈5.7 g/Cm3	HRA 88-89	优于 Better than 316L	up to 800℃	15-53um, 53-150um	HVOF, Cored Wire 热喷涂，粉芯丝	体积价格是 WC-10Co-4Cr 的四分之一 Volume Price is 1/4 of WC-10Co-4Cr
T33E	32-34	25-29	2.0-4.0	4.0-6.0	Balance 27-37	≈6.8 g/Cm3	HRC 40-50	优于 Better than 316L	up to 700℃	20-53um, 53-150um	Laser, PTA Cladding 激光熔覆	体积价格是司太立堆焊粉的二分之一 Volume Price is 1/2 of Stellite
T33W	32-34	15-17	1.0-3.0	4.0-6.0	Balance 40-48	≈6.8 g/Cm3	HRC 51-55	优于 Better than 17-4PH	up to 550℃	20-53um, 53-150um	Laser, PTA Cladding 激光熔覆	体积价格是镍基碳化钨堆焊粉的三分之一 Volume Price is 1/3 of NiBSi+W2C-WC
T25C	24-26	15-25	1.0-3.0	4.0-6.0	Balance 40-56	≈7.1 g/Cm3	HRC 36-46	优于 Better than 316L	up to 550℃	20-53um, 53-150um	Laser, PTA Cladding 激光熔覆	超耐气蚀高耐磨 Super Cavitation & very good Wear Resist

2. 金属陶瓷碳化钛合金粉用于耐磨耐腐蚀耐气蚀代替碳化钨溶射、激光熔覆生产

Top Quality World Lowest Price FerroTiC Titanium Carbide Hardmetal Powders for Brake Disc HVOF Spraying or Laser Cladding Production

奥泰新材纯碳化钛生产工艺：1. TiO2+3C 混匀后真空炉中加热至 2000℃ = TiC + 2CO，2. TiC 破碎，3. TiC 筛分及气流分级。

Pure TiC Titanium Carbide Production Processes: 1. TiO2 + 3C mixed & be put in Vacuum Furnace at about 2000℃ = TiC + 2CO, 2. TiC Crushed, 3. TiC Sieved & Gas Classified.

烟台奥泰预先在碳化钛粉表面包覆了一层不锈钢，彻底解决了纯碳化钛粉熔覆过程中易氧化、不易跟不锈钢润湿结合的技术难题。镍基 60%铸造碳化钨中碳化钨体积比约 43%，T33W 不锈钢基碳化钛中碳化钛体积比约 44%。T33W 不锈钢基碳化钛熔覆层耐磨性略逊色于镍基 60%铸造碳化钨。T33W 不锈钢基碳化钛粉体积价格是镍基 60%铸造碳化钨粉价格的三分之一 1/3。

AMTmetalTech unique FerroTiC Powder is the pure TiC clad with Stainless Steel to avoid the headache of pure TiC oxidizing and not easy to be wet bonded with steel during weld overlaying or thermal spraying.

碳化钨在 WC-10Co-4Cr 溶射粉中的体积比为约 77%。碳化钛在 T60=60%TiC+40%不锈钢热喷涂粉中的体积比为约 70%。T60 耐磨性很好仅略逊于 WC-10Co-4Cr。T60 体积价格是 WC-10Co-4Cr 的四分之一 1/4。T60 可用于 HVOF、HVAF 及等离子热喷涂代替 WC-10Co-4Cr。

The Tungsten Carbide volume rate in WC-10Co-4Cr is about 77%. The Titanium Carbide volume rate in T60=60%TiC+40%Stainless Steel is about 70%. The wear resistance of T60 is very good and close to WC-10Co-4Cr. The volume price of T60 is very competitive only 1/4 one quarter of the WC-10Co-4Cr for HVOF, HVAF or Plasma Spraying Brake Discs, Valves, Pistons, Drill Rods etc.

The Tungsten Carbide volume rate in 60%W2C-WC+40%NiBSi is about 43%. The Titanium Carbide volume rate in T33W=33%TiC+67%Stainless Steel is about 44%. The wear resistance of T33W is very good and close to 60%W2C-WC+40%NiBSi. The volume price of T33W is very competitive only 1/3 one of third of the 60%W2C-WC+40%NiBSi for Laser or PTA Plasma cladding Brake Discs, Conical Mining Drill Bits etc.

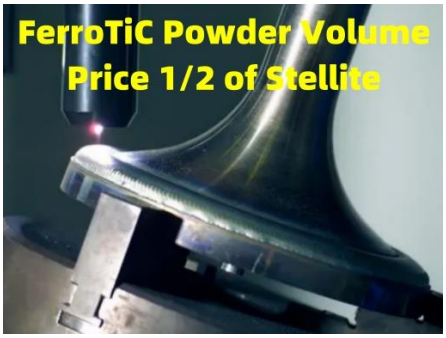
T33E=33%TiC+67%耐高温腐蚀不锈钢用于激光熔覆或等离子堆焊发动机气门等。

T33E=33%TiC+67%Elevated Temperature Erosion Resist Austenite Stainless Steel is very good for Gas Valve Laser or PTA Plasma Cladding in Car Industry.

T25C=25%TiC+75%不锈钢超耐气蚀用于激光熔覆或等离子堆焊水轮机叶片等不预热无裂纹。碳化钛在 T25C 中的体积比为约 35%。

T25C=25%TiC+75%Stainless Steel is very good Cavitation, Corrosion resist and very good abrasion resist no cracking tendency without preheating for Laser or PTA Plasma Cladding Hydro Turbine Runners, Propeller Blades, Impeller Runners, Pumps etc. The Titanium Carbide volume rate in T25C is about 35%.

纯碳化钛真空还原炉
Vacuum Reduction for Pure TiC



气门堆焊粉体积价格是司太立一半
T33E Gas Valve Cladding

T25C 粉用于超耐气蚀熔覆
T25C Powder for Cavitation Resist

3. 金属陶瓷碳化钛合金粉用于耐磨耐腐蚀耐气蚀代替碳化钨溶射、激光熔覆优点

Top Quality World Lowest Price FerroTiC Titanium Carbide Hardmetal Powders for Brake Disc HVOF Spraying or Laser Cladding Advantages

FerroTiC 优点 Advantages	碳化钛合金 FerroTiC T60=60%TiC+SS	纯碳化钛 Pure TiC
密度 Density	较高约 about 6.1	较低 4.93
晶粒度 TiC Grain Size	1-2um	20-53um, 53-150um
涂层均匀度 Coating Homogeneity	均匀度较高因为细 TiC 溶解分散 Homogenious for T60 is dissolved to be fine TiC	均匀度较低因为粗 TiC 易上浮 Less Homogenious for Thick TiC easy to float
涂层脆性 Coating Brittleness	涂层脆性小因为细 TiC 已经在不锈钢中均布 Less Brittle for fine 60%TiC already bonded with SS	涂层中粗 TiC 较脆 More Brittle for pure thick TiC
涂层结合度 Bonding after cladding	细 TiC 已经跟不锈钢粉真空烧结后在熔覆中不易氧化因此涂层结合更佳 Better bonding for fine TiC already bonded with SS during vacuum sintering before cladding	粗纯碳化钛熔覆中易氧化因此涂层不易结合 Pure thick TiC is easy to be oxidized and less easy to be bonded with SS during cladding
涂层裂纹倾向 Coating Cracking Tendency	较低 Less Cracking Tendency	较高 More Cracking Tendency
碳化钛允许含量 TiC content rate allowed in coating to prevent cracking	较高 Higher	较低 Less