TIG CO1

Classification

AWS A5.21 : ERCoCr-C
DIN 8555 : WSG-20-GZ-55-CSTZ
EN 14700 : S Co3

Description & Applications

Cobalt base solid rod for TIG or oxyfuel harfacing of Stellite™ Grade 1*. Very good resistance to metalmetal wear and to corrosion up to 800°C. Coefficien t of friction very low. Highly resistant to erosion and cavitation.

Main applications: Hardfacing of rollers, rails, bearing and shafts of pumps, extrusion nozzles, hot cutting tools, conveyor screws…

* Trademark Kennametal

Typical Chemical Composition (%)

	C	Si	Mn	Cr	Ni	Mo	Fe	W	P	S	A/T	Co
Min	2.0			26				11				
Max	3.0	2.0	1.0	33	3.0	1.0	3.0	14	0.03	0.03	0.50	Rem.
Type	2.4	1.2	0.2	31.0	2.2	0.3	2.5	12.5	0.02	0.015	<0.50	Rem.

All Weld Metal Mechanical Properties

	Hardness (HRC)		
Temperature (°C)	+20°C	400°C	600°C
Type	45-58	~47	~41

Welding Current & Instructions

Welding mode	Shielding Gas
TIG = -	ISO 14175 : I1 (Ar) 6-12 L/min

Preheat massive parts or special steels to 300-600°C. Keep this temperature during welding and cool down slowly, preferable in an oven, to reduce the risk of cracking while cooling.

For oxyfuel hardfacing, use a reducing flame (slight excess of acetylene).