

MIG CO25

Classification

AMS : 5796 EN 14700 : S Z Co1

DIN 8555 : MSG 20-GZ-250-CKTZ

Description & Applications

Cobalt base solid wire for GMAW harfacing of StelliteTM Grade 25*. Good resistance to metal-metal wear and oxidation resistant up to 1000°C. Good behaviour to important thermal and mechanical shocks. Excellent resistance to cracks, work hardenable, highly resistant to cavitation and erosion. Deposit non-magnetic.

Main applications: Surfacing of motor valves, gas turbine blades, extrusion nozzles, forging dies, forging tools.

Typical Chemical Composition (%)

	С	Si	Mn	Cr	Ni	Мо	Fe	W	Nb	Р	S	O/T	Со
Min	0.05		1.00	19.00	9.00			14.00					
Max	0.15	1.00	2.00	21.00	10.00	•	3.00	16.00		0.04	0.03	0.50	Rem.
Type	0.10	0.70	1.2	19.8	9.8	0.03	2.0	15.0	0.01	0.02	0.015	< 0.50	Rem.

All Weld Metal Mechanical Properties

Hardness (as welded)

~230 HB

Welding Current & Instructions

Wolding mode	Wire Ø	Welding p	Shielding Gas		
Welding mode	(mm)	Current (A)	(V)	Silieluling Gas	
				ISO 14175:	
MIG	1.2	140-180	22-27	I1(Ar) / M11	
= +	1.6	160-200	24-28	(Ar/CO ₂)	
				18 L/min	

Preheat large components or special steels to 200-400°C. Keep this temperature during welding and cool down slowly, preferable in an oven, to reduce the risk of cracking while cooling.

FT En-MB05-200309

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