MIG (GMAW) wires for mild and low alloyed steel



ED-SG CrMo 2			
Classification DIN EN ISO	Classification AWS		
21952-A GCrMo2Si	A5.28 ER90S-G		
Approvals	Material No.		
TÜV 10966.00, CE, DB 42.045.20	1.7384		

Characteristics and application

MIG/GMAW wire for high temperature creep resistant 2.25%Cr1%Mo ferritic steel. These steels are used for creep resisting applications up to ~600°C. Typical applications in power generation plant include steam piping, turbines and boilers; the alloy also finds applications in the chemical and petro-chemical industries. The wire has low levels of tramp elements (eg. Sn, As, Sb and P) providing a low Bruscato Factor (X< 10 ppm) for temper embrittlement resistant applications.

Base materials

For matching 2.5%Cr1%Mo creep resisting ferritic steels.

10CrMo 9-10, G-17CrMo 9-10

ASTM: A182 grade F22, A199/A200 grades T21/T22, A213 grade T22, A217 grade WC9, A234 grade WP22, A335 grade P22, A387 grades 21/22

Typical analysis in %

С	Si	Mn	Cr	Мо
80,0	0,60	0,92	2,45	1,00

Typical heat treatment

Preheat temperature: 200°C

Interpass temperature: max. 300°C

PWHT: 690°C

Mechanical properties of the pure weld metal

Yield strength in Mpa	Tensile strength in Mpa	Elongation in %	Charpy-V-Value (ISO-V) in J
≥ 400	≥ 520	4d/5d: ≥20	RT ≥ 80