

diamondspark DCMS MC

Metal cored wire, seamless, creep resistant

Classifications

EN ISO 17634-A EN ISO 17634-B AWS A5.28 / SFA-5.28

T CrMo1 M M21 1 H5 T 55 T15-1M21-1CM-H5 E80C-B2H4

Characteristics and typical fields of application

Seamless, Cr-Mo alloyed, metalcored wire for singleor multilayer welding of creep resistant steels up to 500°C with Ar-CO₂ shielding gas. Features include: high yield, good weldability, excellent bead appearance, very low spatter losses.

Wire with very low amount of diffusible hydrogen (< 3ml/100g) that reduces the risk of cracks.

Base materials

1.7335 13CrMo4-5, 1.7262 15CrMo5, 1.7728 16CrMoV4, 1.7218 25CrMo4, 1.7225 42CrMo4, 1.7258 24CrMo5, 1.7354 G22CrMo5-4, 1.7357 G17CrMo5-5; ASTM A 182 Gr. F12; A 193 Gr. B7; A 213 Gr. T12;

A 217 Gr. WC6; A 234 Gr. WP11; A335 Gr. P11, P12; A 336 Gr. F11, F12; A 426 Gr. CP12

Typical analysis

	Gas	C	Si	Mn	Cr	Mo
wt%	M21	0.06	0.40	1.10	1.20	0.50

Mechanical properties of all-weld metal - typical values (min. values)

Condition	Yield strength R _{p0.2}	Tensile strength R _m	Elongation A (L ₀ =5d ₀)	Impact energy ISO-V KV J		
	MPa	MPa	%	20°C	-10°C	-20°C
S	520 (≥ 470)	620 (550-690)	22 (≥ 20)	110 (≥ 47)	90	80

s stress releived 690°C / 60min - shielding gas M21

Operating data

~ + + 1	Polarity	DC +
*	Shielding gas (EN ISO 14175)	M21

Dimension mm
1.2
16

Preheat, interpass temperature and post weld heat treatment as required by the base metal.

Approvals

TÜV (07158), DB (42.052.16), CE