

Gas Tungsten Arc Welding

TG-S2CM - TG-S2CML

FAMILIARC

TIG welding rod and wire for 2.25%Cr-1%Mo heat resistant steel

Classification: ASME / AWS A5.28 ER90S-G: TG-S2CM
 ER80S-G: TG-S2CML
 JIS Z3316 YGT2CM: TG-S2CM
 JIS Z3316 YGT2CML: TG-S2CML

Features :

- Applied for ASTM A387 Gr.22 and equivalents
- TG-S2CML: Lower carbon content

Shielding Gas: Ar

Polarity: DC-EN

Chemical composition of rod and wire (%) as per AWS

		C	Si	Mn	P	S	Cr	Mo	Ni	Cu
TG-S2CM	Ex.	0.11	0.36	0.75	0.004	0.008	2.29	1.07	0.05	0.12
	Guar.	0.05~ 0.13	≤0.70	0.50~ 1.20	≤0.025	≤0.025	2.00~ 2.50	0.90~ 1.20	≤0.20	≤0.35
TG-S2CML	Ex.	0.03	0.50	1.14	0.007	0.009	2.33	1.09	0.03	0.12
	Guar.	≤0.05	≤0.70	≤1.30	≤0.025	≤0.025	2.10~ 2.60	0.90~ 1.20	≤0.20	≤0.35

Mechanical properties of all-weld metal as per AWS

		0.2%OS (MPa)	TS (MPa)	EI (%)	IV (J)	PWHT (°Cx h)
TG-S2CM	Example	610	720	28	0°C: 250	690x1
	Guaranty	≥540	≥620	≥17	-	690±15x1
TG-S2CML	Example	520	630	28	0°C: 250	690x1
	Guaranty	≥470	≥550	≥19	-	690±15x1

Approvals (only for TGS-2CM)

AB	NV	BV	NK	Others
MG	MG	MG(ER90S-G)	MG	KR, TÜV

Packages

Dia. (mm)	Type	Weight (kg)	Length (mm)	Weight per piece (g)	
				(TG-S2CM)	(TG-S2CML)
0.8	spool	10	-	○	-
1.0	spool	10	-	○	-
1.2	spool	10	-	○	-
	tube	5	1,000	9	-
1.6	spool	10	-	○	-
	tube	5	1,000	16	16
2.0	tube	5	1,000	25	25
2.4	tube	5	1,000	35	35
3.2	tube	5	1,000	63	-