

TG-S1CM ■ TG-S1CML

TRUSTARC™

TIG welding rod and wire for 1~1.25%Cr-0.5%Mo heat resistant steel

Classification: ASME / AWS A5.28 ER80S-G

JIS Z3316 YGT1CM: TG-S1CM

JIS Z3316 YGT1CML: TG-S1CML

Features : •Applied for ASTM A387 Gr.11, Gr.12 and equivalents

•TG-S1CML: 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-S1CM	Ex.	0.08	0.52	1.10	0.007	0.009	1.40	0.55	0.02	0.11
	Guar.	0.05~ 0.12	≤0.70	0.60~ 1.20	≤0.025	≤0.025	1.00~ 1.50	0.40~ 0.65	≤0.20	≤0.35
TG-S1CML	Ex.	0.03	0.50	1.13	0.005	0.009	1.40	0.49	0.04	0.12
	Guar.	≤0.05	≤0.70	≤1.30	≤0.025	≤0.025	1.00~ 1.50	0.40~ 0.65	≤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-S1CM	Example	540	630	28	0°C: 270	690x1
	Guaranty	≥470	≥550	≥19	-	620±15x1
TG-S1CML	Example	480	580	31	0°C: 300	620x1
	Guaranty	≥470	≥550	≥19	-	AW

■ Approvals (only for TGS-1CM)

AB	LR	NV	BV	NK	Others
MG	MG(ER80S-G)	MG	MG(ER80S-G)	MG(E8016-B2)	KR, TÜV

■ Packages

Dia. (mm)	Type	Weight (kg)	Length (mm)	Weight per piece (g)	
				(TG-S1CM)	(TG-S1CML)
0.8	spool	10	-	○	-
1.0	spool	10	-	○	-
1.2	tube	5	1,000	9	-
	spool	10	-	○	○
1.6	spool	20	-	○	-
	tube	5	1,000	16	16
	spool	10	-	○	-
2.0	spool	20	-	○	-
	tube	5	1,000	25	25
2.4	tube	5	1,000	35	35
3.2	tube	5	1,000	63	63

TG-S80B2

TRUSTARC™

TIG welding rod and wire for 1~1.25%Cr-0.5%Mo heat resistant steel

Classification: ASME / AWS A5.28 ER80S-B2**Features:** •Applicable for ASTM A213 Gr.11 and equivalents**Shielding Gas:** Ar**Polarity:** DC-EN

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

	C	Si	Mn	P	S	Cr	Mo	Ni	Cu
Example	0.11	0.50	0.67	0.004	0.004	1.40	0.55	0.01	0.15
Guaranty	0.07~ 0.12	0.40~ 0.70	0.40~ 0.70	≤0.025	≤0.025	1.20~ 1.50	0.40~ 0.65	≤0.25	≤0.35

■ Mechanical properties of all-weld metal as per AWS

	0.2%OS (MPa)	TS (MPa)	EI (%)	IV (J)	PWHT (°Cx h)
Example	490	625	32	-20°C: 246	620x1
Guaranty	≥470	≥550	≥19	-	620±15x1

■ Packages

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