

Low Carbon Steel and High Strength Steel Solid Wire MIG & TIG

Classification	Product Name	AWS Specificaiton		ENISO Specificaiton	Shielding Gas	Dimension (ø mm)	Typical mechanical properties of weld metal			
		<A5.18>	<A5.18M>				<14341-A>	Yield Strength Mpa	Tensile Strength Mpa	Elongation%
Gas Shielding	KM70-2	ER70S-2	ER48S-2	G 42 3 C G2Ti	CO ₂	0.8, 1.0, 1.2	475	550	32	80 (-30)
	KM70-6	ER70S-6	ER48S-6	G 42 3 C/M G3Si1	CO ₂ / 75~80% Ar+CO ₂	0.8, 1.0, 1.2	460 375	570 525	31 32	(64(-30)AW 95(-30) 580°Cx5h
	KM70-G	ER70S-G	ER48S-G	G 42 4 C G4Si1	CO ₂	0.8, 1.0, 1.2	420	535	29	78 (-40)
	KM80-G	A5.28 ER80S-G	A5.28M ER55S-G	G 46 4 C G 4Mo	CO ₂ / 75~80% Ar+CO ₂	0.8, 1.0, 1.2	650	710	23	122 (-20)
		<A5.18>	<A5.18M>	<636-A>						
GTAW	KT-70.G	ER70S-G	ER48S-G	W 42 3 W3Si1	Ar	1.6,2,0,2,4	420	550	31	225 (-20) AW 218 (-20) 580°Cx5h
	KT-70.2	ER70S-2	ER48S-2	W 42 3 W2Ti	Ar	1.6,2,0,2,4	555	615	28	175 (-30)
	KT-70.3	ER70S-3	ER48S-3	W 42 4 W2Si	Ar	1.6,2,0,2,4	435	525	29	265 (-46)
	KT-70.6	ER70S-6	ER48S-6	W3Si1	Ar	1.6,2,0,2,4	460 375	570 525	31	64(-30) AW 95(-30) 580°Cx5h

Typical mechanical composition of weld metal (wt%)							Applications
C	Mn	Si	Cr	Ni	Mo	Others	
0.053	1.08	0.51	0.04	0.01	0.06	Ti0.10 Al0.07 Zr0.06	It is a gas shielding solid wire for 490MPa high strength steel suitable for vehicle, bridge, shipbuilding, pressure vessel etc, high current is preferred.
0.078	1.45	0.85	0.02	0.01	0.01	-	Applicable in automobile, bridges, shipbuildings, pressure vessels etc. High current is preferred.
0.053	1.5	0.86	0.03	0.02	0.01	Ti0.10	Applicable in automobile, bridges, constructions, excavators etc. High current is preferred.
0.075	1.42	0.55	0.08	0.05	0.4	-	Applicable in construction, engineering machineries , port machineries, pressure vessels etc. Range of current is extensive, arc is stable
0.075	1.47	0.85	0.01	0.01	0.01	-	Applicable in petrochemical industries, pressure vessels such as the steel of 20,20g,20R,X60,X65,16Mn,16MnR and etc.
0.054	1.07	0.54	0.04	0.02	0.05	Ti0.10 Al0.06 Zr0.07	Suitable for the bottom welding of pipes, pressure vessels, petrochemical industries etc.
0.078	1.09	0.67	0.01	0.01	0.01	-	Gas tungsten arc welding rod and wire for 490MPa high tensile steel, suitable for the sheet plate welding of machinery, building, ships and vehicle.
0.078	1.45	0.85	0.02	0.01	0.01	-	Butt and fillet welding of carbon steel for pressure vessel, tubes for nuclear reactors,ships,penstock and aluminum-killed steel for low temperature service.