

TOKO Welding LLC(Tokyo), we aim to be the leaders in the welding industry, with our innovative products and remarkable portfolio. Our positive attitude, determined approach and innovative solutions will help us bring world-class welding solutions accessible to one and all.

Almost of TOKO welding consumables have been approved by the China Classification Society(CCS), Lloyd's Register of Shipping(LR), American Bureau of Shipping(ABS), Bureau Veritas(BV), Germanischer Lloyd(GL), Det Norske Veritas(DNV), Nippon Kaiji Kyokai(NK), Korea Register of Shipping(KR), PT.Biro Klasifikasi Indonesia(BKI),Canadian Welding Bureau(CWB) as well as Lloyd's Register Quality Assurance (LRQA) etc.

TOKO, is also the first person who to introduce a new business mode base on"Customer to Factory("C2F") + Partner + Equity" in this field, our final mission is trying to make thousands of customers are finally becoming one of TOKO this an international brand equity holders...

Mild Steel Welding Rods E6013

AWS A5.1 E6013
CSA W48-01 E4313
JIS Z3211 D4313
BS EN ISO 2560-B-E43 19A

Description

TOKO AWS A5.1 E6013 is a high titania(rutile) potassium type welding rods with cellulose in coating. Both all position welding and vertical-down welding could be preformed. It is suitable for mild steel structures of small work pieces, sheet and hull of vehicles etc.



Product Technical Data

(A) Chemical Composition of Deposited Metal (%)

	C	Mn	Si	S	P	Ni	Cr	Mo	V
Standard	≤0.20	≤1.20	≤1.00	≤0.035	≤0.040	≤0.30	≤0.20	≤0.30	≤0.08
Typical	0.068	0.39	0.28	0.017	0.023	0.02	0.027	0.003	0.002

(B) Mechanical Properties of Deposited metal (AW)

	Yield Point	Tensile Strength	Elongation	Impact Value(J)
	Reh (Mpa)	Rm (Mpa)	A4 (%)	0°C
Standard	≥330	≥430	≥17	-----
Typical	395	480	29	70

(C) Sizes, Pieces & Recommended Current (AC or DC)

Size(mm)		2.5×300	3.2×350	4.0×400	5.0×400
Pieces(5kg)		≈268	≈163	≈96	≈62
Current(A)	F,H	60-100	80-150	160-200	180-250
	V,OH	60-90	80-110	150-170	---

Approvals	CCS	LR	ABS	BV	GL	DNV	NK	CWB
Grade	2	2N	2	2	2	2	KMW2	E4313

Welding Rods for Carbon Steel & High Tensile Strength Steel

AWS E5.1 E7015

Standard & Typical Chemical Composition of Deposited Metal(%)								
C	Mn	Si	S	P	Cr	Ni	Mo	V
≤0.16 0.078	≤1.60 1.21	≤0.9 0.51	≤0.035 0.010	≤0.040 0.020	≤0.2 0.037	≤0.3 0.014	≤0.3 0.002	≤0.08 0.01
Welding position	Type of Current	Standard & Typical Mechanical Properties of Deposited Metal(AW1)				Application		
		Yield Point ReL(Mpa)	Tensile Strength Rm(Mpa)	Elongation A4(%)	Akv Value(J)			
F,V, OH,H	DC ⁺	ReH≥375 440	490-660 540	≥22 31	-20℃ ≥47 160	Suitable for welding important structures made of low alloy steel with corresponding grade of tensile strength, such as ships and heavy machinery.		

AWS A5.1 E7016

Standard & Typical Chemical Composition of Deposited Metal(%)								
C	Mn	Si	S	P	Cr	Ni	Mo	V
≤0.15 0.069	≤1.60 1.11	≤0.75 0.53	≤0.035 0.007	≤0.035 0.020	≤0.20 0.037	≤0.30 0.013	≤0.30 0.002	≤0.08 0.010
Welding position	Type of Current	Standard & Typical Mechanical Properties of Deposited Metal(AW1)				Application		
		Yield Point ReL(Mpa)	Tensile Strength Rm(Mpa)	Elongation A4(%)	Akv Value(J)			
F,V, OH,H	DC+	≥400 440	≥490 550	≥22 31	-30°C ≥27 170	Welding important structures made of low alloy steel with corresponding grade of tensile strength, such as ships and heavy machinery.		

AWS A5.1 E7018

Standard & Typical Chemical Composition of Deposited Metal(%)								
C	Mn	Si	S	P	Cr	Ni	Mo	V
≤0.15 0.068	≤1.60 1.38	≤0.75 0.41	≤0.035 0.012	≤0.035 0.015	≤0.20 0.011	≤0.30 0.035	≤0.30 0.001	≤0.08 0.002
Welding position	Type of Current	Standard & Typical Mechanical Properties of Deposited Metal(AW1)				Application		
		Yield Point ReL(Mpa)	Tensile Strength Rm(Mpa)	Elongation A4(%)	Akv Value(J)			
F,V, OH,H	AC≥7 0V or DC+	≥400 465	≥490 560	≥22 29	-30°C ≥27 130	Suitable for welding important low alloy structures, which belong to the same grade of tensile strength such as boilers, pressure vessels, pipelines ,offshore drilling platform and so on.		

Flux Cored Wire E71T-1

GB/T 10045 E501T-1
AWS A5.20 E71T-1C
BS EN 17632T422PC1H10

Description

E71T-1 is formulated to deposit x-ray quality welds in flat, vertical up, horizontal, or overhead positions. E71T-1 is designed for welding low carbon and mild steel, structural and pressure vessel grades. E71T-1 flux core ingredients produce a fast freezing slag that facilitates out of position welds. Bead contour is flat to slightly convex. Slag is easy to remove and low spatter provides easy post weld cleaning. Conforms to AWS A5.20 E71T-1 OR E71T-GS.



Product Technical Data

(A) Chemical Composition of Deposited Metal(%)

Item	C	Mn	Si	P	S	Cr	Ni	Mo	V	Cu
Standard	≤0.18	≤1.75	≤0.90	≤0.03	≤0.03	≤0.20	≤0.50	≤0.30	≤0.08	≤0.35

(B) Mechanical Properties of Deposited Metal

Item	Yield Point (MPa)	Tensile Strength(MPa)	Elongation(%)	Test Temp(°C)	Impact Energy	Average (J)
Standard	≥400	≥480	≥20	-20	≥27	

(C) Recommended Current (DC+) and Voltage Range

Welding position	1.2 mm			1.6 mm		
	Flat	120~320A	16~34V	15~25 L/Min	180~400A	22~42V
Horizontal	120~280A	16~29V	15~25 L/Min	180~400A	22~42V	15~25 L/Min
Overhead	120~240A	16~28V	15~25 L/Min			
Vertical Up	120~240A	16~27V	15~25 L/Min	180~260A	23~30V	15~25 L/Min

Vertical Down	120~260A	16~29V	15~25 L/Min	180~260A	23~30V	15~25 L/Min
---------------	----------	--------	-------------	----------	--------	-------------

(d) Diameter: 0.8mm,0.9mm,1.0mm,1.2mm,1.4mm,1.6mm, 1.8mm

(E) Packing: Precision layer winding, wrapped with volatile corrosion inhibitor paper, vacuum packed with aluminum foil-bags further packed in seaworthy corrugated carton.

CO2 Welding Wire ER70S-6

GB/T 8110 ER50-6
AWS A5.18 ER70S-6
BS EN 14341-A-G 42 3 C G3Si1

Application

ER70S-6 is widely used to weld ship building steel (A , B , D , E ; A36 , D36 , E36) and equivalent mild steel or 550 Mpa grade mild alloy steel , such as container building , construction machine , railway construction , pressure vessel for semi-auto or automatic gas shielded welding with high performance.



Product Technical Data

Wire Size	Spool Size	Net Weight
0.8mm 1.0mm 1.2mm 1.6mm	D100mm D200mm D270mm D300mm K300mm	1kg,5kg,15kg,18kg,20kg

Chemical Composition (%)	C	Mn	Si	P	S	Cr	Ni	Cu
	0.06~0.15	1.40~1.85	0.80~1.15	≤0.025	≤0.035	-	-	≤0.50
Mechanical Properties or Deposited Metal	Yield strength $\sigma_{0.2}$ (Mpa)		Tensile strength σ_b (Mpa)		Elongation δ_5 (%)		AKV impact(J)	
	≥420		≥500		≥22		≥27(-29)	

Wire Size (mm)	φ0.8	φ1.0	φ1.2	φ1.6	Welding position: All positions
Welding current(A)	40~140	50~220	80~350	120~550	
Please be noted	Wire shall be stocked in dry.open the packs just when welding to avoid the wire rust.				
	Before welding please clean out the oil,rust,water etc from the work parts				

Submerged Arc Welding Wire EL12

GB/T 5293 F4A2-H08A
AWS A5.17 F6A0-EL12
BS EN 756-S 35 2 MS S1

Description

Submerged arc welding products manufactured by our company have excellent welding and machinery performance and can be used with many kinds of welding flux. The electric arc is steady; deslagging process is easy; welding line is formed well and the welding speed is fast. There is no splashing and arc stimulation in the melting of the welding wire. the welding line surface is bright and clean, and the welding quality is guaranteed and it is prone to realize mechanization and automatic welding.



Application

Applicable for single pass and multi-pass welding of carbon steel and 500 MPa grade low alloy steel and is widely used in such fields as automobile industry, machinery manufacturing, ship building, metallurgical and mining equipment manufacturing, bridge building, petrochemical industry and pressure vessel manufacturing, high-speed welding of pipeline etc.

Product Technical Data

(A) Chemical Composition of Deposited Metal(%)

Elements	C	Mn	Si	Cu	S	P	Cr
Samples	0.10	0.30-0.55	0.03	0.20	0.030	0.030	0.20

(B) Mechanical Properties of Deposited Metal(%)

ITEM	Yield Strength(MPa)	Tensile Strength(MPa)	Elongation(%)
Samples	320	410-550	22

2. Wire Diameter (mm) : 2.0mm 2.5mm 3.2mm 4.0mm 5.0mm

3. Other grades of SAW: H08A EL8, H08MnA EM12K, H10MnSi EM13K etc

