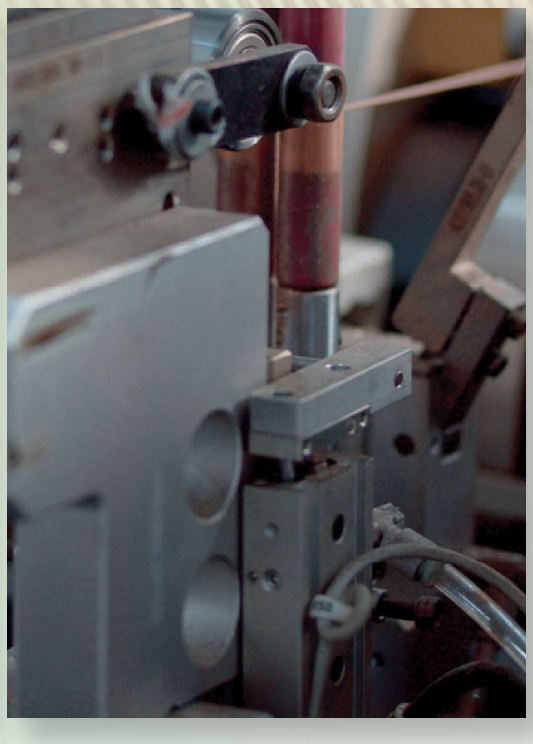


WELDING MATERIAL
CATALOGUE

Exceptional Global Services

Connecting Australian Industry with World-Class Manufacturing Excellence

At Exceptional Global Services (EGS), we are committed to delivering high-quality industrial products backed by global manufacturing expertise and trusted Australian service. As the exclusive Australian affiliate of LongTeng, one of China's leading manufacturers and exporters of steel and industrial products, we provide Australian businesses with direct access to premium-quality materials at competitive global pricing.

Our extensive product portfolio includes welding consumables, grinding balls, prestressed concrete steel bars (PC Steel Bars), reinforcing steel products, angle bars, structural steel, industrial wire products, and a wide range of engineered materials for the mining, construction, infrastructure, manufacturing, and engineering sectors. Through our established international supply chain and strong manufacturing partnerships, we have the capability to source and deliver both standard and customised products to meet the unique requirements of every project.

At EGS, we believe that successful business is built on quality, reliability, and long-term partnerships. We work closely with our clients from enquiry through to delivery, ensuring consistent product quality, transparent communication, competitive pricing, and dependable logistics. Whether you require a single shipment or an ongoing supply agreement, our experienced team is dedicated to providing tailored solutions that support your business growth.

With Exceptional Global Services, you gain more than a supplier—you gain a trusted Australian partner with the strength of a global manufacturing network behind every order.

Fully intergrated production process, with the support of upstream world class steel making facilities in house from same group company.

Newly developed production process with lastest technology and know-how,i.e., fully automatic production which will be the assurance of consistant qualtiy.

High efficiency, fully automatic production line make us achieve 1.5 million tons capacity.

Solid Welding Wire

Carbon Steel Solid Welding Wire	Mild Steel	ER70S-3	5
		ER70S-4	5
		ER70S-6	6
		ER70S-6 (Copper Free)	6
		ER70S-G	7
	Weathering Steel	ER80S-G	7
	High Strength Steel	ER90S-G	8
		ER100S-G	8
		ER110S-G	9
Stainless Steel Solid Welding Wire		ER308L	10
		ER316L	10

Carbon Steel Solid Welding Wire

ER70S-3

Conformance

ISO 14341-B-GS3

AWS A5.18 ER70S-3

Typical Application

- Used for welding low-carboon steel and thin plates
- Used for welding low-carboon steel parts with thorough surface treatment

Mechanical Properties

Tensile Strength (MPa)	Yield Strength (MPa)	Elongation (%)	Impact Energy (J)	Impact Temperature (℃)
525	430	28	103, 97, 100	-20

Chemical Composition %

C	Mn	Si	S	P	Cr	Ni	Mo	V	Cu
0.074	1.15	0.63	0.021	0.020	0.021	0.023	0.023	0.004	0.12

Reference

Shielding Gas	CO_2			
Gas Flow Rate (L/min)	15	15~20	15~25	20~25
Diameter (mm)	0.8	1.0	1.2	1.6
Current(A) DC^+	50~100	50~220	80~350	170~550

ER70S-4

Conformance

ISO 14341-B-GS4

AWS A5.18 ER40S-6

Typical Application

- Used for welding low-carboon steel and thin plates
- Used for welding low-carboon steel parts with thorough surface treatment

Mechanical Properties

Tensile Strength (MPa)	Yield Strength (MPa)	Elongation (%)	Impact Energy (J)	Impact Temperature (℃)
540	450	30	93, 87, 95	-30

Chemical Composition %

C	Mn	Si	S	P	Ni	Cr	Mo	V	Cu
0.085	1.05	0.718	0.014	0.014	0.005	0.018	0.006	0.003	0.106

Reference

Shielding Gas	CO_2 / Ar+CO_2 5~20%			
Gas Flow Rate (L/min)	15	15~20	15~25	20~25
Diameter (mm)	0.8	1.0	1.2	1.6
Current(A) DC^+	50~100	50~220	80~350	170~550

Carbon Steel Solid Welding Wire

ER70S-6

Conformance

ISO 14341-4-G424C13Si1

AWS A5.18 ER70S-6

Typical Application

- Used for welding all kinds of 500MPa structural steel parts
- Used for welding all kinds of 500MPa plates and pipes

Mechanical Properties

Tensile Strength (MPa)	Yield Strength (MPa)	Elongation (%)	Impact Energy (J)	Impact Temperature (℃)
555	450	29	77, 95, 83	-40

Chemical Composition %

C	Mn	Si	S	P	Cr	Ni	Mo	V	Cu
0.077	1.45	0.87	0.013	0.012	0.031	0.017	0.002	0.004	0.125

Reference

Shielding Gas	$100\%CO_2$ / $80\%Ar+20\%CO_2$			
Gas Flow Rate (L/min)	15	15~20	15~25	20~25
Diameter (mm)	0.8	1.0	1.2	1.6
Current(A) DC^+	50~100	50~220	80~350	170~550

ER70S-6 (Copper Free)

Conformance

ISO 14341-4-G424C13Si1

AWS A5.18 ER70S-6

Typical Application

- Used for welding low-carbon steel and all kinds of 500MPa structural steel parts

Mechanical Properties

Tensile Strength (MPa)	Yield Strength (MPa)	Elongation (%)	Impact Energy (J)	Impact Temperature (℃)
555	450	29	77, 95, 83	-40

Chemical Composition %

C	Mn	Si	S	P	Cr	Ni	Mo	V	Cu
0.007	1.54	0.88	0.011	0.012	0.011	0.008	0.010	0.002	0.15

Reference

Shielding Gas	$100\%CO_2$ / $80\%Ar+20\%CO_2$			
Gas Flow Rate (L/min)	15	15~20	15~25	20~25
Diameter (mm)	0.8	1.0	1.2	1.6
Current(A) DC^+	50~100	50~220	80~350	170~550

Carbon Steel Solid Welding Wire

ER70S-G

Conformance

ISO 14341-B-GS1

AWS A5.18 ER70S-3

Typical Application

- Used for welding all kinds of 500MPa structural steel parts
- Applied for high-speed welding steel plate of 500MPa

Mechanical Properties

Tensile Strength (MPa)	Yield Strength (MPa)	Elongation (%)	Impact Energy (J)	Impact Temperature (℃)
545	455	29	114, 131, 127	-40

Chemical Composition %

C	Mn	Si	S	P	Ti+Zr	Cu
0.061	1.44	0.73	0.012	0.009	0.16	0.124

Reference

Shielding Gas	CO_2			
Gas Flow Rate (L/min)	15	15~20	15~25	20~25
Diameter (mm)	0.8	1.0	1.2	1.6
Current(A) DC^+	50~100	50~220	80~350	170~550

ER80S-G

Conformance

AWS A5.18 ER80S-G

Typical Application

- Suitable for welding 550MPa high strength weathering steel, such as vehicles, offshore projects, bridges, etc

Mechanical Properties

Tensile Strength (MPa)	Yield Strength (MPa)	Elongation (%)	Impact Energy (J)	Impact Temperature (℃)
590	495	28	112, 120, 118	-40

Chemical Composition %

C	Mn	Si	S	P	Ni	Cr	Cu
0.057	1.4	0.46	0.008	0.016	0.33	0.48	0.3

Reference

Shielding Gas	CO_2 / Ar+CO_2 5~20%			
Gas Flow Rate (L/min)	15	15~20	15~25	20~25
Diameter (mm)	0.8	1.0	1.2	1.6
Current(A) DC^+	50~100	50~220	80~350	170~550

Carbon Steel Solid Welding Wire

ER90S-G

Conformance

AWS A5.28 ER90S-G

Typical Application

· Suitable for welding 620MPa high strength steel structures, such as construction machinery, pipelines, ships, pressure vessels, etc.

Mechanical Properties

Tensile Strength (MPa)	Yield Strength (MPa)	Elongation (%)	Impact Energy (J)	Impact Temperature (℃)
660	545	25	103, 111, 121	-20

Chemical Composition %

C	Mn	Si	S	P	Mo	Ti	Cu
≤0.10	1.40~1.90	0.50~0.95	≤0.025	≤0.025	0.20~0.60	≤0.12	≤0.50

Reference

Shielding Gas	$Ar+CO_2$			
Gas Flow Rate (L/min)	15	15~20	15~25	20~25
Diameter (mm)	0.8	1.0	1.2	1.6
Current(A) DC^+	50~100	50~220	80~350	170~550

ER100S-G

Conformance

AWS A5.28 ER100S-G

Typical Application

· Suitable for welding 690MPa high strength steel structures, such as construction machinery, hoisting machinery, bridges, pipelines, shipbuilding, pressure vessels, etc

Mechanical Properties

Tensile Strength (MPa)	Yield Strength (MPa)	Elongation (%)	Impact Energy (J)	Impact Temperature (℃)
660	545	25	103, 111, 121	-20

Chemical Composition %

C	Mn	Si	S	P	Cr	Ni	Mo	Ti	Cu
≤0.11	1.40~1.90	≤0.80	≤0.025	≤0.025	≤0.30	0.20~0.60	0.010	≤0.16	≤0.50

Reference

Shielding Gas	$Ar+20\%CO_2$			
Gas Flow Rate (L/min)	15	15~20	15~25	20~25
Diameter (mm)	0.8	1.0	1.2	1.6
Current(A) DC^+	50~100	50~220	80~350	170~550

Carbon Steel Solid Welding Wire

ER110S-G

Conformance

AWS A5.28 ER110S-G

Typical Application

・Suitable for welding 790MPa high strength weathering steel, such as pressure vessels, construction machinery, and hosting machinery

Mechanical Properties

Tensile Strength (MPa)	Yield Strength (MPa)	Elongation (%)	Impact Energy (J)	Impact Temperature (℃)
840	730	24.5	85, 93, 75	-40

Chemical Composition %

C	Mn	Si	S	P	Ni	Mo	Cr	Cu	Ti
≤0.10	1.40~1.85	0.40~1.00	≤0.025	≤0.025	1.20~2.40	0.20~0.60	0.25~0.60	≤0.50	≤0.16

Reference

Shielding Gas	$Ar+20\%CO_2$			
Gas Flow Rate (L/min)	15	15~20	15~25	20~25
Diameter (mm)	0.8	1.0	1.2	1.6
Current(A) DC^+	50~100	50~220	80~350	170~550

Stainless Steel Welding Wire

ER308L

Conformance

AWS A5.9 ER308L

Typical Application

· Used in petrochemical, pressure vessel, food processing machinery, medical equipment, chemical fertilizer

Mechanical Properties

Tensile Strength (MPa)	Yield Strength (MPa)	Elongation (%)	Impact Energy (J)	Impact Temperature (℃)
840	730	24.5	85, 93, 75	-40

Chemical Composition %

C	Mn	Si	Cr	Ni	Mo	P	S	Cu
0.023	1.63	0.40	20.12	10.35	0.37	0.013	0.009	0.16

Reference

Shielding Gas	$Ar+20\%CO_2$		
Gas Flow Rate (L/min)	20~25	20~25	20~25
Diameter (mm)	0.8	1.0	1.2
Current(A) DC^+	70~150	100~200	140~220

ER316L

Conformance

AWS A5.9 ER316L

Typical Application

· Applied in petrochemical, chemical fertilizer equipment such as SUS316L and other materials of welding

Mechanical Properties

Tensile Strength (MPa)	Yield Strength (MPa)	Elongation (%)	Impact Energy (J)	Impact Temperature (℃)
840	730	24.5	85, 93, 75	-40

Chemical Composition %

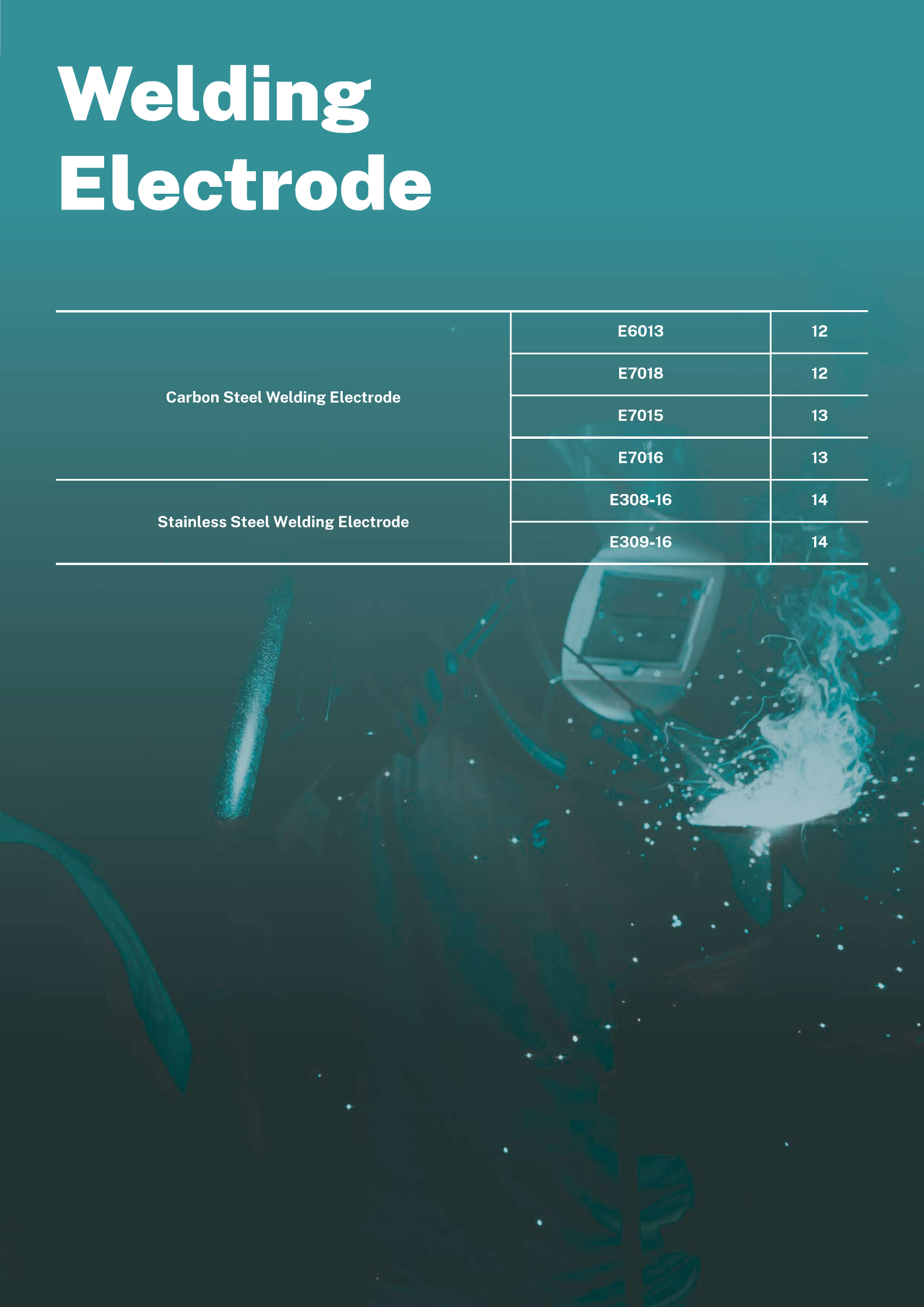
C	Mn	Si	Cr	Ni	Mo	P	S	Cu
0.023	1.90	0.42	19.12	12.59	2.59	0.009	0.008	0.28

Reference

Shielding Gas	$Ar+20\%CO_2$		
Gas Flow Rate (L/min)	20~25	20~25	20~25
Diameter (mm)	0.8	1.0	1.2
Current(A) DC^+	70~150	100~200	140~220

Welding Electrode

Carbon Steel Welding Electrode	E6013	12
	E7018	12
	E7015	13
	E7016	13
Stainless Steel Welding Electrode	E308-16	14
	E309-16	14



Carbon Steel Welding Electrode

E6013

Conformance

AWS A5.1 E6013

Typical Application

· Suitable for welding structures made of low carbon steel, such as small size steel plates

Mechanical Properties

Tensile Strength (MPa)	Yield Strength (MPa)	Elongation (%)	Impact Energy (J)	Impact Temperature (℃)
485	380	28.5	86	0

Chemical Composition %

C	Mn	Si	S	P	Ni	Mo	Cr	V
0.079	0.38	0.21	0.018	0.024	0.020	0.005	0.032	0.010

Reference

Diameter (mm)	2.0	2.5	3.2	4.0	5.0
Type of Current	AC/DC$^+$				
Current(A)	40~70	60~100	80~140	140~220	180~230

E7018

Conformance

AWS A5.1 E7018

Typical Application

· Applied in low alloy steel and carbon steel welding structure

Mechanical Properties

Tensile Strength (MPa)	Yield Strength (MPa)	Elongation (%)	Impact Energy (J)	Impact Temperature (℃)
550	450	28	145, 149, 150	-30

Chemical Composition %

C	Mn	Si	S	P	Cr	Ni	Mo	V
0.07	1.05	0.46	0.015	0.011	0.01	0.02	0.031	0.017

Reference

Diameter (mm)	2.0	2.5	3.2	4.0	5.0
Type of Current	AC/DC$^+$				
Current(A)	40~70	50~90	80~140	110~210	160~230

Carbon Steel Welding Electrode

E7015

Conformance

AWS A5.1 E7015

Typical Application

- Applied in welding medium-carbon steel and low-alloy structures
- Used in shipbuilding such as A, B, D, E. It is also used in thick steel plates and the carbon steel structures

Mechanical Properties

Tensile Strength (MPa)	Yield Strength (MPa)	Elongation (%)	Impact Energy (J)	Impact Temperature (℃)
550	440	30	140	-30

Chemical Composition %

C	Mn	Si	S	P	Ni	Mo	Cr	V
0.087	1.12	0.58	0.012	0.021	0.011	0.007	0.028	0.016

Reference

Diameter (mm)	2.0	2.5	3.2	4.0	5.0
Type of Current	DC^+				
Current(A)	50~80	60~100	80~140	110~220	160~230

E7016

Conformance

AWS A5.1 E7016

Typical Application

- Mainly for welding carbon steel or low alloy steel
- Welding ships which used A, B, C,D E grade steel, and the important frame for the relative strenght grade vehicles, construction and bridges.

Mechanical Properties

Tensile Strength (MPa)	Yield Strength (MPa)	Elongation (%)	Impact Energy (J)	Impact Temperature (℃)
550	450	31	170	-30

Chemical Composition %

C	Mn	Si	S	P	Cr	Ni	Mo	V
0.069	1.11	0.53	0.009	0.020	0.037	0.013	0.002	0.010

Reference

Diameter (mm)	2.0	2.5	3.2	4.0	5.0
Type of Current	AC/DC^+				
Current(A)	40~70	50~90	80~140	110~210	160~230

Stainless Steel Welding Electrode

E308-16

Conformance

AWS A5.4 E308-16

Typical Application

- Suitable for welding the corrosion resistant stainless steel structure

Mechanical Properties

Tensile Strength (MPa)	Elongation (%)
590	45

Chemical Composition %

C	Mn	Si	S	P	Cr	Ni	Mo	Cu
0.038	1.35	0.68	0.008	0.022	19.75	9.60	0.064	0.010

Reference

Diameter (mm)	2.0	2.5	3.2	4.0	5.0
Type of Current	DC^+				
Current(A)	40~80	50~100	70~130	100~160	140~200

E309-16

Conformance

AWS A5.4 E309-16

Typical Application

- Used in similar type stainless steel, dissimilar stainless steel and high chromium steel and high manganese steel.

Mechanical Properties

Tensile Strength (MPa)	Elongation (%)
595	40

Chemical Composition %

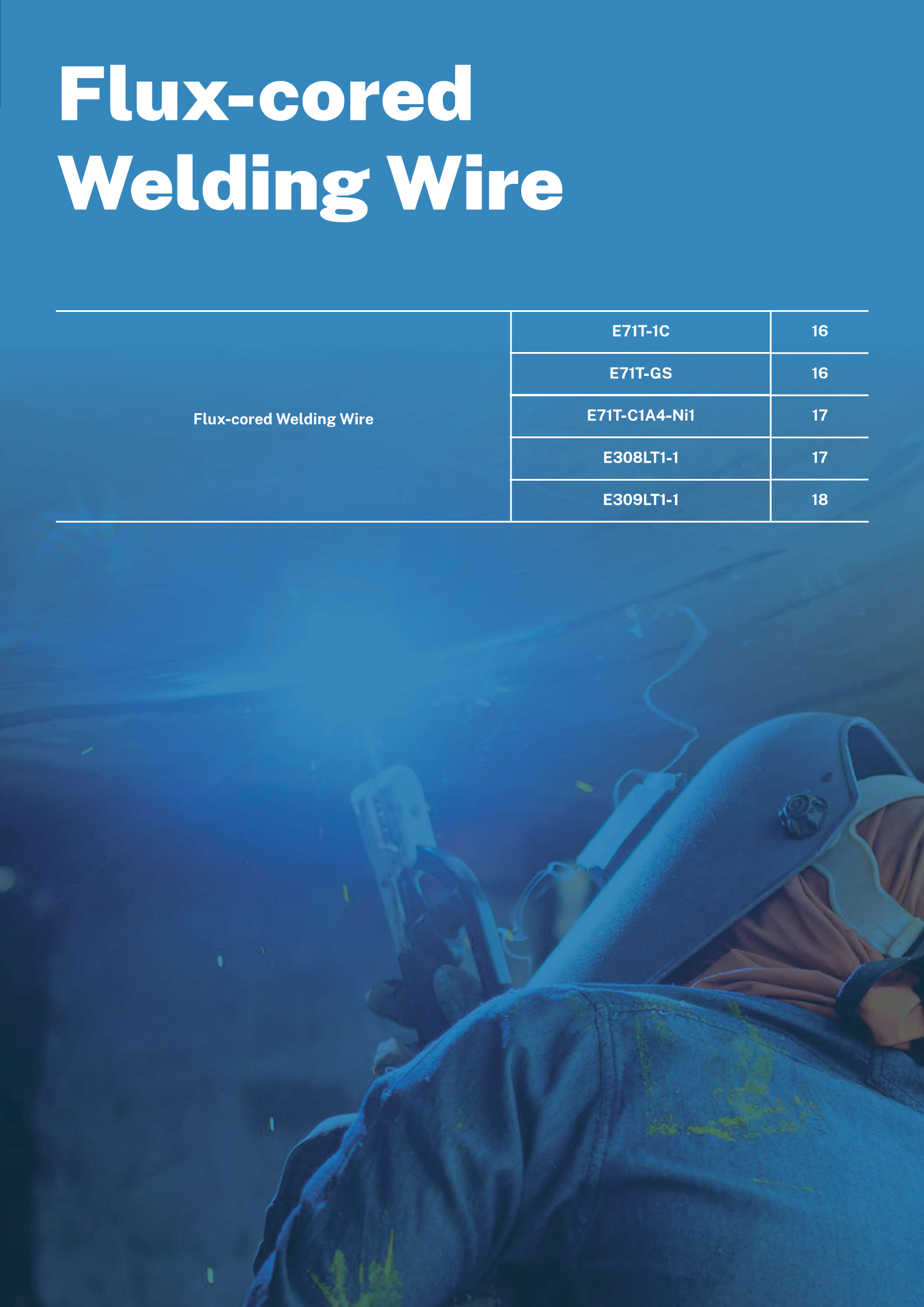
C	Mn	Si	S	P	Cr	Ni	Mo	Cu
0.055	1.45	0.70	0.009	0.021	24.25	12.75	0.035	0.10

Reference

Diameter (mm)	2.0	2.5	3.2	4.0	5.0
Type of Current	DC^+				
Current(A)	40~80	50~100	70~130	100~160	140~200

Flux-cored Welding Wire

Flux-cored Welding Wire	E71T-1C	16
	E71T-GS	16
	E71T-C1A4-Ni1	17
	E308LT1-1	17
	E309LT1-1	18



Flux-Cored Welding Wire

E71T-1C

Conformance

AWS A5.20 E71T-1C

Typical Application

· Used for welding some key structures like shipbuilding, mechanical manufacture, petroleum machinery, chemical machinery, hoisting machinery etc

Mechanical Properties

Tensile Strength (MPa)	Yield Strength (MPa)	Elongation (%)	Impact Energy (J)	Impact Temperature (℃)
560	480	29	77, 95, 83	-20

Chemical Composition %

C	Mn	Si	S	P
0.05	1.36	0.41	0.008	0.012

Reference

Shielding Gas	CO_2			
Gas Flow Rate (L/min)	20~25			
Diameter (mm)	1.0	1.2	1.4	1.6
Current(A) DC^+	120~250	120~300	150~400	180~450

E71T-GS

Conformance

AWS A5.20 E71T-GS

Typical Application

· Used for many kinds of carbon steel base material (Mainly thin plate and galvanized plate),Full position semi-automatic welding, suitable for family type operation.

Mechanical Properties

Tensile Strength (MPa)	Yield Strength (MPa)	Elongation (%)
620	450	23

Chemical Composition %

C	Mn	Si	S	P	Al
0.22	0.62	0.23	0.007	0.008	1.42

Reference

Diameter (mm)	0.8	0.9	1.0
Current(A) DC^+	60~130	60~150	60~150
Voltage(V)	14~21	15~22	15~22

Flux-Cored Welding Wire

E71T-C1A4-Ni1

Conformance

AWS A5.20 E71T-1C

Typical Application

· Used for welding some key structures like shipbuilding, mechanical manufacture, pressure vessels, boilers, petroleum machinery, chemical machinery, hoisting machinery etc.

Mechanical Properties

Tensile Strength (MPa)	Yield Strength (MPa)	Elongation (%)	Impact Energy (J)	Impact Temperature (℃)
570	510	27	135/120	-30/-40

Chemical Composition %

C	Mn	Si	S	P	Ni	Cr	Mo	V
0.04	1.28	0.38	0.006	0.011	0.90	≤0.15	≤0.35	≤0.05

Reference

Shielding Gas	CO_2		
Gas Flow Rate (L/min)	20~25		
Diameter (mm)	1.2	1.4	1.6
Current(A) DC^+	120~300	150~400	180~450

E308LT1-1

Conformance

AWS A5.22 E308LT1-1

Typical Application

· Applied in welding corrosion-resistant 06Cr19Ni10, 07Cr19Ni11Ti stainless steel structures and the working temperature should be below 300℃ . It used for welding 301,302,304,301L, 308,308L and other stainless steel materials.

Mechanical Properties

Tensile Strength (MPa)	Elongation (%)
550	43.5

Chemical Composition %

C	Mn	Si	P	S	Ni	Cr	Mo	Cu
0.022	1.74	0.60	0.016	0.003	10.35	18.77	0.034	0.08

Reference

Shielding Gas	CO_2	
Gas Flow Rate (L/min)	20~25	
Diameter (mm)	1.2	1.6
Current(A) DC^+	160~240	180~270

Flux-Cored Welding Wire

E309LT1-1

Conformance

AWS A5.22 E309LT1-1

Typical Application

• Used for welding some key structures like shipbuilding, mechanical manufacture, petroleum machinery, chemical machinery, hoisting machinery etc

Mechanical Properties

Tensile Strength (MPa)	Yield Strength (MPa)	Elongation (%)	Impact Energy (J)	Impact Temperature (℃)
545	480	29	77, 95, 83	-20

Chemical Composition %

C	Mn	Si	S	P	Ni	Cr	Mo	Cu
0.021	1.68	0.58	0.003	0.018	12.39	23.82	0.08	0.07

Reference

Shielding Gas	CO_2	
Gas Flow Rate (L/min)	20~25	
Diameter (mm)	1.2	1.6
Current(A) DC^+	160~240	180~270

TIG Welding Wire

TIG Welding Wire	ER70S-3	19
	ER70S-6	19

TIG Welding Wire

ER70S-3

Conformance

AWS A5.18 ER70S-3

Typical Application

· Used for general steel fabrication: automotive structures, small trailers, roof joist, railcar repair, exercise equipment, furniture and other types of mild steels.

Mechanical Properties

Tensile Strength (MPa)	Yield Strength (MPa)	Elongation (%)	Impact Energy (J)	Impact Temperature (℃)
550	450	26	116, 108, 110	-20

Chemical Composition %

C	Mn	Si	S	P	Ni	Cr	Mo	V	Cu
0.008	1.31	0.58	0.008	0.012	0.018	0.020	0.020	0.011	0.11

Reference

Shielding Gas	Ar	
Gas Flow Rate (L/min)	7~12	12~15
Current(A)	100~200	200~300

ER70S-6

Conformance

AWS A5.18 ER70S-6

Typical Application

· Used for all-position manual tungsten argon arc backing weld and arc welding on pipelines, and both can produce satisfactory welded joints. It can be used for welding carbon steel and some low-alloy steel.

Mechanical Properties

Tensile Strength (MPa)	Yield Strength (MPa)	Elongation (%)	Impact Energy (J)	Impact Temperature (℃)
550	450	29	160	-30

Chemical Composition %

C	Mn	Si	P	S	Ni	Cr	Mo	Cu	V
0.08	1.49	0.84	0.018	0.84	0.019	0.032	0.004	0.08	0.007

Reference

Shielding Gas	Ar	
Gas Flow Rate (L/min)	9~14	14~18
Current(A)	100~200	200~300

Submerged Arc Welding Wire

Submerged Arc Welding Wire	EL8	22
	EM12	22
	EH14	23
	EM12K	23
	EM13K	24

Submerged Arc Welding Wire

EL8

Conformance

AWS A5.17 EL8

Typical Application

- Using with sintered flux SJ301 and 501
- Applied both for high speed welding steel plate of tensile strength 420MPa and filling welding

Mechanical Properties

Tensile Strength (MPa)	Yield Strength (MPa)	Elongation (%)	Impact Energy (J)	Impact Temperature (℃)
550	450	26	116, 108, 110	-20

Chemical Composition %

C	Mn	Si	S	P	Ni	Cr	Cu
0.060	0.45	0.012	0.014	0.020	0.022	0.017	0.113

Reference

Flux	SJ301			
Diameter(mm)	2.5	3.2	4.0	5.0

EM12

Conformance

AWS A5.17 EM12

Typical Application

- Using with sintered flux SJ101
- Applied both for high speed welding steel plate of tensile strength 420MPa and filling welding

Mechanical Properties

Tensile Strength (MPa)	Yield Strength (MPa)	Elongation (%)	Impact Energy (J)	Impact Temperature (℃)
415~550	≥330	≥22	≥27	-20

Chemical Composition %

C	Mn	Si	P	S	Ni	Cr	Cu
0.066	0.96	0.038	0.010	0.007	0.011	0.027	0.110

Reference

Flux	SJ101			
Diameter(mm)	2.5	3.2	4.0	5.0

Submerged Arc Welding Wire

EH14

Conformance

AWS A5.17 EH14

Typical Application

- Using with sintered flux SJ101
- Applied both for high speed welding steel plate of tensile strength 490MPa and filling welding

Mechanical Properties

Tensile Strength (MPa)	Yield Strength (MPa)	Elongation (%)	Impact Energy (J)	Impact Temperature (℃)
490~650	≥400	≥22	≥27	-20/-40

Chemical Composition %

C	Mn	Si	S	P	Ni	Cr	Cu
0.066	1.62	0.011	0.011	0.011	0.007	0.013	0.12

Reference

Flux	SJ301			
Diameter(mm)	2.5	3.2	4.0	5.0

EM12K

Conformance

AWS EM12K

Typical Application

- Using with sintered flux SJ101
- Applied both for high speed welding steel plate of tensile strength 420MPa and filling welding

Mechanical Properties

Tensile Strength (MPa)	Yield Strength (MPa)	Elongation (%)	Impact Energy (J)	Impact Temperature (℃)
415~550	≥330	≥22	≥27	-40

Chemical Composition %

C	Mn	Si	P	S	Ni	Cr	Cu
0.066	0.96	0.038	0.010	0.007	0.011	0.027	0.110

Reference

Flux	SJ101			
Diameter(mm)	2.5	3.2	4.0	5.0

Submerged Arc Welding Wire

EM13K

Conformance

AWS EM13K

Typical Application

- Using with sintered flux SJ101
- Applied both for high-speed welding steel plate of tensile strength 420MPa and filling welding.

Mechanical Properties

Tensile Strength (MPa)	Yield Strength (MPa)	Elongation (%)	Impact Energy (J)	Impact Temperature (℃)
490~670	≥390	≥18	≥27	-20

Chemical Composition %

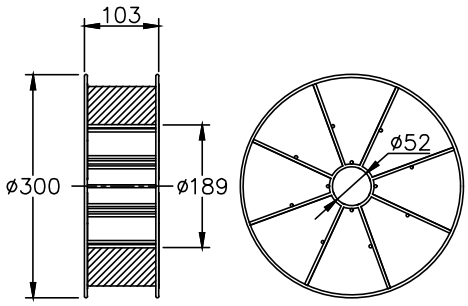
C	Mn	Si	S	P	Ni	Cr	Cu
0.089	0.98	0.67	0.023	0.032	0.034	0.015	0.110

Reference

Flux	SJ101			
Diameter(mm)	2.5	3.2	4.0	5.0

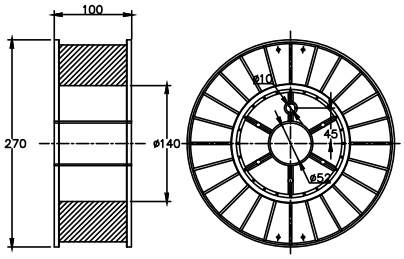
Package & Quality Approval

Package Reference



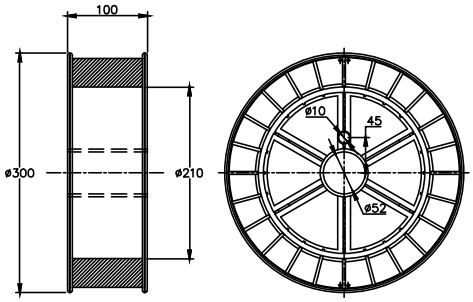
Spool BS300 (GMAW)

Specification	EN ISO544
Designation	BS300
Material	Steel wire
Wire weight	15kg
Outer material	Corrugated cardboard



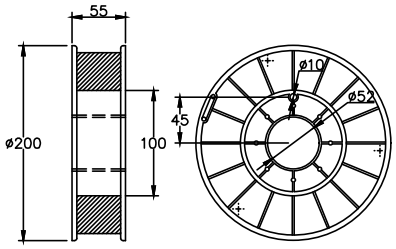
Spool D270 (GMAW)

Specification	EN ISO544
Designation	D270
Material	Plastic
Wire weight	15kg
Outer material	Corrugated cardboard



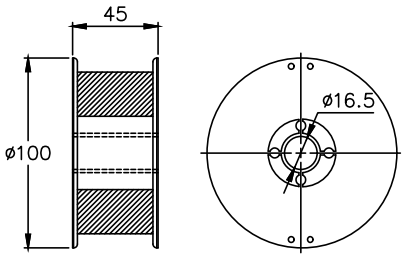
Spool D300 (GMAW)

Specification	EN ISO544
Designation	D300
Material	Plastic
Wire weight	15kg
Outer material	Corrugated cardboard



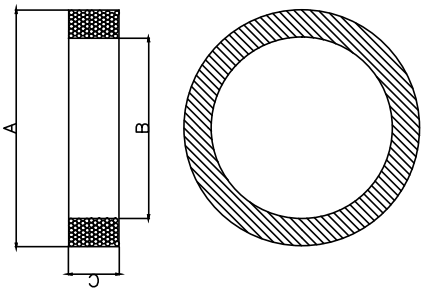
Spool D200 (GMAW)

Specification	EN ISO544
Designation	D200
Material	Plastic
Wire weight	5kg
Outer material	Corrugated cardboard



Spool D100 (GMAW)

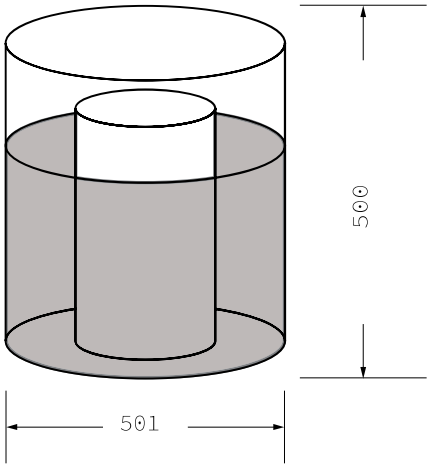
Specification	EN ISO544
Designation	D100
Material	Plastic
Wire weight	1kg
Outer material	Corrugated cardboard



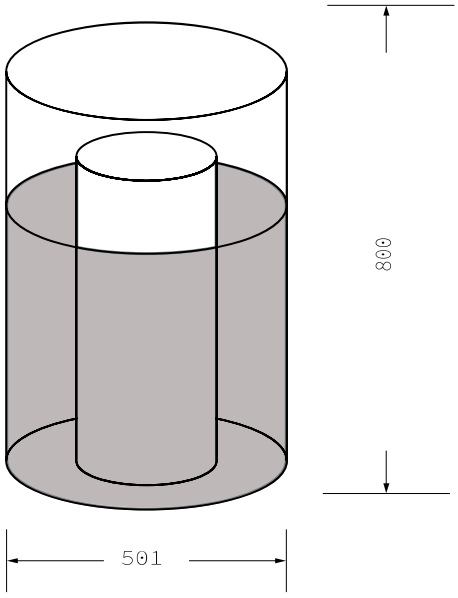
Coil wire (SAW)

Specification	EN ISO544
Wire weight	25/50/100/250/350kg
Outer material	Corrugated cardboard (25kg only) PP strip covered (50/100/250/250/350kg)

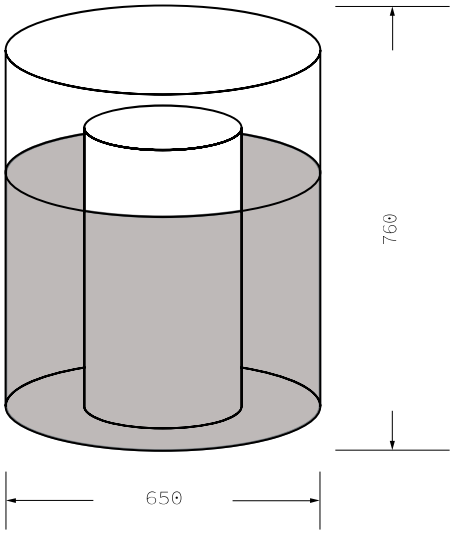
Package Reference



Wire weight	150kg
Outer drum dia.	501mm
Outer drum height	500mm
Inner durm dia.	300mm
Inner drum height	470mm

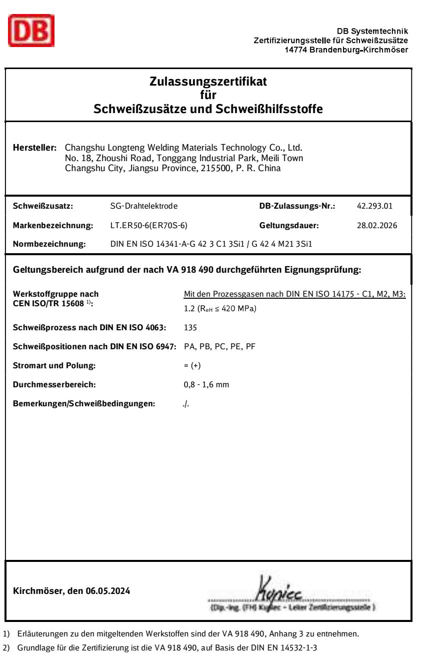


Wire weight	250kg
Outer drum dia.	501mm
Outer drum height	800mm
Inner durm dia.	755mm
Inner drum height	300mm



Wire weight	350kg
Outer drum dia.	760mm
Outer drum height	650mm
Inner durm dia.	435mm
Inner drum height	675mm

Quality Control Approval


DB Systemtechnik
Zertifizierungsstelle für Schweißzusätze
14774 Brandenburg-Kirchmöser

Zulassungszertifikat für Schweißzusätze und Schweißhilfsstoffe

Hersteller: Changshu Longteng Welding Materials Technology Co., Ltd. No. 18, Zhoushi Road, Tonggang Industrial Park, Meili Town Changshu City, Jiangsu Province, 215500, P. R. China

Schweißzusatz:	SG-Drahtelektrode	DB-Zulassungs-Nr.:	42.293.01
Markenbezeichnung:	LT.ER50-6(ER70S-6)	Geltungsdauer:	28.02.2026
Normbezeichnung:	DIN EN ISO 14341-A-G 42 3 C1 3Si1 / G 42 4 M21 3Si1		

Geltungsbereich aufgrund der nach VA 918 490 durchgeführten Eignungsprüfung:

Werkstoffgruppe nach CEN ISO/TR 15608 [1]:	Mit den Prozessgasen nach DIN EN ISO 14175 - C1, M2, M3: 1.2 (R_{eH} ≤ 420 MPa)
Schweißprozess nach DIN EN ISO 4063:	135
Schweißpositionen nach DIN EN ISO 6947:	PA, PB, PC, PE, PF
Stromart und Polung:	= (+)
Durchmesserbereich:	0,8 - 1,6 mm
Bemerkungen/Schweißbedingungen:	./.

Kirchmöser, den 06.05.2024 (Dipl.-Ing. (FH) Kopiec – Leiter Zertifizierungsstelle)

1) Erläuterungen zu den mitgeltenden Werkstoffen sind der VA 918 490, Anhang 3 zu entnehmen.
2) Grundlage für die Zertifizierung ist die VA 918 490, auf Basis der DIN EN 14532-1-3


Page 1 of 1
Certificate No: LR23138929WC
Issue Date: 31/03/2023
Expiry Date: 30/03/2024

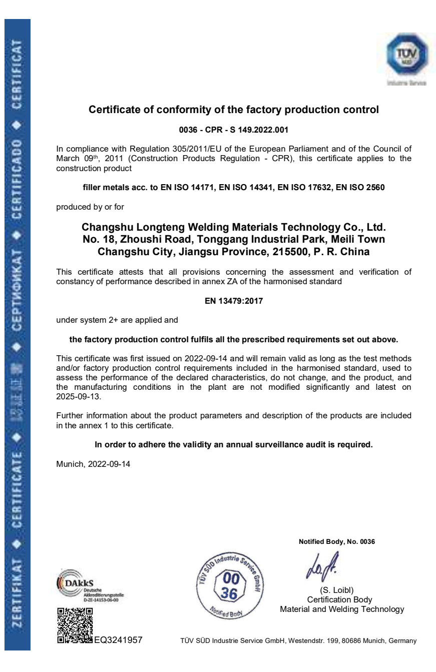
CERTIFICATE OF APPROVAL OF WELDING CONSUMABLE FOR SHIP CONSTRUCTION

This certificate is issued to the company named below. The welding consumable or combination described has been tested in accordance with the requirements of Lloyd's Register for use in ship construction. This approval is subject to annual tests being carried out in accordance with the requirements of Lloyd's Register. The continued validity of this approval will be confirmed by appropriately dated Annual Reapproval Certificates issued to the company.

Company	Changshu Longteng Welding Materials Technology Co.,Ltd
Address	No.18 Zhoushi Road, Tonggang Industrial Park, Meili Town, Changshu City, Jiangsu Province, 215500, China
Type of welding consumable	Section 5 - Solid Wire/Gas Shield
Trade name	LT.ER50-6/CO2
Welding Process	Gas Metal Arc Welding
Grade & Technique	3YS
Welding Positions	Downhand, horizontal-vertical, vertical upward and overhead only.
Weld Type	Butt and Fillet Welding.
Diameter (mm)	0.8 - 1.6
Current	DC(+)
Remarks	Approved also for automatic multirun welding in the downhand position only. Approved low hydrogen consumable, conforming to standard H15.

Jaspal Nirankari
Principal Specialist to Lloyd's Register EMEA
A member of the Lloyd's Register group

71 Fenchurch Street, London, EC3M 4BS, United Kingdom


ZERTIFIKAT ◆ CERTIFICATE ◆ 認證 ◆ СЕРТИФИКАТ ◆ CERTIFICADO ◆ CERTIFICAT

Certificate of conformity of the factory production control

0036 - CPR - S 149.2022.001

In compliance with Regulation 305/2011/EU of the European Parliament and of the Council of March 09th, 2011 (Construction Products Regulation - CPR), this certificate applies to the construction product

filler metals acc. to EN ISO 14171, EN ISO 14341, EN ISO 17632, EN ISO 2560

produced by or for

Changshu Longteng Welding Materials Technology Co., Ltd. No. 18, Zhoushi Road, Tonggang Industrial Park, Meili Town Changshu City, Jiangsu Province, 215500, P. R. China

This certificate attests that all provisions concerning the assessment and verification of constancy of performance described in annex ZA of the harmonised standard

EN 13479:2017

under system 2+ are applied and

the factory production control fulfils all the prescribed requirements set out above.

This certificate was first issued on 2022-09-14 and will remain valid as long as the test methods and/or factory production control requirements included in the harmonised standard, used to assess the performance of the declared characteristics, do not change, and the product, and the manufacturing conditions in the plant are not modified significantly and latest on 2025-09-13.

Further information about the product parameters and description of the products are included in the annex 1 to this certificate.

In order to adhere the validity an annual surveillance audit is required.

Munich, 2022-09-14

Notified Body, No. 0036
(S. Loibl)
Certification Body
Material and Welding Technology

EQ3241957

TÜV SÜD Industrie Service GmbH, Westendstr. 199, 80686 Munich, Germany


ABS

Welding Consumable Certificate

This is to certify

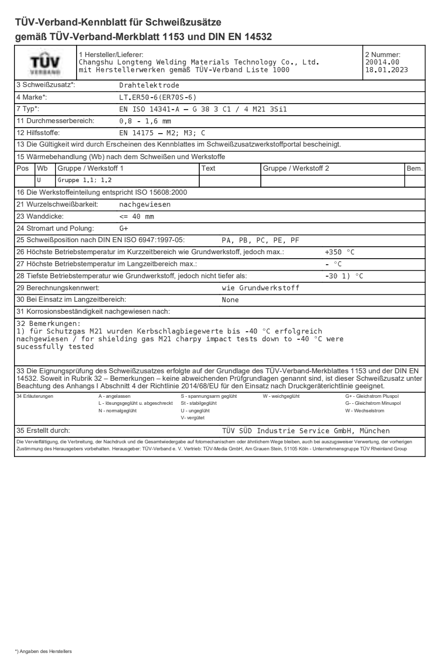

Page 1 / 1

TYPE APPROVAL CERTIFICATE

Changshu Longteng Welding Materials Technology Co., Ltd.
CHANGSHU - CHINA

Flux-Cored Wire for Semi-Automatic or Automatic Welding with Shielding Gas

This certificate will expire on: 06 Jan 2025


TÜV-Verband-Kennblatt für Schweißzusätze gemäß TÜV-Verband-Merkblatt 1153 und DIN EN 14532

TÜV VERBAND	1 Hersteller/Lieferer: Changshu Longteng Welding Materials Technology Co., Ltd. mit Herstellerwerken gemäß TÜV-Verband Liste 1000	2 Nummer: 20014.00 18.01.2023
3 Schweißzusatz*:	Drahtelektrode	
4 Marke*:	LT.ER50-6(ER70S-6)	
7 Typ*:	EN ISO 14341-A – G 38 3 C1 / 4 M21 3Si1	
11 Durchmesserbereich:	0,8 - 1,6 mm	
12 Hilfsstoffe:	EN 14175 – M2; M3; C	
13 Die Gültigkeit wird durch Erscheinen des Kennblattes im Schweißzusatzwerkstoffportal bescheinigt.		
15 Wärmebehandlung (Wb) nach dem Schweißen und Werkstoffe		
Pos / Wb / Gruppe / Werkstoff 1 / Text / Gruppe / Werkstoff 2 / Bem.	U / Gruppe 1,1; 1,2	
16 Die Werkstoffeinteilung entspricht ISO 15608:2000		
21 Wurzelschweißbarkeit:	nachgewiesen	
23 Wanddicke:	<= 40 mm	
24 Stromart und Polung:	G+	
25 Schweißposition nach DIN EN ISO 6947:1997-05:	PA, PB, PC, PE, PF	
26 Höchste Betriebstemperatur im Kurzzeitbereich wie Grundwerkstoff, jedoch max.:	+350 °C	
27 Höchste Betriebstemperatur im Langzeitbereich max.:	- °C	
28 Tiefste Betriebstemperatur wie Grundwerkstoff, jedoch nicht tiefer als:	-30 1) °C	
29 Berechnungskennwert:	wie Grundwerkstoff	
30 Bei Einsatz im Langzeitbereich:	None	
31 Korrosionsbeständigkeit nachgewiesen nach:		
32 Bemerkungen: 1) für Schutzgas M21 wurden Kerbschlagbiegewerte bis -40 °C erfolgreich nachgewiesen / for shielding gas M21 charpy impact tests down to -40 °C were sucessfully tested		
33 Die Eignungsprüfung des Schweißzusatzes erfolgte auf der Grundlage des TÜV-Verband-Merkblattes 1153 und der DIN EN 14532. Soweit in Rubrik 32 – Bemerkungen – keine abweichenden Prüfgrundlagen genannt sind, ist dieser Schweißzusatz unter Beachtung des Anhangs I Abschnitt 4 der Richtlinie 2014/68/EU für den Einsatz nach Druckgeräterichtlinie geeignet.		
35 Erstellt durch:	TÜV SÜD Industrie Service GmbH, München	

*) Angaben des Herstellers

In order to satisfy our golobal clietns' requirements, Longteng has set up a strict quality control system.
Our products have been sold to many places around world and can ensure fantastic quality and impressive aftersale service.

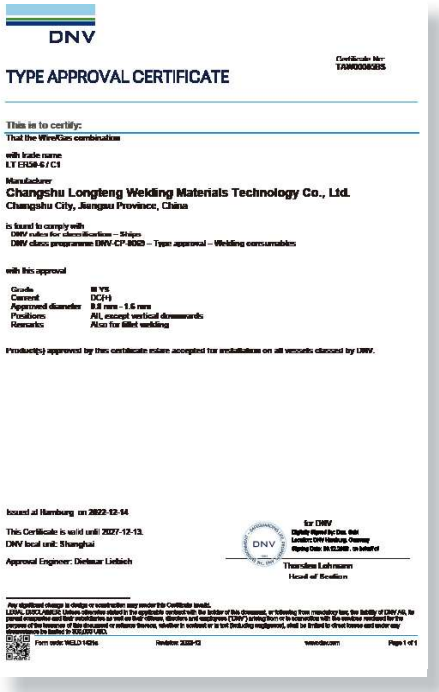
Quality Control Approval

NIPPON KAIJI KYOKAI

Certificate
OF
TYPE APPROVAL

Type Approval Certificate

[Welding Consumables]



DNV

TYPE APPROVAL CERTIFICATE

IQNet

THE INTERNATIONAL CERTIFICATION NETWORK

CERTIFICATE

中国船级社
CHINA CLASSIFICATION SOCIETY
工厂认可证书
CERTIFICATE OF WORKS APPROVAL

质量管理体系认证证书

中国质量认证中心

Exceptional Global Services Pty Ltd

Office Address: Sudbury House, 30 Chesterfield Road, Mirrabooka, WA 6061

Office Phone: +61 868 656 002

Mobile: +61 481 117 004

Email: procurements@exglobal.com.au

Website: https://exglobal.com.au/