



Specification compliance: AWS A5.22 E308LT0-3, ISO 14343-A W 19 9 L T3 GB/T 17853 E308L-FN0-3, DIN EN ISO 14343-AW 19 9 L T3, JIS Z 3323 T-308LT0-3

# ลวดเชื่อม สมตนเลสฟลักซ์คอ Stainless steel flux cored welding wire

# мів **E308LT0-3**

เชื่อมง่าย **แกร่ง ทนทุกสภาพงาน ไปปีโรโก๊ส 0.8mm.** พร้อมใช้งานทันที แม้ในพื้นที่ที่ไม่สามารถใช้แก๊สได้

สามารถเรื่อมสแตนเลสเกรด

301, 302, 304, 304L, 321, 347 และเหล็กกล้าไร้สนิมชนิดออสเทนนิติก

E308LT0-3 is a self-shielded, flux cored stainless steel welding wire. It is designed with a nominal weld metal composition of 21% chromium and 10% nickel with a maximum carbon content of 0.04%. The low carbon in E308LT0-3 minimizes carbide precipitation and makes the weld metal more resistant to intergranular corrosion. Welds types: 301, 302, 304, 304L, 321, and 347 stainless steels and austenitic steels. Used extensively for welding chemical plant equipment.

## **FEATURES**

•Low carbon content helps reduce carbide precipitation and minimizes the risk of intergranular corrosion.

 Gasless operation eliminates the need for shielding gas, making it convenient for welding in areas where gas supply is not feasible.

•Ideal for outdoor welding or environments with strong wind conditions.

## RECOMMENDED APPLICATIONS

 Chemical plant equipment.
 Stainless steel pipes and vessels. • General stainless steel structural work.







PA/1G PC/2G

Size, recommended current & voltage: DCEP(DC+)

Diameter(mm)	0.8
Current(A)	130-180
Voltage(V)	23-28

Труе	Size (mm)	Weight	Price		
MIG (Wire)	8.0	1 kg	490/กก.		









ARC RAYS CAN BUR EYES AND SKIN: • Select a filter lens which is comfortable for you while welding. • Always use helmet when welding. • Provide non-flammable shielding to protect others. • Wear clothing which protects skin while welding.



FUMES AND GASES CAN BE DANGEROUS:

• Use ventilation or exhaust to keep air breathing zone clear, comfortable.

• Use helmet and positioning of head to minimize fume in breathing zone.

• Read warnings on electrode container and material safety data sheet (MSDS) for electrode.

• Provide additional ventilation requirements exist.

• Use special care when welding in a confined area.

• Do not weld unless ventilation is adequate.

CONFINED SPACE: • Carefully evaluate adequacy of ventilation especially where electrode requires special ventilation or where gas may displace breathing air. • If basic electric shock precautions cannot be followed to insulate welder from work and electrode, use semiautomatic, constant-voltage equipment with cold electrode or stick welder with voltage reducing device. • Provide welder helper and method of welder retrieval from outside enclosure.

Chemical	Composition	of Deposit Metal (	%)

Test item	С	Si	Mn	Cr	Ni	Мо	Р	S	Cu
Standard	≤0.04	≤1.00	0.5-2.50	19.50-22.00	9.00-12.00	≤0.75	≤0.04	≤0.03	≤0.75
Actural Result	0.027	0.63	1.28	19.79	9.55	0.03	0.028	0.007	0.06

### **Mechanical Properties of Deposit Metal**

		Tensile	of Deposited	d Metal	V-Notch Impact Test				
Test it	em	Tensile strength Rm (MPa)	Yield point Rel (MPa)	Elongation (%)	Impact Temp (°C)	Impact value Average (J)	X-Ray	Diffusion hydrogen content (ml/100g)	
Stand	ard	≥520	*	≥25	*	*	- 1	*	
Actural R	esult	570	*	40	*	*	1	*	

**STORAGE**: Product should be stored in a dry, enclosed environment, and in its original intact packaging.



ISO 9001:2008



# MIG ER4043 ลวดเชื่อมอลูมิเนียม

ER4043 เป็นลวดเชื่อมฐาน ซิลิคอน สามารถใช้เชื่อม อลูมิเนียมเกรด 2014, 5052, 6061 และ 6101 ได้ ทนต่อ การกัดกร่อนได้เป็นอย่างดี ในน้ำเค็ม

ER4043 is a silicon alloyed aluminum weld rod great for filler 4xxx series alloys. 2014, 5052, 6061, and 6101 (in various conditions of heat treatment and 6063 sheets, plates and shapes). Offers better corrosion resistance in salt waterconditions.



Mec	hanical Properties	10/-:	Price		
Size (mm)	Tensile Strength	Elongation	Weight	Price	
0.8	-	-	0.5 kg	420/ม้วน	
1.2	-	-	6.0 kg	360/กก.	



CHEMICAL COMPOSITION (%)											
ELEMENT	Fe	Si	Mn	Mg	Zn	Cu	Τί				
REQUIREMENT	≤0.8	4.5~6.0	≤0.05	≤0.05	≤0.10	≤0.30	≤0.20				
ACTUAL RESULT	0.10	5.1	0.01	0.003	0.003	0.03	0.02				

## Application:

- โครงสร้างรถบรรทุก (Truck Bodies)
- ถังแรงดัน (Pressure Vessels)
- ชิ้นส่วนยานยนต์ (Automotive Components Such as Frame and Drive Shafts)
- โครงสร้างสิ่งก่อสร้าง (Structural Members)
- ระบบไฟฟ้ารถบัส (Electrical Bus Bars)
- ท่อส่งน้ำมัน (Petroleum Distribution Equipment)

## ้ สินค้าแนะนำที่ใช้คู่กับลวดเชื่อมอลูมิเนียม ER4043 <u>ข**นาด 0.8mm 0.5 กก./ม้วน</u>**</u>

ชุดสายเชื่อมสปูนกัน SPOOL GUN

**200A** 

9400.-/Pc



**EXCEPTIONALLY** 

SMOOTH WELDS

เนียนมาก



ISO 9001:2000 AWS A5.10 ER5356



ER5356 เป็นลวดเชื่อมอลูมิเนียมฐานแมกนีเซียม

สามารถใช้เชื่อมอลูมิเนียมเกรด 5050, 5052, 5083, 5086, 5356,

5454 และ 5456 ได้ให้ ความแข็งแรง

สูงมากมีความเหนียวและต้านทาน

การกัดกร่อนได้ดี

ER5356 is a 5% magnesium aluminum weld metal recommended for general purpose welding 5050, 5052, 5083, 5086, 5356, 5454 and 5456. has high strength, ductility, toughness, fatigue and good corrosion resistance.

## Welding Position:

สามารถเชื่อมได้ทุกท่าเชื่อม(All, expect vertical down)



= มีสินค้า













หน่วย : mm

1.2 6,00 kg



For MIG: set machine on DC reverse polarity. Use Ar shielding gas. Make sure all contaminants such as grease and oil are removed. Hold a short arc and weld with stringer beads or a slight weave bead.

Recommended: This alloy is not recommended for elevated temperature applications (above 150°F)

Storage: Product should be stored in a dry, enclosed environment, and in its original intact packaging.

Mec	hanicalPropertie	S	101 111	Drice
Ø Size (mm)	Tensile Strength	Elongation	Weight	Price
1.2	-	-	0.6 kg	450/กก.

## Shielding Gases (ACC.ISO 14175)

Inert gas Ar (100%)

Inert gas Ar+ 0.5-95% Helium mixtures

Flow rate 4.2 - 23.6L/min

90

	CHEMICAL COMPOSITION (%) Ø1.2 mm											
ELEMENT	Fe	Si	Mn	Cr	Zn	Mg	Cu	Ti				
REQUIREMENT	≤0.4	≤0.25	0.05~0.2	0.05~0.2	≤0.1	4.5~5.5	≤0.1	0.06~0.2				
ACTUAL RESULT	0.12	0.026	0.082	0.061	0.020	5.12	0.01	0.12				

Application : เหมาะสำหรับใช้ในงานอุตสาหกรรม • อุตสาหกรรมโครงสร้างการต่อเรือ • อลูมิเนียมหล่อ และเสื้อสูบเครื่องยนต์ • ฝาสูบ • ท่อหรือเฟรม • อตสาหกรรมเฟรมจักรยาน ยานยนต์ รถบัส หรือรถพ่วง • อตสาหกรรมรางรถไฟ

This alloy is commonly used in the construction industry in • Structural Frames in The Shipbuilding Industry. • Cts and Housings. Cylinder Heads.
 Pipes and Frames.
 Bicycle, Automotive, Bus and Trailer Industry tructural Frames.
 Railway Industry.

TYPICAL GMAW (MIG) WELDING PROCEDURES - DCEP 100% Ar

TIFICA	TIFICAL GMAW (MIG) WELDING PROCEDURES: DELF 100 /0 AI											
Wire Dia	meter	Amps	Volts	Travel Speed (ipm)	Argon (cfh)							
0.8 n	nm	60 - 175	15 - 24	25 - 45	25 - 30							
0.9 n	nm	70 - 185	15 - 27	25 - 40	30 - 35							
▶ 1.2 n	nm	125 - 260	20 - 29	24 - 35	35 - 45							
1.6 n	nm	170 - 300	24 - 30	28 - 38	45 - 55							
2.4 n	nm	275 - 400	26 - 31	14 - 20	60 - 75							

PROTECT yourself and others. Read and understand this information. FUMES AND GASES can be hazardous to your health. ARC RAYS can injure eyes and burn skin. ELECTRIC SHOCK can KILL. • Before use, read and understand the manufacturer's instructions, Material Safety Data Sheets (MSDSs), and your employer's safety practices. • Keep your head out of fumes. • Use enough ventilation, exhaust at the arc, or both

to keep fumes and gases from your breathing zone and the general area. • Wear correct eye, ear, and body protection.

• Do not touch live electrical parts.



















STABLE ARC WITH LOW FEEDING FORCE & EXTREMELY LOW OVERALL SPATTER

# er 70S-6

## CO<sub>2</sub> WELDING WIRE

ISO 9001:2015 WG ER50-6 ISO 135i1 C€

## BENEFITS:

Consistent welding performance

· Stable arc with low feeding force

· Excellent arc ignition

High current applicability

Extremely low overall spatter

Low fume emission

 Trouble-free feed ability, even at high wire feed speeds and lengthy feed distances

WELDING POSITIONS





Conforms to AWS A5.18 ER70S-6.





A general purpose of welding wire with copper coated for long

contact tip life is provides superior feeding and arc stability design

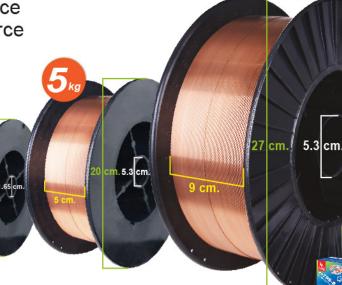
for fabrication of mild steel. Contains higher levels of manganese and silicon than the other standard grades of MIG wire, provide high

deoxidizers to heavy mill scale surfaces that provide better wetting,

yielding a flatter bead shape and the capability of faster travel speeds.

Usually used with 75/25 (Argon/CO<sub>2</sub>) shielding gas or higher contents

of Argon, such as 90/10. Can also be used with 100% CO<sub>2</sub>.



APPLICATIONS: SUMO ER70S-6 It is a great choice for welding light to moderately scaled, oily or rusty plates. It can also be recommended for spray transfer arc welding applications. Used for butt and fillet welding of sheet and plate of a variety of thickness. Applications included general carbon steel fabrication.

## STORAGE:

Product should be stored in a dry, enclosed environment, and in its original intact packaging.

Chemical Composition (%) - 1KG												
С	Si	Mn	S	Р	Cr	Ni	Мо	V	Cu			
0.06-0.15	0.8-1.15	1.4-1.85	≤ 0.035	≤ 0.025	≤ 0.15	≤ 0.15	≤ 0.15	≤ 0.03	≤ 0.5			
0.06	0.9	1.51	0.016	0.012	0.013	0.005	0.002	0.002	0.13			
Mecha	anical Pr	operties		Soundness Test								
Tensile Strength	Yield Strength	Elongation%	Test Temp °C	Absorbed Energy J	_							
≥ 480	≥ 400	≥ 22	-30	≥ 27	1							
545	432	30	-30	86 94 90	Acceptable							
	0.06-0.15 0.06  Mecha  Tensile  Strength ≥ 480	0.06-0.15	C         Si         Mn           0.06-0.15         0.8-1.15         1.4-1.85           0.06         0.9         1.51           Mechanical Properties           Tensile Strength         Yield Strength         Elongation%           ≥ 480         ≥ 400         ≥ 22	C         Si         Mn         S           0.06-0.15         0.8-1.15         1.4-1.85         ≤ 0.035           0.06         0.9         1.51         0.016           Mechanical Properties           Tensile Strength         Yield Strength         Elongation%         Test Temp °C           ≥ 480         ≥ 400         ≥ 22         -30	C         Si         Mn         S         P           0.06-0.15         0.8-1.15         1.4-1.85         ≤ 0.035         ≤ 0.025           0.06         0.9         1.51         0.016         0.012           Mechanical Properties           Tensile Strength         Yield Strength         Elongation%         Test Temp °C         Absorbed Energy J           ≥ 480         ≥ 400         ≥ 22         -30         ≥ 27	C         Si         Mn         S         P         Cr           0.06-0.15         0.8-1.15         1.4-1.85         ≤ 0.035         ≤ 0.025         ≤ 0.15           0.06         0.9         1.51         0.016         0.012         0.013           Mechanical Properties           Tensile Strength         Yield Strength         Elongation%         Test Test Test Temp °C         Absorbed Energy J           ≥ 480         ≥ 400         ≥ 22         -30         ≥ 27	C         Si         Mn         S         P         Cr         Ni           0.06-0.15         0.8-1.15         1.4-1.85         ≤ 0.035         ≤ 0.025         ≤ 0.15         ≤ 0.15           0.06         0.9         1.51         0.016         0.012         0.013         0.005           Mechanical Properties         South           Tensile Strength         Yield Strength         Elongation% Test Temp °C         Absorbed Energy J           ≥ 480         ≥ 400         ≥ 22         -30         ≥ 27	C         Si         Mn         S         P         Cr         Ni         Mo           0.06-0.15         0.8-1.15         1.4-1.85         ≤ 0.035         ≤ 0.025         ≤ 0.15         ≤ 0.15         ≤ 0.15           0.06         0.9         1.51         0.016         0.012         0.013         0.005         0.002           Mechanical Properties         Soundness           Tensile Strength         Yield Strength         Elongation% Test Temp °C         Absorbed Energy J         II           ≥ 480         ≥ 400         ≥ 22         -30         ≥ 27	C         Si         Mn         S         P         Cr         Ni         Mo         V           0.06-0.15         0.8-1.15         1.4-1.85         ≤ 0.035         ≤ 0.025         ≤ 0.15         ≤ 0.15         ≤ 0.15         ≤ 0.15         ≤ 0.03           0.06         0.9         1.51         0.016         0.012         0.013         0.005         0.002         0.002           Mechanical Properties         Soundness Test           Tensile Strength         Yield Strength         Elongation% Test         Absorbed Energy J         II           ≥ 480         ≥ 400         ≥ 22         -30         ≥ 27			

	Chemical Composition (%) - 5 / 15KG												
Element	С	Si		Mn		s	Р	Cr	Ni	Мо	V	Cu	
Requirement	0.06-0.15	0.80-1	.15 1	.40-1.85	≤ (	0.035	≤ 0.025	≤ 0.15	≤ 0.15	≤ 0.15	≤ 0.03	≤ 0.50	
Actual Result	0.074	0.91		1.48	0.	010	0.017	0.015	0.017	0.011	0.007	0.036	
	Mech	anical	Prop	perties	Soundness Test								
	Tensile Strength	Yield Strength	Elonga %		Temp C	p Absorbed Energy J		п					
Requirement	≥ 480	≥ 400	≥ 22	2.0 -3	0		≥ 27						
Sample Test	546	449	27.	.0 -3	0	71	91 73	Acceptable					

นำหนัก <sub>Weight (kg)</sub>	SIAI (Price)
1	<b>105</b> /kg
5	<b>70</b> /kg
15	<b>60</b> /kg
15	<b>60</b> /kg
15	<b>58</b> /kg
15	<b>57</b> /kg
250	<b>XX</b> /kg
	Weight (kg)  1  5  15  15  15  15

## SHIELDING GAS:

100% CO<sub>2</sub> 75-95% Argon / Balance CO<sub>2</sub> 95-98% Argon / Balance O<sub>2</sub> Flow Rate : 30-50 CFH

## GUIDELINE FOR USE :

Oil stains and rust must be removed from surface of weldment prior to welding in accordance with appropriate welding standards.





















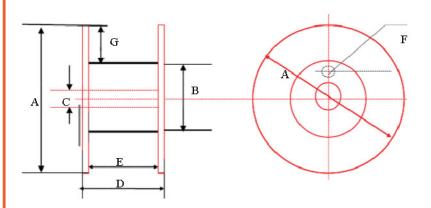


CO<sub>2</sub> WELDING WIRE

ISO 9001:2015 WG ER50-6 ISO 14341-A - G 42 3 C1 3Si1 CE

STABLE ARC WITH LOW FEEDING FORCE & EXTREMELY LOW OVERALL SPATTER

## **Factory control standard** For Plastic Spool precision layer winding CO2 wire

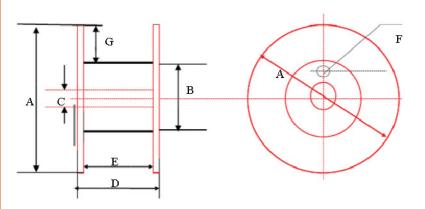


## D100 (Black)

## Main parameter



1	С	16 +0.5mm
2	Α	100 +5mm
4	В	45 +2mm -2mm
5	G	28.5 +0.5mm -0.5mm
6	D	42 +1.5mm -1.5mm
7	E	38 +1mm –1mm
8	Weight	53 +5g -5g

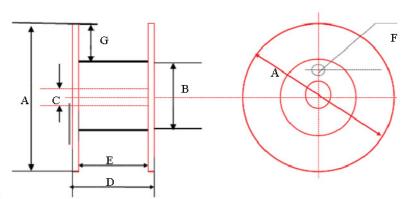


## D200 (Black)

## Main parameter



1	С	50.5 +2.5mm
2	Α	200 +5mm
4	В	95 +2mm -2mm
5	G	44.5 +0.5mm -0.5mm
6	F	11 +1mm
7	D	56 +1.5mm -1.5mm
8	E	46 +1mm -1mm
9	Weight	260 +10g -10g



## D270 (Black)

## Main parameter



1	С	50.5 +2.5mm
2	Α	270 +5mm
4	В	138 +2mm -2mm
5	G	60 +0.5mm -0.5mm
6	F	11 +1mm
7	D	102 -3mm
8	E	90 +1mm –1mm
9	Weight	680 +10g -10g







## GASLESS FLUX CORED WELDING WIRE

# AWS E71T-GS

## ลวดเชื่อมมิกฟลักซ์คอร์

4.5 cm

ไม่ใช้แก๊ส

WIRE

# ใช้ได้กับ**งานเชื่อมเหล็กทุกชนิด**

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ขั้นพื้นฐานที่ออกแบบมาสำหรับการเชื่อม ตำแหน่งเหล็กอ่อนในทุกตำแหน่งที่ต้องการ

• ความแข็งแรงระดับปานกลางและ ความเหนียวที่ดีมาก

ไม่ใช้แก๊ส GASLESS WIRE

Reference Current (DC+)

Wire Diameter	Amps
Ø0.8 mm	70-120
Ø1.0 mm	80-180

## มีสินค้า

	Mecha	nicalProperties		QTY	Weight	Price
	Size (mm)	Tensile Strength	Elongation	Spool / Box	vveignt	FIICE
<b>&gt;</b>	Ø0.8	-	-	1	1 kg	188/กก.
<b>&gt;</b>	Ø0.8	-	-	1	5 kg	180/กก.
<b>&gt;</b>	Ø1.0	-	-	1	1 kg	180/กก.
<b>&gt;</b>	Ø1.0	-	<u>-</u>	1	5 kg	160/กก.



Storage product should be stored in a dry, enclosed environment, and in its original intact packaging.



## CHARACTERISTIC:

This kind of wire is 1kg, 5kg self protective flux cored wire.

For all position. When welding, the spatter is smaller, the arc is stable and soft, slag removal is easy and the forming is beautiful.

Trade Name	E71T-GS	Si	ize (mm)	0.8 mm	•	1.0 mm	Producti	ion Batch			DATE:
Executive Standard		GB/T	10045-2001	45-2001 E501T-GS ( AWS A5.20 E71T-GS )					Quantities	1 KG	5 KG
Chemical Composition (%) Ø0.8 mm , Ø1.0 mm						Mechanical Properties of Deposited				i i	
С	Mn	Si	Р	S	AI	Tensile S	-	Yield Str MPa		ongation &(%)	Impact Energy -20 °C
0.12	0.89	0.32	0.012	0.009	1.23	54	0	476	;	27	110/107/112
Examination Clerk			Quality	Leader				This certific	cate is invalid with	out seal of qua	lity control department.

### **ELECTRIC SHOCK CAN KILL:**

- Insulate welder from workpiece and ground using dry insulation. Rubber mat or dry wood.
- Wear dry, hole-free gloves. (Change as necessary to keep dry.)
- Do not touch electrically "hot" parts or electrode with bare skin or wet clothing. • If wet area and welder cannot be insulated from workpiece with dry insulation, use a
- semiautomatic, constant-voltage welder or stick welder with voltage reducing device.
- Keep electrode holder and cable insulation in good condition. Do not use if insulation damaged or missing.

## WELDING SPARKS CAN CAUSE FIRE OR EXPLOSION:

- · Do not weld on containers which have held combustible materials (unless strict AWS F4.1 procedures are followed). Check before welding.
- Remove flammable materials from welding area or shield from sparks, heat.
- Keep a fire watch in area during and after welding. Keep a fire extinguisher in the welding area. Wear fire retardant clothing and hat. Use earplugs when welding overhead.

## ARC RAYS CAN BUR EYES AND SKIN:

· Select a filter lens which is comfortable for you while welding. Always use helmet when welding.
 Provide non-flammable shielding to protect others. . Wear clothing which protects skin while welding.

### FUMES AND GASES CAN BE DANGEROUS:

- Use ventilation or exhaust to keep air breathing zone clear, comfortable.
- Use helmet and positioning of head to minimize fume in breathing zone. · Read warnings on electrode container and material safety data sheet (MSDS) for electrode.
- Provide additional ventilation/exhaust where special ventilation requirements exist.
  Use special care when welding in a confined area.
- Do not weld unless ventilation is adequate.

## CONFINED SPACE:

- Carefully evaluate adequacy of ventilation especially where electrode requires special ventilation or where gas maydisplace breathing air.
- · If basic electric shock precautions cannot be followed to insulate welder from work and electrode, use semiautomatic, constant-voltage equipment with cold electrode or stick welder with voltage reducing device.
- Provide welder helper and method of welder retrieval from outside enclosure.

## **WELDING POSITIONS**











ISO 9001:2005



# **AWS E71T-1** ลวดเชื่อมฟลักซ์คอร์

## SHIELDING GAS 100% CO<sub>2</sub> shielding gas.

ลวดเชื่อมฟลักซ์คอร์ 1.2 mm E71T-1 เป็นลวดเชื่อมที่มี ฟลักซ์คอร์ อยู่ในแกนกลาง ของลวดเชื่อม เหมาะสำหรับงานเชื่อมต่อเรือ ชิ้นส่วนรถยนต์ หรืออุตสาหกรรมที่มีขนาดใหญ่

## Sumo AWS E71T-1

Is a flux-cored welding wire basic-rutile designed for all position welding of mild steel in applications requiring moderate levels strength and very good toughness. Impact values of weld metal are good.

All position welding of machinery, shipbuilding, bridges, offshore structures, Structural fabrication.

- Excellent mechanical properties.
- Slag system provides for puddle support, good wetting, and bead shape in all position.
- Arc action and metal transfer are smooth.
- Slag removal is easily achieved with hand tools.
- One sided welding is possible with ceramic backing and will produce
- Applications include those in general fabrication, Ship or barge construction, building or bridge erection, and off-shore industries.
- Manufactured under a quality system certified to ISO 9001 requirements.

## มิสินคำ

Mechan	MechanicalProperties   QTY   Weight				Drice	
Size (mm)	Tensile Strength	Elongation	Spool / Box	Weight	Price	
▶Ø1.2	-	-	1	15 kg	<b>110.</b> -/กก.	

Reference Current (DC+)

Wire Diameter Amps

Ø1.2 mm 160-320A

## SUGGESTION:

Product should be stored in a dry, enclosed environment, and in its original intact packaging.



## **ข้อแนะนำ** : พลิตภัณฑ์ควรเก็บไว้ในที่แห้ง

Trade Name		E71	T-1	Size (mm	1)	1.2 mm		Production Batch				DATE :	
Executive Stand	ard	GB/	T10045-2	001 E501T-1	( AWS A5.20 E71T-1C )						Quantities : 15 kg		
Che	Chemical Composition (%) Ø1.2 mm					Mechanical Properties of Deposited							
С	Mr	n	Si	Р	s	3	Tensile Strength MPa		th	Yield Stren MPa	gth	Longation &(%)	Impact Energy -20 °C
0.06	1.4	14	0.41	0.012	0.0	09	557	1300		485		27	110/107/112
Examination Clerk			Quali	ty Leader					This ce	rtificate is inva	lid with	out seal of qual	ity control department.

## ELECTRIC SHOCK CAN KILL:

- Insulate welder from workpiece and ground using dry insulation. Rubber mat or dry wood.
- · Wear dry, hole-free gloves. (Change as necessary to keep dry.) Do not touch electrically "hot" parts or electrode with bare skin or wet clothing.
- If wet area and welder cannot be insulated from workpiece with dry insulation, use a
- semiautomatic, constant-voltage welder or stick welder with voltage reducing device.
- · Keep electrode holder and cable insulation in good condition. Do not use if insulation damaged or missing.

## WELDING SPARKS CAN CAUSE FIRE OR EXPLOSION:

- Do not weld on containers which have held combustible materials (unless strict AWS F4.1 procedures are followed). Check before welding.
- · Remove flammable materials from welding area or shield from sparks, heat.
- Keep a fire watch in area during and after welding.
   Keep a fire extinguisher in the welding area. Wear fire retardant clothing and hat. Use earplugs when welding overhead.

### ARC RAYS CAN BUR EYES AND SKIN:

- · Select a filter lens which is comfortable for you while welding.
- Always use helmet when welding.
   Provide non-flammable shielding to protect others. . Wear clothing which protects skin while welding.

## FUMES AND GASES CAN BE DANGEROUS:

- Use ventilation or exhaust to keep air breathing zone clear, comfortable.
  Use helmet and positioning of head to minimize fume in breathing zone.
  Read warnings on electrode container and material safety data sheet (MSDS) for electrode.
- Provide additional ventilation/exhaust where special ventilation requirements exist.
- · Use special care when welding in a confined area.
- Do not weld unless ventilation is adequate.

### CONFINED SPACE

- Carefully evaluate adequacy of ventilation especially where electrode requires special ventilation or where gas maydisplace breathing air.
- If basic electric shock precautions cannot be followed to insulate welder from work and electrode, use semiautomatic, constant-voltage equipment with cold electrode or stick welder with voltage reducing device.
- Provide welder helper and method of welder retrieval from outside enclosure.

### WELDING POSITIONS







EN17632 & CE 0035-CPD-C742-15



## **MIG E71T-1C** ลวดเชื่อมฟลักซ์คอร์

HIELDING GAS

100% CO<sub>2</sub> shielding gas.

## แนวเชื่อมมันเงา อาร์คได้นิ่ม สะเก็ดไฟน้อย

## Sumo E71T-1C

is a flux-cored welding wire basic-rutile designed for all position welding of mild steel in applications requiring moderate levels strength and very good toughness. Impact values of weld metal are good.

## APPLICATIONS

All position welding of machinery, shipbuilding, bridges, offshore structures, Structural fabrication.

## CONFORMANCE

ISO 9001:2000 AWS A5.20 E71T-1C

- Excellent mechanical properties.
- Slag system provides for puddle support, good wetting, and bead shape in all position.
- Arc action and metal transfer are smooth.
- Slag removal is easily achieved with hand tools.
- One sided welding is possible with ceramic backing and will produce excellent results.
- Applications include those in general fabrication, Ship or barge construction, building or bridge erection, and off-shore industries.
- Manufactured under a quality system certified to ISO 9001 requirements.

## ▶ มิสินค้า

	icalPrope		QTY	14/-:	Price	
Size (mm)	Tensile Strength	Elongation	Spool / Box	Weight		
⊳Ø1.2	-	-	1	15 kg	<b>140.</b> -/ຄຄ.	

Reference Current (DC+)

Wire Diameter	Amps
Ø1.6 mm	180-450A
Ø1.2 mm	120-300A

## SUGGESTION:

Product should be stored in a dry, enclosed environment, and in its original intact packaging.

## **APPROVALS**

CCS	:	3YSH10
LR	:	3YSH10
GL	:	3YH5S
ABS	:	3YSAH10
DNV	:	IIIYSH10
BV	:	SA3YMH10
NK	:	KSW53GH10
RINA		3YSAH10

## **ข้อแนะนำ** : พลิตภัณฑ์ควรเก็บไว้ในที่แห้ง

CHEMICAL COMPOSITION (%) Ø1.2mm										
ELEMENT	С	Mn	Si	S	Р	Cr	Ni	Мо	٧	Cu
REQUIREMENT	≤0.12	≤1.75	≤0.90	≤0.03	≤0.03	-	-	-	-	-
ACTUAL RESULT	0.048	1.22	0.38	0.0038	0.012	-		-	-	1-

9 cm

Mechanical Properties									
Tensile Strength MPa Yield Strength Elongation (%) Impact Temp (°C) Impact Value									
Requirement	≥490	≥400	≥22	-20	≥47				
Real Parameter	529	462	26	-20	54 63 119				

## WELDING POSITIONS



1G



2G













## <u>∕N</u>WARNING

PROTECT yourself and others. Read and understand this information. FUMES AND GASES can be hazardous to your health. ARC RAYS can injure eyes and burn skin. ELECTRIC SHOCK can KILL. · Before use, read and understand the manufacturer's instructions, Material Safety Data Sheets (MSDSs), and your employer's safety practices. • Keep your head out of fumes. • Use enough ventilation, exhaust at the arc, or both, to keep fumes and gases from your breathing zone and the general area. • Wear correct eye, ear, and body protection. • Do not touch live electrical parts.













STAINLESS STEEL MIG ER30

MIG ER308LSi สำหรับงานเชื่อมสแตนเลสเกรด 304 และ 304L หรือสแตนเลสทั่วไปในกลุ่ม Austenitic ที่จะนิยมเรียกกันว่า "18-8" มีคณสมบัติดีกว่า ER308L เนื่องจากมีส่วนผสมของซิลิกอน จึงทำให้การเชื่อมมีประสิทธิภาพดีกว่ามีลักษณะการไหลของน้ำ โลหะได้ดีแนวเชื่อมซึมลึกเชื่อมได้นิ่มและเรียบเหมาะกับงานที่ ้ต้องการแนวเชื่อมที่สวยพร้อมทั้งทนต่อการกัดกร่อนได้ดีเยี่ยม ER308LSi is designed for joining type 304 and 304L stainless steels and other common austenitic stainless steels referred to as "18-8" steels. It has the same analysis as ER308L but with higher silicon content. The higher silicon content improves arc stability,

Труе	Med	hanicalProperti	\A/-!-I-4	Price		
	Size (mm)	Tensile Strength	Elongation	Weight	FIICE	
MIG (Wire)	8.0	-	-	12.5 kg	385/กก.	
	0.9	1350-1450 N/mm²	2%	12.5 kg	<b>375.</b> -/กก.	
	1.2 1250-1350 N/mm²		3%	12.5 kg	<b>370.</b> -/กก.	

bead appearance and wetting action. ER308LSi produces exceptionally smooth welds for applications that require a good cosmetic appearance and excellent corrosion resistance.

Shielding Gas

shielding gas.

•100% CO<sub>2</sub>

0.010 0.010

19.98

●90% Helium / 7-1/2% Argon / 2-1/2% CO<sub>2</sub>

	1.4	1230	1330 N/	mm-	37	70	12.0	o kg	31	0.	7/11/11.			
			Ce	ertificat	e of Qua	ality For	Weldin	ng Electi	rode					
Name of Commodity: Welding Wire Cer No.:TW23E0130E														
Trade name Diameter(mm)							Bato	h No.		А	pplication St	andard		
MIG ER308Lsi 0.8mm							2.30	E+07		A <sup>1</sup>	WS A5.9 EF	308Lsi		
Chemical Composition of Deposited Metal (%) Ø0.8, Ø1.2 mm									m					
Test item	С	S	i	Mn		S		Р	Ni		Cr	Мо	C	Cu
Standard	≤0.03	0.65~	1.00 1	.00~2.	0~2.50 ≤0.0		≤0	.025	9.00~1	1.00 1	9.50~22.00	≤0.75	≤0	).75
Actural Resu	ılt 0.022	0.8	33	1.87		0.008	0.	.018	9.7	3	19.96	0.01	0.	.02
	2,500	Mec	hanic	al P	rope	ertie	s of	f Dej	posit	ted I	Metal	3		
	Te	ensile Test	Of Depos	ited M	etal				\	/-Notch	Impact Te	st		
Test item	Tensile str Rm (Mi		ield point eL (MPa)	Е	longation (%)	n		act Temp Impact value (°C) Average (J) X-F			ay Diffusion hydroger content (ml/100g)			
Standard	≥510	)	-		≥25		-		1-1		I		-	
Actural Resu	Actural Result 600 - 45						72	a		(2)	I	-		
CHEMICAL COMPOSITION (%) Ø0.9 mm														
ELEMENT	Tensile Strength (MPa)	Elongation (%)	ELEMENT	T <sub>1</sub>	С	Si		Mn	Р	S	Ni	Cr	Мо	Cu
REQUIREMENT	≤520	≤35	REQUIRE	MENT	≤0.3	0.65~1.0	.00 1.0	00~2.50	≤0.030	≤0.030	9.00~11.00	19.50~22.00	≤0.75	≤0.75

## Advantage

ACTUAL RESULT

- Excellent operator appeal-great weld puddle fluidity and bead shape.
- Superior corrosion and crack resistance.

594

environmental and quality management systems. •

45

ACTUAL RESULT

## 0.86 Key Features

1.94

0.016

· High silicon level for increased puddle fluidity and toe wetting.

0.013

9.73

- · Proprietary surface lubricant for steady feeding and arc stability.
- ISO 9001 certified-manufactured to standards for Versatile electrode disigned to weld CrNi austenitic stainless steels.

## Controlled ferrite content for maximum corrosion resistance.

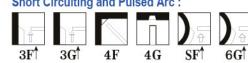
## Application:

Welding **Positions**  Globular and Spray Transfer:



## Short Circuiting and Pulsed Arc:

0.017





## การใช้งาน

เหมาะกับงานอุตสาหกรรมต่อเรือ ยานยนต์ เครื่องจักรในอตสาหกรรมอาหาร ยา และเครื่องใช้ไฟ ฟ้า

Application: Ship building, automobile, electric power food medicine machinery manufacturing.

วิธีใช้: สำหรับเชื่อมสแตนเลส ข้อแนะนำ :

เลือกลวดเชื่อมให้เหมาะกับชิ้นงาน

PROTECT yourself and others. Read and understand this information. FUMES AND GASES can be hazardous to your health. ARC RAYS can injure eyes and burn skin. ELECTRIC SHOCK can KILL.



คำเตือน: สวมอปกรณ์ป้องกันทกครั้ง



AWS E308LT1-1 AWS A5.22 E308LT1-1 GB/T 17853 TS 308L-FC11 JIS Z3323 YF308LC EN ISO 17633-B TS308L-FB1





# ลวดเชื่อม**ฟลักซ์คอร์สแตนเลส**

# MIG **E308**L

MIG 308L สำหรับงานเชื่อมสแตนเลส มีคุณสมบัติในการป้องกันการกัดกร่อน ไม่มีรูอากาศ เหมาะสำหรับงานเชื่อม ที่ต้องการคุณภาพสูงและผ่านุการ X-Rey ได้ดี เช่น งานเชื่อมท่อน้ำมัน ้ถังน้ำมันงานอุตสาหกรรมการต่อเรือ

MIG 308L for stainless steel welding Has anti-corrosion properties, no air holes, suitable for welding work that Need high quality and pass X-Ray well, such as welding of oil pipes, oil tanks, shipbuilding industry.

## Features

**Key Features** •Easy to control, able to •X-ray quality welds welding at any position. and good penetration.

 Has anti-corrosion properties.

•Excellent slag removal.

• Provides excellent weldability • 100% CO<sub>2</sub> and crack resistance.

งานเชื่อม

Shielding Gas

•75% Argon 25% CO2

Труе	Size (mm)	Weight	Price
MIG (Wire)	1.2	12.5 kg	520/กก.

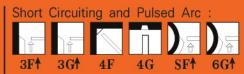


Specification Classification			TS 308L-FC11 2 E308LT1-1		Commodity	MIG 308L Dime		ension	1.2 mm	
(%) CHEMICAL COMPOSITION OF DEPOSITED METAL Ø1.2 mm										
Elements	С	Mn	Si	S	Р	Cr	Ni	Мо	Cu	
Requirement	≤0.04	0.5-2.5	≤1.0	≤0.03	≤0.04	18.0-21.0	9.0-11.0	≤0.5	≤0.5	
Actual Result	0.026	1.110	0.6	0.005	0.013	19.960	9.66	0.02	0.01	
Mechanical Property of Deposited Metal	Yield Strength Mpa	Tensile Strength Mpa	Elongation %	Reduction of Area %	Test Temperature °C	Ave.Energy J	BENDING TEST ACCORDING TO	RADIOGRAPHIC ACCORDING TO	FILET WEIDING TEST	
Requirement	-	≥520	≥35	-	-	-	-	II	-	
Actual Result	-	610	42	-	-	_		I		
SHIELDING GAS CURRENT (A) VOLTAGE (V)		VOLTAGE (V)	POLARITY	PREHEAT	INTERPASS (°C)		WS (MM/MIN)			
CO2 130-260 26-32		26-32	DCEP	-	16~150		300-400			
	rtify that this report is npliance with the spe			Inspecti	on Stamp	Manage	Manager of QA Rema		narks	

Welding Positions

Globular and Spray Transfer:







้คำเตือน : สวมอปกรณ์ป้องกันทกครั้ง PROTECT yourself and others. Read and understand this information. FUMES AND GASES can be hazardous to your health. ARC RAYS can injure eyes and burn skin. ELECTRIC SHOCK can KILL.