SUMO INDUSTRIAL

ISO 9001:2015 CERTIFIED

ABS CCS TÜVRheinland Precisely Right.

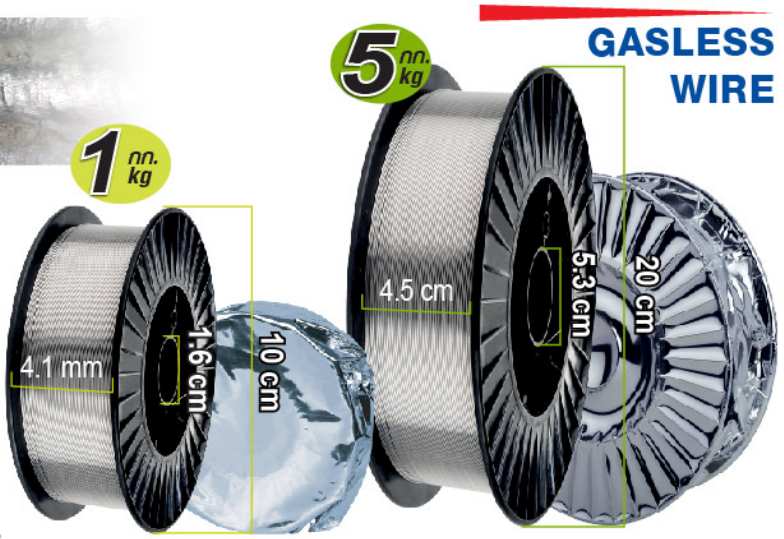
GASLESS FLUX CORED WELDING WIRE

AWS E71T-GS

ลวดเชื่อมมิกฟลักซ์คอร์ ไม่ใช้แก๊ส

ใช้ได้กับงานเชื่อมเหล็กทุกชนิด

GASLESS WIRE



- ลวดเชื่อมแบบไม่ใช้แก๊ส FLUX CORE 0.8 mm, 1.0 mm E71T-GS SUMO
- เป็นลวดเชื่อมที่ไม่มีการสึกหรอเป็นเชื้อเพลิงขั้นพื้นฐานที่ออกแบบมาสำหรับการเชื่อมตำแหน่งเหล็กอ่อนในทุกตำแหน่งที่ต้องการ
- ความแข็งแรงระดับปานกลางและความเหนียวที่ดีมาก
- ไม่ใช้แก๊ส GASLESS WIRE

Reference Current (DC+)

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

▸ มีสินค้า

MechanicalProperties			QTY	Weight	Price
Size (mm)	Tensile Strength	Elongation	Spool / Box		
▸ Ø0.8	-	-	1	1 kg	188.-/กก.
▸ Ø0.8	-	-	1	5 kg	180.-/กก.
▸ Ø1.0	-	-	1	1 kg	180.-/กก.
▸ Ø1.0	-	-	1	5 kg	160.-/กก.

SUGGESTION :
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.

SUITABLE :
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	Size (mm)	0.8 mm	1.0 mm	Production Batch		DATE :
Executive Standard	GB/T10045-2001 E501T-GS (AWS A5.20 E71T-GS)				Quantities	1 KG	5 KG

Chemical Composition (%) Ø0.8 mm , Ø1.0 mm						Mechanical Properties of Deposited			
C	Mn	Si	P	S	Al	Tensile Strength MPa	Yield Strength MPa	Longation &(%)	Impact Energy -20 °C
0.12	0.89	0.32	0.012	0.009	1.23	540	476	27	110/107/112
Examination Clerk			Quality Leader			This certificate is invalid without seal of quality 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.

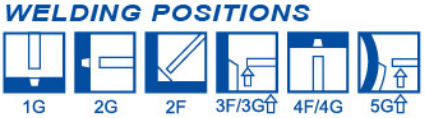
WELDING SPARKS CAN CAUSE FIRE OR EXPLOSION :
- Do not weld on containers which have held combustible materials (unless strict AWS F4.1 procedures are followed). Check before welding.
- Remove flammable materials from welding area or shield from sparks, heat.
- Keep a fire watch in area during and after 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



คำเตือน
ควรสวมอุปกรณ์ป้องกันทุกครั้งก่อนใช้งาน

FLUX CORED WELDING WIRE

AWS E71T-1

ลวดเชื่อมฟลักซ์คอร์

ISO 9001:2005

ABS CCS DNV-GL QA

15 กก. kg

SHIELDING GAS

100% CO_2 shielding gas.

ลวดเชื่อมฟลักซ์คอร์ **1.2 mm E71T-1** เป็นลวดเชื่อมที่มี ฟลักซ์คอร์ อยู่ในแกนกลางของลวดเชื่อม 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.

APPLICATIONS

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

ADVANTAGE

- 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.

▶ มีสินค้า

MechanicalProperties			QTY	Weight	Price
Size (mm)	Tensile Strength	Elongation	Spool / Box		
▶Ø1.2	-	-	1	15 kg	110.-/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 : ผลิตภัณฑ์ควรเก็บไว้ในที่แห้ง

Trade Name	E71T-1	Size (mm)	1.2 mm	Production Batch		DATE :
Executive Standard	GB/T10045-2001 E501T-1 (AWS A5.20 E71T-1C)				Quantities : 15 kg	

Chemical Composition (%) Ø1.2 mm					Mechanical Properties of Deposited			
C	Mn	Si	P	S	Tensile Strength MPa	Yield Strength MPa	Longation &(%)	Impact Energy -20 °C
0.06	1.44	0.41	0.012	0.009	557	485	27	110/107/112

Examination Clerk		Quality Leader		This certificate is invalid without seal of quality 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.

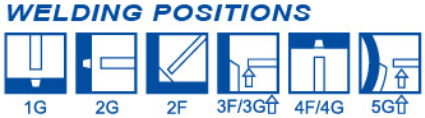
FUMES AND GASES CAN BE DANGEROUS :

- 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



คำเตือน
ควรสวมอุปกรณ์ป้องกันทุกครั้งก่อนใช้งาน

SUMO INDUSTRIAL

DNV · KR KOREAN REGISTER · CCS · NK · ABS · Lloyd's Register LR · TÜV SÜD

ER70S-6

CO_2 WELDING WIRE

ISO 9001:2015 WG ER50-6 ISO14341-A - G 42 3 C1 3Si1 CE

STABLE ARC WITH LOW FEEDING FORCE & EXTREMELY LOW OVERALL SPATTER

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

A/1G PD/4F PC/2G PE/4G

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_2) shielding gas or higher contents of Argon, such as 90/10. Can also be used with 100% CO_2. Conforms to AWS A5.18 **ER70S-6**.

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										
Element	C	Si	Mn	S	P	Cr	Ni	Mo	V	Cu
Requirement	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
Actual Result	0.06	0.9	1.51	0.016	0.012	0.013	0.005	0.002	0.002	0.13

Mechanical Properties						Soundness Test
	Tensile Strength	Yield Strength	Elongation%	Test Temp °C	Absorbed Energy J	
Requirement	≥ 480	≥ 400	≥ 22	-30	≥ 27	Ⅱ
Sample Test	545	432	30	-30	86 94 90	Acceptable

Chemical Composition (%) - 5 / 15KG										
Element	C	Si	Mn	S	P	Cr	Ni	Mo	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

Mechanical Properties						Soundness Test
	Tensile Strength	Yield Strength	Elongation %	Test Temp °C	Absorbed Energy J	
Requirement	≥ 480	≥ 400	≥ 22.0	-30	≥ 27	Ⅱ
Sample Test	546	449	27.0	-30	71 91 73	Acceptable

ขนาด Size (mm)	น้ำหนัก Weight (kg)	ราคา (Price)
● 0.8	1	105.- /kg
▶ 0.8	5	70.- /kg
▶ 0.8	15	60.- /kg
▶ 0.9	15	60.- /kg
▶ 1.0	15	58.- /kg
▶ 1.2	15	57.- /kg
● 1.2	250	xx.- /kg

SHIELDING GAS :
100% CO_2
75-95% Argon / Balance CO_2
95-98% Argon / Balance O_2
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.

● กำลังจะเข้า ▶ มีสินค้า

SUMO INDUSTRIAL

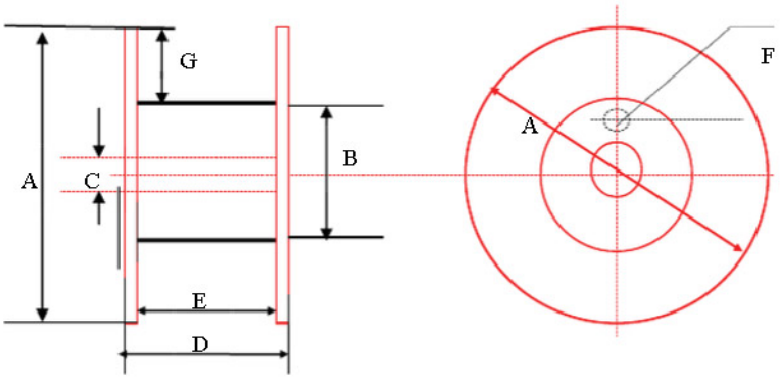
ER70S-6

CO_2 WELDING WIRE

ISO 9001:2015 WG ER50-6 ISO14341-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

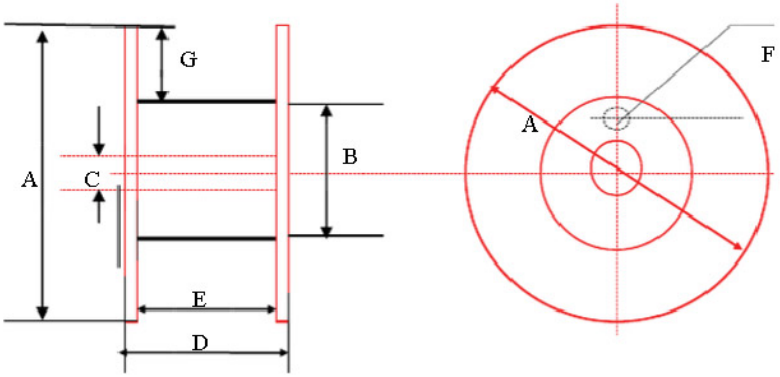


D100 (Black)

Main parameter

1kg

1	C	16 +0.5mm
2	A	100 +5mm
4	B	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

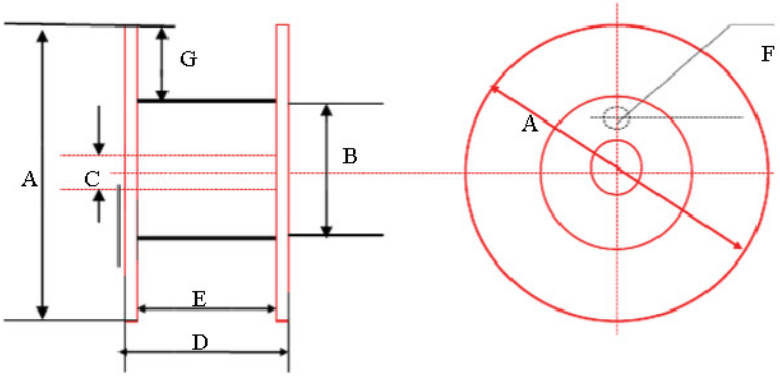


D200 (Black)

Main parameter

5kg

1	C	50.5 +2.5mm
2	A	200 +5mm
4	B	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

15kg

1	C	50.5 +2.5mm
2	A	270 +5mm
4	B	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

ISO 9001:2008

ALUMINUM SOLID WELD WIRES

MIG ER4043

ลวดเชื่อมอลูมิเนียม

ER4043 เป็นลวดเชื่อมฐานซิลิคอน สามารถใช้เชื่อมอลูมิเนียมเกรด 2014, 5052, 6061 และ 6101 ได้ ทนต่อการกัดกร่อนได้เป็นอย่างดีในน้ำเค็ม

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.

MechanicalProperties			Weight	Price
Size (mm)	Tensile Strength	Elongation		
0.8	-	-	0.5 kg	420.-/ม้วน
1.2	-	-	6.0 kg	360.-/กก.

CHEMICAL COMPOSITION (%)

ELEMENT	Fe	Si	Mn	Mg	Zn	Cu	Ti
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 **ขนาด 0.8mm 0.5 กก./ม้วน**

ชุดสายเชื่อมสปูนกัน
SPOOL GUN
200A

9400.-/Pc

ISO 9001:2000
AWS A5.10 ER5356

ALUMINUM SOLID WELD WIRES

MIG ER5356

ลวดเชื่อมอลูมิเนียม

ER5356 เป็นลวดเชื่อมอลูมิเนียมฐานแมกนีเซียม สามารถใช้เชื่อมอลูมิเนียมเกรด 5050, 5052, 5083, 5086, 5356, 5454 และ 5456 ได้ให้ ความแข็งแรงสูงมากมีความเหนียวและต้านทานการกัดกร่อนได้ดี

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.

เชื่อมได้นิ่ม และเนียนมาก

THE BEST OF MILD AND EXCEPTIONALLY SMOOTH WELDS

6 กก. kg

Welding Position :

สามารถเชื่อมได้ทุกท่าเชื่อม (All, expect vertical down)

Guideline For USE :

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.

MechanicalProperties			Weight	Price
Ø Size (mm)	Tensile Strength	Elongation		
1.2	-	-	0.6 kg	450.-/กก.

Shielding Gases (ACC.ISO 14175)

I1	Inert gas Ar (100%)
I3	Inert gas Ar+ 0.5-95% Helium mixtures
Flow rate	4.2 - 23.6L/min

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 • อุตสาหกรรมเฟรมจักรยาน ยานยนต์ รถบัส หรือรถพ่วง • อุตสาหกรรมรางรถไฟ

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

Wire Diameter	Amps	Volts	Travel Speed (ipm)	Argon (cfh)
0.8 mm	60 - 175	15 - 24	25 - 45	25 - 30
0.9 mm	70 - 185	15 - 27	25 - 40	30 - 35
▶ **1.2 mm**	125 - 260	20 - 29	24 - 35	35 - 45
1.6 mm	170 - 300	24 - 30	28 - 38	45 - 55
2.4 mm	275 - 400	26 - 31	14 - 20	60 - 75

▶ = มีสินค้า

⚠ 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.

SUMO INDUSTRIAL

CE ISO 9001:2015 CERTIFIED

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 สแตนเลสฟลักซ์คอร์
Stainless steel flux cored welding wire

MIG E308LT0-3

ไม่ใช้แก๊ส 0.8mm.

เชื่อมง่าย **แกร่ง ทนทุกสภาพงาน**
พร้อมใช้งานทันที *แม้ในพื้นที่ที่ไม่สามารถใช้แก๊สได้*
สามารถเชื่อมสแตนเลสเกรด
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.

WELDING POSITIONS

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

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

Tpye	Size (mm)	Weight	Price
MIG (Wire)	0.8	1 kg	490.-/กก.

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.

Chemical Composition of Deposit Metal (%)

Test item	C	Si	Mn	Cr	Ni	Mo	P	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

Test item	Tensile of Deposited Metal			V-Notch Impact Test			
	Tensile strength Rm (MPa)	Yield point Rel (MPa)	Elongation (%)	Impact Temp (°C)	Impact value Average (J)	X-Ray	Diffusion hydrogen content (ml/100g)
Standard	≥520	*	≥25	*	*	I	*
Actural Result	570	*	40	*	*	I	*

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

SUMO INDUSTRIAL

ISO 9001:2015 CERTIFIED

ลวดเชื่อมสแตนเลส
STAINLESS STEEL WIRE
MIG ER308LSi

MIG ER308LSi สำหรับงานเชื่อมสแตนเลสเกรด 304 และ 304L หรือสแตนเลสทั่วไปในกลุ่ม Austenitic ที่จะนิยมเรียกกันว่า "18-8" มีคุณสมบัติดีกว่า ER308L เนื่องจากมีส่วนผสมของซิลิกอน จึงทำให้การเชื่อมมีประสิทธิภาพดีกว่ามีลักษณะการไหลของน้ำโลหะได้ดีแนวเชื่อมซึมลึกเชื่อมได้นิ่มและเรียบเหมาะกับงานที่ต้องการแนวเชื่อมที่สวยพร้อมทั้งทนต่อการกัดกร่อนได้ดีเยี่ยม

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

Tpye	MechanicalProperties			Weight	Price
	Size (mm)	Tensile Strength	Elongation		
MIG (Wire)	0.8	-	-	12.5 kg	385.-/กก.
	0.9	1350-1450 N/mm²	2%	12.5 kg	375.-/กก.
	1.2	1250-1350 N/mm²	3%	12.5 kg	370.-/กก.

ใช้แก๊ส
100% CO_2 shielding gas.

Shielding Gas
- 100% CO_2
- 90% Helium / 7-1/2% Argon / 2-1/2% CO_2

Certificate of Quality For Welding Electrode

Name of Commodity : Welding Wire		Cer No.:TW23E0130E	
Trade name	Diameter(mm)	Batch No.	Application Standard
MIG ER308Lsi	0.8mm	2.30E+07	AWS A5.9 ER308Lsi

Chemical Composition of Deposited Metal (%) Ø0.8, Ø1.2 mm

Test item	C	Si	Mn	S	P	Ni	Cr	Mo	Cu
Standard	≤0.03	0.65~1.00	1.00~2.50	≤0.02	≤0.025	9.00~11.00	19.50~22.00	≤0.75	≤0.75
Actural Result	0.022	0.83	1.87	0.008	0.018	9.73	19.96	0.01	0.02

Mechanical Properties of Deposited Metal

Test item	Tensile Test Of Deposited Metal			V-Notch Impact Test			
	Tensile strength Rm (MPa)	Yield point ReL (MPa)	Elongation (%)	Impact Temp (°C)	Impact value Average (J)	X-Ray	Diffusion hydrogen content (ml/100g)
Standard	≥510	-	≥25	-	-	I	-
Actural Result	600	-	45	-	-	I	-

CHEMICAL COMPOSITION (%) Ø0.9 mm

ELEMENT	Tensile Strength (MPa)	Elongation (%)	ELEMENT	C	Si	Mn	P	S	Ni	Cr	Mo	Cu
REQUIREMENT	≤520	≤35	REQUIREMENT	≤0.3	0.65~1.00	1.00~2.50	≤0.030	≤0.030	9.00~11.00	19.50~22.00	≤0.75	≤0.75
ACTUAL RESULT	594	45	ACTUAL RESULT	0.016	0.86	1.94	0.017	0.013	9.73	19.98	0.010	0.010

การใช้งาน
เหมาะกับงานอุตสาหกรรมต่อเรือ ยานยนต์ เครื่องจักรในอุตสาหกรรมอาหาร ยา และเครื่องใช้ไฟฟ้า

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

วิธีใช้ : สำหรับเชื่อมสแตนเลส

ข้อแนะนำ : เลือกลวดเชื่อมให้เหมาะกับชิ้นงาน

Advantage
- Excellent operator appeal-great weld puddle fluidity and bead shape.
- Superior corrosion and crack resistance.
- ISO 9001 certified-manufactured to standards for environmental and quality management syatems.

Key Features
- High silicon level for increased puddle fluidity and toe wetting.
- Proprietary surface lubricant for steady feeding and arc stability.
- Versatile electrode disigned to weld CrNi austenitic stainless steels.
- Controlled ferrite content for maximum corrosion resistance.

Application :

Welding Positions

Globular and Spray Transfer : 1F 1G 2F 2G

Short Circuiting and Pulsed Arc : 3F↑ 3G↑ 4F 4G SF↑ 6G↑

⚠ 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.

คำเตือน: สวมอุปกรณ์ป้องกันทุกครั้ง

SUMO INDUSTRIAL

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

ISO 9001:2015 CERTIFIED

ABS CCS TÜVRheinland® Precisely Right.

ลวดเชื่อมฟลักซ์คอร์สแตนเลส
FLUX CORE STAINLESS STEEL WIRE
MIG E308L

MIG 308L สำหรับงานเชื่อมสแตนเลส มีคุณสมบัติในการป้องกันการกัดกร่อน ไม่มีรูอากาศ เหมาะสำหรับงานเชื่อมที่ต้องการคุณภาพสูงและผ่านการ 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
- Easy to control, able to welding at any position.
- Has anti-corrosion properties.

Key Features
- X-ray quality welds and good penetration.
- Excellent slag removal.
- Provides excellent weldability and crack resistance.

Shielding Gas
- 100% CO_2
- 75% Argon 25% CO_2

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

Specification & Classification	GB/T17853 TS 308L-FC11 AWS A5.22 E308LT1-1			Commodity	MIG 308L	Dimension	1.2 mm
(%) CHEMICAL COMPOSITION OF DEPOSITED METAL Ø1.2 mm							
Elements	C	Mn	Si	S	P	Cr	Ni	Mo	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

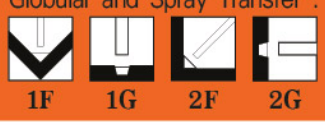
Mechanical Property of Deposited Metal	Yield Strength Mpa	Tensile Strength Mpa	Elongation %	Reduction of Area %	Test Temperature °C	Ave.Energy J	BENDING TEST ACCORDING TO	RADIOGRAPHIC ACCORDING TO	FILET WEIDING TEST
Requirement	–	≥520	≥35	–	–	–	–	II	–
Actual Result	–	610	42	–	–	–		I	

SHIELDING GAS	CURRENT (A)	VOLTAGE (V)	POLARITY	PREHEAT	INTERPASS (°C)	WS (MM/MIN)
CO2	130-260	26-32	DCEP	–	16~150	300-400

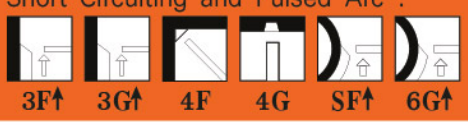
We hereby certify that this report is correct and that all test results are in compliance with the specification described herein.	Inspection Stamp	Manager of QA	Remarks

Welding Positions

Globular and Spray Transfer :



Short Circuiting and Pulsed Arc :



⚠ WARNING

คำเตือน : สวมอุปกรณ์ป้องกันทุกครั้ง

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.

FLUX CORE WELDING WIRES

MIG E71T-1C

ลวดเชื่อมฟลักซ์คอร์

EN17632

CE 0035-CPD-C742-15

SHIELDING GAS

100% CO_2 shielding gas.

แนวเชื่อมมันเงา
อาร์คได้นิ่ม สะเก็ดไฟน้อย

15 กก. kg

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

ADVANTAGE
- 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.

▶ มีสินค้า

MechanicalProperties			QTY	Weight	Price
Size (mm)	Tensile Strength	Elongation	Spool / Box		
▶Ø1.2	-	-	1	15 kg	140.-/กก.

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 : ผลิตภัณฑ์ควรเก็บไว้ในที่แห้ง

CHEMICAL COMPOSITION (%) Ø1.2mm

ELEMENT	C	Mn	Si	S	P	Cr	Ni	Mo	V	Cu
REQUIREMENT	≤0.12	≤1.75	≤0.90	≤0.03	≤0.03	-	-	-	-	-
ACTUAL RESULT	0.048	1.22	0.38	0.0038	0.012	-	-	-	-	-

Mechanical Properties

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

WELDING POSITIONS

⚠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.