



966334-H





Incorporated in November 2011, Ace Weld Sdn Bhd is a specialist in Welding equipment, accessories and consumables. We have since grown and now comprise of three offices, located in Puchong and Juru.

Ace Weld was established to cater to the dealers' network and since inception, now boasts a comprehensive range for over 100 dealers nationwide, In addition to our range of welding products, Ace Weld offers other services such as customizable items and OEM production for bulk orders. Our technical service and support teams are also readily available should you require additional assistance, Apart from our range of products and services, we carry the Ace Weld brand, an economical range of welding products.

Here Ace Weld, we are constantly adapting and improving our products and services in view of the growing market landscape, giving us the ability to provide comprehensive solutions to suit our customers' ever changing business needs.

ACE WELD YOUR PARTNER IN WELDING







NICHIA









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## ACE WELD

YOUR PARTNER IN WELDING	
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WELDING ALLOYS





Product Name	Packing	Product Description
		- Designed for co2 application (non-siphoned tube cylinder)
		- High flow CO2 applications (SR310 100 psig) (SR 311/312 100 SFCH) with adequate supply or source
Ace Weld Carbon Dioxide	40 000	- Designed for core wire applications
Fin Type Regulator	10 PCS	- Machined aluminum body & housing cap
		- 2n (50.8mm) gauge
		- Stem type seat mechanism
		- 1.75" (44.5mm) diaphragm



Product Name	Packing	Product Description
Ace Weld Argon Regulator	10 PCS	- Argon Gas
with flowmeter (Diaphragm)	10 - 03	- Flow, 0-25
Product Name	Packing	Product Description
Product Name Ace Weld CO2 Regulator	Packing	Product Description - Carbon Dioxide Gas



Product Name	Packing	Product Description
		- Argon Gas Type
Ace Weld Argon Regulator	10 PCS	- Preset Pressure, 25PSI
with Flowmeter (Piston)		- Max Inlet Pressure, 450PSI
Product Name	Packing	Product Description
		- Carbon Dioxide Gas Type
Ace Weld CO2 Regulator with Flowmeter (Piston)	10 PCS	- Preset Pressure, 25 PSI



Product Name	Packing	Product Description
Ace Weld Edge Oxygen Regulator	10 PCS	
Product Name	Packing	Product Description
Ace Weld Acetylene Regulator	10 PCS	





Product Name	Packing	Product Description
		- Gas Flow Lit/Min, 35
Ace Weld Oxygen Regulator	12 PCS	- Max Delivery Pressure, 10BAR/145PSI
		- Cylinder Pressure, 315BAR/4500PSI
Product Name	Packing	Product Description
Product Name	Packing	Product Description - Gas Flow Lit/Min, 6
Product Name Ace Weld Acetylene Regulator	Packing	
		- Gas Flow Lit/Min, 6



Product Name	Packing	Product Description
Ace Weld Professional Full	12 PCS	- Gas Flow Lit/Min, 35
Copper Oxygen Regulator	121 00	- Max Delivery Pressure, 10BAR/145PSI
		- Cylinder Pressure, 315BAR/4500PSI



Product Name	Packing	Product Description
Ace Weld Professional Full	12 PCS	- Gas Flow Lit/Min, 6
Copper Acetylene Regulator	12 PC3	- Max Delivery Pressure 2BAR/350PSI
		- Cylinder Pressure, 315BAR/4500PSI



Product Name Pa	acking	Product Description
Ass Wold Oxygen Begulater		- Gas Flow Lit/Min, 35
Ace Weld Oxygen Regulator Y Series	2 PCS	- Max Delivery Pressure, 10BAR/145PSI
T Genes		- Cylinder Pressure, 315BAR/4500PSI
Product Name Pa	acking	Product Description
		- Gas Flow Lit/Min, 6
Ace Weld Acetylene Regulator Y Series	12 PCS	- Max Delivery Pressure 1.5BAR/20PSI
T Series		- Cylinder Pressure, 315BAR/4500PSI





Product Name	Packing	Product Description
	12 PCS	- Nitrogen Gas
Ace Weld Nitrogen Regulator		- Flow Liter/min 35
		- Max. Delivery Pressure 10 Bar/145PSI
		- Cylinder Pressure 315BAR/4500PSI



Product Name	Packing	Product Description
Ace Weld CO2 Heater	8 PCS	- Carbon Dioxide Gas
Regulator C/W Flowmeter 36V	0100	- Flow Lt/min 0-25
Product Name	Packing	Product Description
Ace Weld CO2 Heater	8 PCS	- Carbon Dioxide Gas
Regulator C/W Flowmeter 110V	0100	- Flow Lt/min 0-25
Product Name	Packing	Product Description
Ace Weld CO2 Heater	8 PCS	- Carbon Dioxide Gas
Regulator C/W Flowmeter 220V	0.00	- Flow Lt/min 0-25



Product Name	Packing	Product Description
LPG/Propane Regulator	6 PCS	- FlowM <sup>3</sup> /hr: 11
Industrial Type	0100	- Max. Delivery Pressure 1.4BAR/20PSI
		- Cylinder Pressure 25bar/375PSI
Product Name	Packing	Product Description
Product Name	Packing	Product Description
Product Name LPG/Propane Regulator	, in the second se	Product Description - FlowM <sup>3</sup> /hr: 11
	Packing 6 PCS	
LPG/Propane Regulator	, in the second se	- FlowM³/hr: 11





Product Name	Packing	Product Description
Ass Wold Oxygen		Model Type: BSP 3/8 RH Oxygen (Blue label)
Ace Weld – Oxygen Check Valve	1 PC	Gas Type: Oxygen
Check valve		Max Pressure: 15bar / 210psi
Product Name	Packing	Product Description
	Packing	Product Description Model Type: BSP 3/8 RH Oxygen (Blue label)
Ace Weld – Acetylene	Packing 1 PC	
Ace Weld – Acetylene		Model Type: BSP 3/8 RH Oxygen (Blue label)

	ACE
FLASH	FLASHE
Certys PLEAK	PLEASE I

Product Name	Packing	Product Description
Ace Weld Flashback Arrestor		Model Type: Oxygen Flashback Arrestor (Blue label)
- Oxygen (Torch Side)	1 PC	Gas Type: Oxygen
- oxygen (Toren olde)		Max Pressure: 10bar / 150psi
Product Name	Packing	Product Description
	Packing	Product Description Model Type: Acetylene Flashback Arrestor (Red Label)
Product Name Ace Weld Flashback Arrestor - Acetylene (Torch Side)	Packing 1 PC	

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Product Name	Packing	Product Description
		Model Type: Oxygen Flashback Arrestor (Blue label)
Ace Weld Flashback Arrestor	1 PC	Gas Type: Oxygen
- Oxygen (Regulator End)		Max Pressure: 10bar / 150psi
Product Name	Packing	Product Description
		Model Type: Acetylene Flashback Arrestor (Red Label)
Ace Weld Flashback Arrestor	1 PC	Gas Type : Acetylene / Max Pressure : 1bar / 150psi
<ul> <li>Acetylene (Regulator End)</li> </ul>		Gas Type : Fuel Gases / Max Pressure : 5bar / 75psi





Product Name	Packing	Product Description
		- Capacity: Cutting up to 250MM (10")
Ass Wold Cutting Tareh		- Suitable for both Acetylene and Propane service
Ace Weld Cutting Torch (Heavy Duty)	10 PCS	- Capacity: cutting from 1/8" (3.2MM) to 8" (203.2MM)
(neavy Duty)		- Stainless Steel Tubes for greater strength & durability
		- Hose connection BSP 3/8", and other thread sizes available
Product Name	Packing	Product Description
		- Cutting Thickness (mm) : 200
Ace Weld Cutting Torch	10 PCS	Acetylene/Propane
(Medium Duty)		- Cutting Tip : AN series / PN series



Product Name	Packing	Product Description
	1 PC	- Soldering, brazing, annealing, straightening and bending plates,
		pipes and bars
LPG Heating Torch		- Pre-heating in welding jobs, drying moulds, thawing jobs,
LFG Heating forch		asphalt wore, etc.
		- Torch Connection: 3/8 " BSP
		- Torch Length 500mm

Nozzle Size	Head Size (mm)	Propane Pressure (kg/cm2)
S	25.4	0.3
Μ	38.1	0.4
L	50.8	0.5

X

Product Name	Packing	Product Description
7500 101 7		- A Light Duty Welding Torch, design for minor repair jobs.
7502 "S" Type	1 PC	- Welding Capacity: 0.5mm- 3.2mm (1/64"- 1/8")
Welding Torch		- Torch connection thread size: 3/8" BSP

SIZE	ORIFICE	WELDING RANGE (MM)	OXYGEN PRESSURE	ACETYLENE PRESSURE
25	0.7	0.5-1.0	1.5	0.2-0.5
50	0.8	1.0-1.5	1.5	0.2-0.5
75	0.9	1.5-1.8	2.0	0.2-0.5
100	1.0	1.8-2.2	2.0	0.2-0.5
125	1.1	2.2-2.8	2.5	0.2-0.5
150	1.2	2.8-3.2	2.5	0.2-0.5



Cutting Nozzle	Size	Packing
ANME (Oxygen + Acetylene)	1/16 1/8 1/32 3/32 3/64 5/64	50 PCS
PNME (Oxygen + LPG)	1/16 9L 1/32 9L 1/8 9L 3/64 9L 5/64 9L 1/16 18L 1/32 18L	50 PCS
Nozzle Tip Cleaner		25 PCS

Cutting Nozzle Type ANE/ANME using 6.3mm x 10m fitted hose with resettable flashback arrestors - all in new condition.

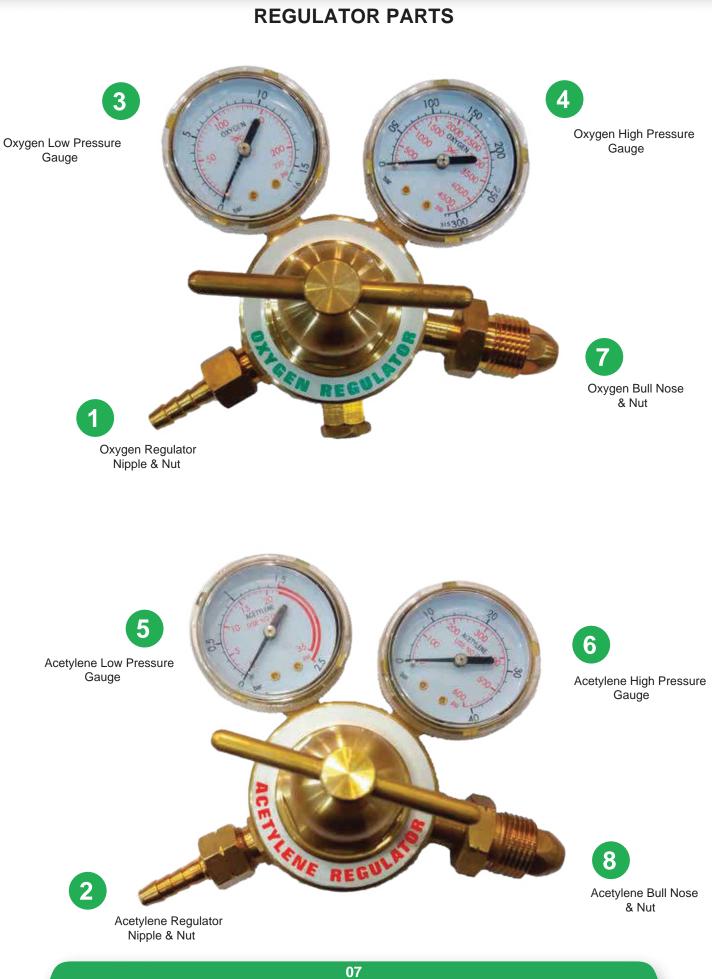
Mild S Pla		Nozzle Size	0	Operation	Pressure	e		G	as Consu	umption		
Thick		0120	Оху	/gen	Fuel	Gas	Cuttir	ng Oxy	Heat		Fu	
mm	in		ber	lbf/in <sup>2</sup>	ber	lbf/in <sup>2</sup>	L/M	ft <sup>3</sup> /H	L/M	ft <sup>3</sup> /H	L/M	ft <sup>3</sup> /H
6	1/4	1/32	1.4	20	.3	4	14.15	30	8.5	18	8	17
13	1/2	<sup>3</sup> /64	2.1	30	.35	5	30.7	65	10.4	22	9.4	20
25	1	*1/16	2.8	40	.4	6	67.5	143	13.2	28	11.8	25
50	2	*1/16	3.1	45	.4	6	78.5	166	13.2	28	11.8	25
75	3	*1/16	3.5	50	.4	6	88.7	188	13.2	28	11.8	25
100	4	*5/64	3.1	45	31	4.5	121	256	14.6	31	13.2	28
150	6	* <sup>3</sup> /32	3.1	45	.4	6	175	370	20	43	18.4	39
200	8	*1/8	4.1	60	.45	6.5	283	600	26	55	23.5	50
250	10	*1/8	4.8	70	.45	6.5	377	800	26	55	23.5	50
300	12	*1/8	6.2	90	.45	65	434	920	26	55	23.5	50

Nozzle Type PNE/PNME using 6.3mm x 10m fitted hose with

Mild S Pla		Nozzle Size	(	Operation Pressure			Gas Consumption					
Thickr		0120	Оху	gen	Fuel	Gas	Cuttin	g Oxy	Heat	Oxy	Fue	
mm	in		ber	lbf/in <sup>2</sup>	ber	lbf/in <sup>2</sup>	L/M	ft <sup>3</sup> /H	L/M	ft <sup>3</sup> /H	L/M	ft <sup>3</sup> /H
6	1/4	1/32	2	30	.2	3	14.15	30	22.6	48	5.7	12
13	1/2	<sup>3</sup> /64	2	30	.2	3	30.6	65	25.5	54	6.6	14
25	1	*1/16	2.8	40	.2	3	70.8	150	37.7	80	9.4	20
50	2	*1/16	3.1	45	.2	3	80.2	170	41.5	88	10.4	22
75	3	*1/16	3.4	50	.3	4	99	210	41.5	88	10.4	22
100	4	* <sup>5</sup> /64	3.4	50	.3	4	113	240	41.5	88	10.4	22
150	6	* <sup>3</sup> /32	4.1	60	.4	6	160	340	56.6	120	14.2	30
200	8	*1/8	4.8	70	.4	6	245	520	66	140	16.5	35
250	10	*1/8	5.5	80	.55	8	330	700	75	160	18.9	40
300	12	*1/8	6.2	90	.62	9	425	900	75	160	18.9	40

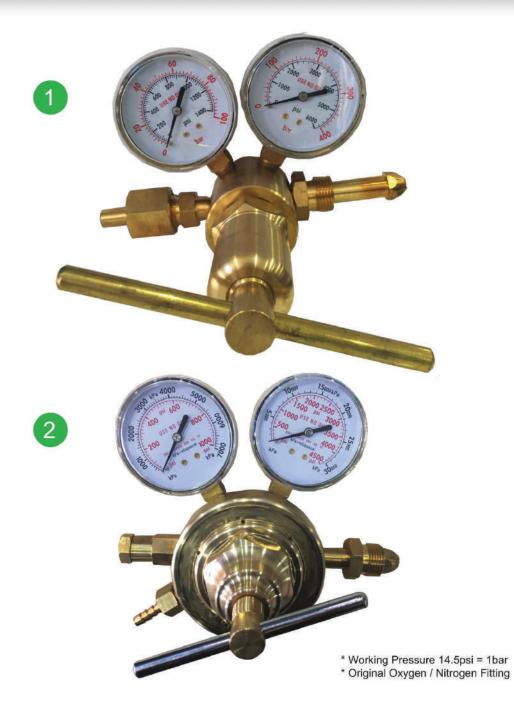








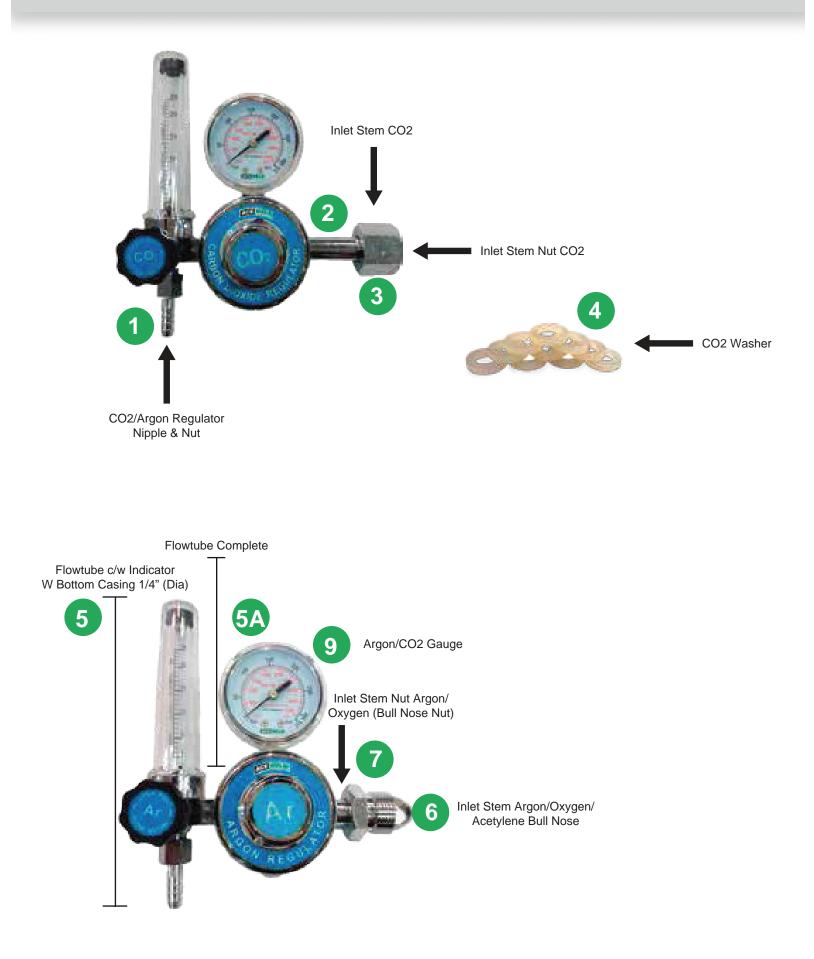
## GAS EQUIPMENT PARTS



PRODUCT CODE	DESCRIPTION	PRICE (RM)
TZAW6600003	High Pressure Regulator 1000psi	
TZAW6600014	High Pressure Regulator 450psi	



## GAS EQUIPMENT PARTS







Product Name	Packing	Product Description
AW Earth Clamp 300AMP		
AW Earth Clamp 500AMP		



Product Name	Packing	Product Description
AW Electrode Holder 300AMP	25 PCS/BOX	
AW Electrode Holder 500AMP	25 PCS/BOX	
AW Electrode Holder 600AMP	25 PCS/BOX	



Product Name	Packing	Product Description
Dinse Connector 200AMPS 10/25 (MALE)	20 PCS/BOX	
Dinse Connector 300AMPS 35/50 (MALE)	20 PCS/BOX	
Dinse Connector 400AMPS 50/70 (MALE)	20 PCS/BOX	
Dinse Connector 500AMPS 70/95 (MALE)	20 PCS/BOX	
Dinse Connector (FEMALE) 70/95	20 PCS/BOX	



Product Name	Packing	Product Description
Dinse Socket 200AMPS (PANEL FEMALE) 10/25	20 PCS/BOX	
Dinse Socket 300AMPS (PANEL FEMALE) 35/50	20 PCS/BOX	
Dinse Socket 400AMPS (PANEL FEMALE) 50/70	20 PCS/BOX	
Dinse Socket 500AMPS (PANEL FEMALE) 70/95	20 PCS/BOX	





Product Name	Packing	Product Description
HI-LO Welding Gauge - Multipurpose - Single purpose		<ul> <li>After filling and aligning the pipe, measure the internal alignment and remove any radiographic rejects.</li> <li>Determine the pipe's internal misalignment before and after tracking.</li> </ul>
		<ul> <li>Measures displayed in standard on one side and metric on the opposite side.</li> </ul>



Product Name	Packing	Product Description
Tapper Gauge 0-15mm		<ul> <li>Measure opening, slot width, hole size, etc.</li> <li>Made of stainless steel</li> </ul>





Product Name	Packing	Product Description
AW Welding Gauge MG-1/HJC40B		- The product mainly consists of a main scale, a slinder and a multi-purpose gauge.
		<ul> <li>It is a weld detention gage used to detect the bevel angle of weldments, the height of various weld lines, weldment gaps and the plate thickness of weldments.</li> </ul>
		<ul> <li>This product is made of stainless steel, with reasonable structure and beautiful appearance, which is easy to use.</li> </ul>

Product Name	Packing	Product Description
Ace Weld Welding Gauge MG-11		<ul> <li>Filler weld gauge allows fast, accurate measurement of seven (7) fillet weld size: 3.2mm – 4.8mm/7.9mm-11.1mm/ 9.5mm-12.7mm/6.4mm-15.9mm/19.1mm-22.2mm/22.2mm -25.4mm/19.1mm-25.4mm/19.1mm-25.4mm their metric equivalents, to determine weld sizes, either concave or convex.</li> </ul>
		<ul> <li>Each gauge blade is made of 1-1/4 x 4" cold rolled stainless steel to resists rust and bendin. Blades are deburred to remove rough edges. All sizes and numerals are engraved into the surface for easier reading. The set of seven blades comes in a standard packing.</li> </ul>



Product Name	Packing	Product Description
Ace Weld Welding Gauge MG-8		<ul> <li>The gauge consists of four components: main scales, height gauge, undercut depth gauge and multiple-purpose gauge and is specially used for the measurement of the bevel angle, height, width, gap and undercut depth of weldment, suitable for the direction of boilers, bridges, ships, pressure vessels and oil pipes. It is made of stainless steel</li> </ul>



Product Name	Packing	Product Description
Ace Weld Welding Gauge HJC-40		- The product mainly consists of a main scale, a slider and a multi-purpose gauge.
		<ul> <li>It is a weld detention gage used to detect the bevel angle of weldments, the height of various weld lines, weldment gaps and the plate thickness of weldments.</li> </ul>
		<ul> <li>It is suitable for manufacturing boilers, bridges, chemical machinery, and ships and for inspecting the welding quality of pressure vessels.</li> </ul>
		- This product is made of stainless steel, with reasonable structure and beautiful appearance, which is easy to use.



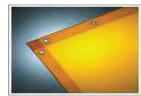
#### WELDING CURTAIN & FIRE BLANKET

# WELDING CURTAIN

#### INCREASE PRODUCTIVITY IN THE WORK PLACE BY CREATING A SAFER, CLEANER, ORGANIZED AND MORE EASILY SUPERVISED ENVIRONMENT.

Welding screens are made with special formulated vinyl 16 mil(0.40) thick.

These screens are transparent and are resistant to UV rays, flame and abrasion.



# Gold

Yellow Screen Constitutes high transparent welding curtain.

Formulated to disperse light from welding arcs throughout the curtain while creating a bright work area, our gold curtain is recommended for low-to-medium amperage welding applications.

# FIRE BLANKET

#### Product Name Welding Curtain 6FT x 6FT Welding Curtain 50M x 1.93M

Product Code A8150000004 A8150000001/2/3



## **SPECTRA** Red/Orange Screen

Constitutes the near-ideal transparent welding curtain. Offering good visibility, it

it also minimizes the arc glare better than any other transparent welding curtain while reflection usable light back into the work area. Weld master spectra orange is considered the best in its class.



### **EXTRA Dark Green** Constitutes moder transparent welding curtain.

Opaque welding curtains are designed for durability, strength and resistance totearing and ripping. Recommended for plasma cutting or bright welding applications.



Product Name	Pa
Fire Blanket Size: 1.0MM x 1M x 50M	
Fire Blanket Size: 1.5MM x 1M x 30M	
Fire Blanket Size: 3.0MM x 1M x 30M	



#### Product Name

king

**Product Name** 

#### White Fiberglass Welding Blanket

and acids. This material comes in size of 1.5mm thickness.

Gold Fiberglass Welding Blanket Heat Resistant:860°C (1580°F) Size:1mm x 1m x 50m

Heat Resistant: 550°C (1022°F)

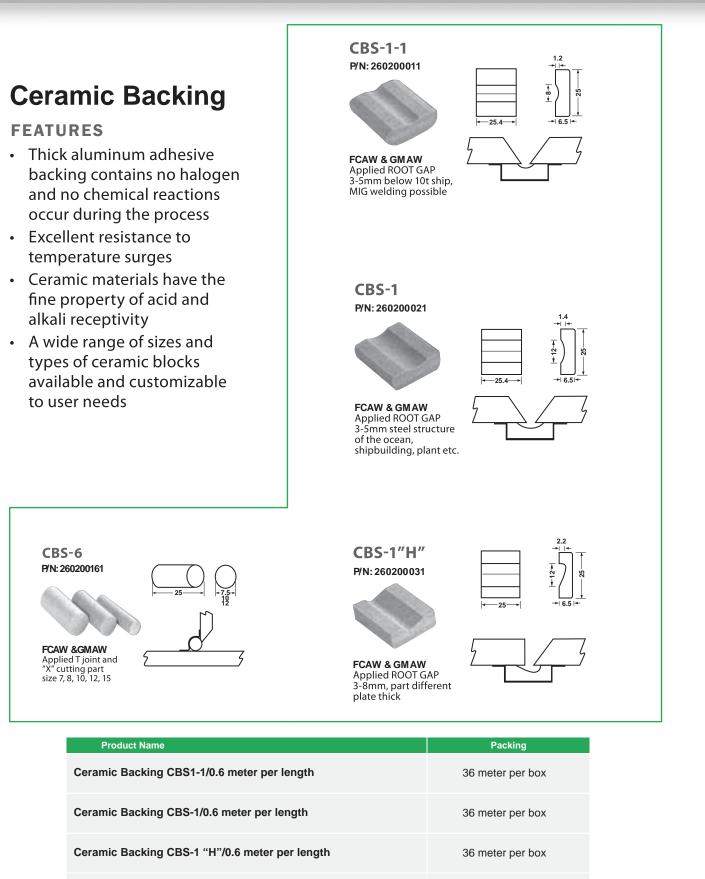
sand blasting, and heat treating

Size: 1.5mm x 1m x 30m An economical option for welding blankets, curtains, and heat shields, this material can withstand consistent temperatures that go up to 1022°F. It is often used for applications involving heat treating and as a high temperature safety barrier. It is also used as an egress blanket, welding curtains, and light duty applications. It offers excellent protection from both vertical splatter and sparks, and resists most solvents

The fiberglass material is specially treated with silica yards and a proprietary formula, creating a fabric that is resistant to high temperature. It can handle temperatures up to 1500°F continuously and 2000°F for short periods. This material is commonly used for welding curtains and blankets as well as heat shields, gaskets, and drop cloths. It comes in 20oz and 27oz weights, 35 mil and 60 mil thicknesses, and in the color tan. In vertical applications, it provides protection from light to medium grinding, sparks,

Current (Amp)	Length	Specification
300	90m	475 x 0.19 x 13
400	90m	758 x 0.19 x 15
500	90m	1043 x 0.19 x 17
600	90m	1727 x 0.19 x 18.5





72 meter per box

72 meter per box

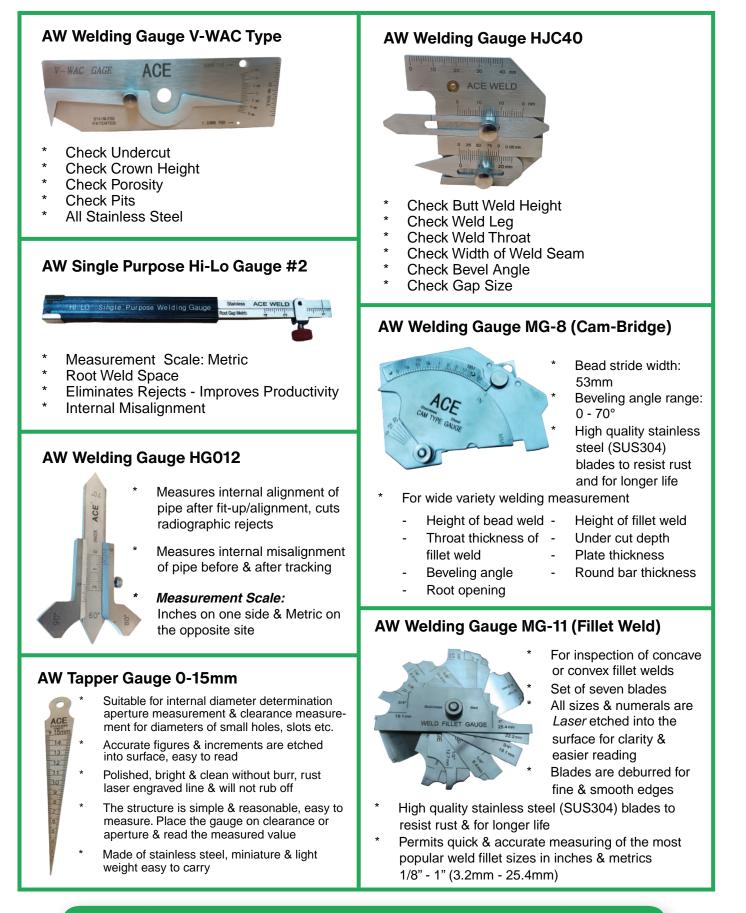
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Ceramic Backing CBS-6 8mm/0.6 meter per length

Ceramic Backing CBS-6 10mm/0.6 meter per length

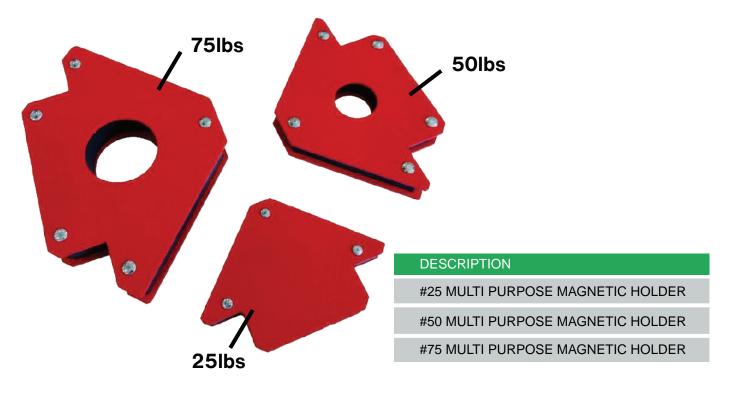


#### WELDING GAUGE

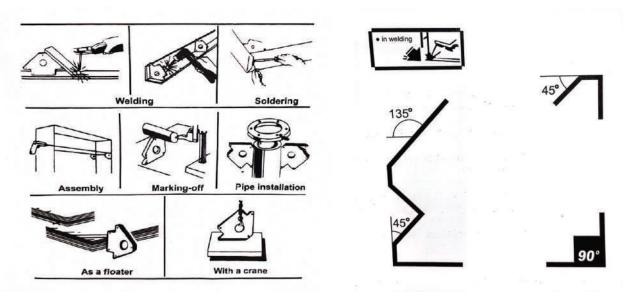




#### **MULTI PURPOSE MAGNETIC HOLDER**



- Designed to work as an Extra Hand
- Enables Fast and Accurate Holding of any Ferrous Object
- Powerful Magnet Holds Strongly to any Ferrous Material
- Will hold both sheet and Tube at Angles of 45°, 90° and 135°
- Compact Design Allows use in tight places
- Can be used as double sided Holder for Welding and Assembly Work
- Three popular sizes for use in a variety of different applications
- Ideal for use as work holder and positioner in Welding, Soldering, Supporting, Jigging, Assembly etc





## ACE WELD IK-12 STRAIGHT LINE CUTTER

Main features:

- 1. Small capacity, low gravity center, lightweight, portable.
- 2. Whole main body is made of high strength aluminum die-cating..
- 3. Mechanical speed adjustment system increase the reliability under high temperature.
- 4. Main motor with cooling fan.
- 5. Optional circular rail for circular piece cutting (optional)

<b>Technical Parameter</b> Specifications		
Weight:	7.5kg	
One torch with body:	10kg	
Two torch with body:	14kg	
Machine size:	350x140x175mm	
Wheel distance:	160mm	
Power source:	220±10%	
Reduction gear:	single cone system	
Cutting edge sharp:	1, V (45)	
Cutting thickness:	6~100mm (by std. acc)	
Motor:	1500 r.p.m	



Contents of package		
Main unit:	1 set	
Torch holder with rack:	1 set	
Torch:	1 pc	
Gas distributor:	1 pc	
Hose 600mm:	2 pcs	
Power cord, 5m:	1 pc	
Tip (102 or 106 type #0,1,2, one each):	3 pcs	
Straight rail:	2 pcs (1.8m each)	

PARTS AVAILABLE PURCHASE	E DEPRATE
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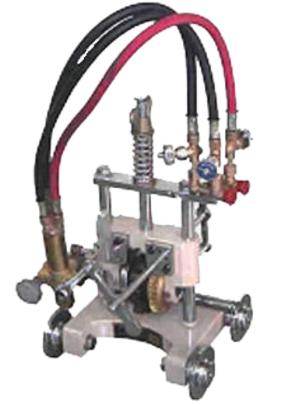
- 1 GAS DISTRIBUTOR
- 2 TORCH BODY
- 3 TORCH HOLDER
- 4 GAS HOSE
- 5 GEAR BAR
- 6 TRACK 1.8M

PRODUCT CODE	DESCRIPTION	PRICE (RM)
A5236120100	Straight Line Cutter c/w track 1.8 meter	



## ACE WELD PIPE CUTTER

## MANUAL PIPE GAS CUTTER





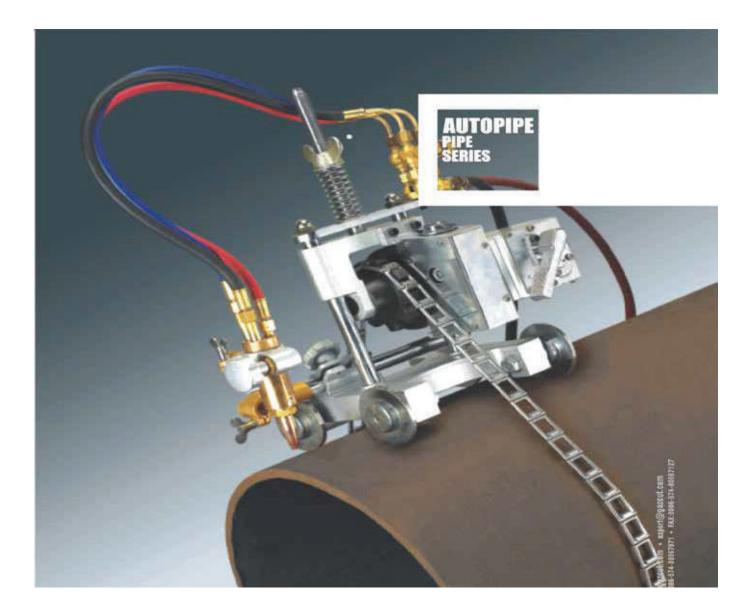
MODEL	PORTABLE PIPE GAS CUTTING MACHINE	
WEIGHT	17 KG (37.5LBS)	
MACHINE SIZE	285 X 320 X 390 mm	
<b>BEVEL ANGLE</b>	0° - 45°	
PIPE CUTTER DIAMETER	ø150 - ø600 mm ( OVER 600 mm BY EXTRA CHAIN )	

PRODUCT CODE	DESCRIPTION	PRICE (RM)
	Manual Pipe Gas Cutter c/w 80pc chain	
	Chain 80pc	



## ACE WELD PIPE CUTTER

## AUTO PIPE CUTTER



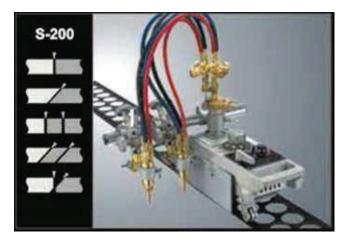
Chain Type	Single link chain
Quick Release Clutch	With
Cutting Speed	50-1150mm/min
Effective Pipe Diameter	150-600mm by standard chain Larger size over 600mm by extra chain
Cutting Thickness	Up to 500mm
Cutting Shape	Square and bevel (up to 45°
Drive Method	Motorized
Main Size (mm)	265 X 420 X 450
Weight (kg)	16



#### ACE WELD PIPE CUTTER

#### HEAVY DUTY STRAIGHT LINE CUTTER - SINGLE/DOUBLE TRACK





#### S-100 For Square or V-Beve

- Single torch unit equipped with a simple holder

- Having no floating function
- Standard pipe arm length: 400m
  - Vertical adjustment up to 65mm

#### S-200 For Square, V, Y, or X-Bevel Cutting:

- Two torch model of S-100
- Standard pipe arm length:600mm
- Balance weight attached.
- Bevel and parallel cutting possible

Model	S-100	S-200
Input Voltage	240V 50Hz	
Cutting Thickness	5-50 mm	
Cutting Speed Range	100-1,000 mm/min	
Cutting Edge Shape	Square Cutting V bevel 45°	
Dimension	310 x 450 x 300mm	
Weight (with track)	27 kg	31 kg



#### **AUTO MAGNETIC PIPE CUTTER**

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#### Feature:

1. Machine body is made of aluminium alloy

2. Compact structures.

3. It uses permanent magnet wheel absorbed on the steel tube to make creeping cutting horizontally, vertically or upwards.

4. This machines takes the advantages of extremely sound cutting circumference and easy operation etc. With groovesto 1. V 45

5. Widely used for the cutting of steel tubes in petroleum and chemical pipeline engineering.

Model	Auto Magnetic Pipe Cuter CG2-11
Voltage	AC 220V / 50HZ
ting Thickness	6~50mm
utting Speed	50~750/mm/min
rall Dimension	350 x 240 x 220 mm
Weight	23.5kg
f Circle Cutting	>108 mm





## ACE WELD SHAPE CUTTER

## SHAPE CUTTER



Model	Shape Cutter CG2-150 (220V)
Voltage	AC 240V
Cutting Thickness	5~100mm
Cutting speed	50~750/mm/min
Max. Straight Line Cutting	1200mm
Max. Diameter Circular Cutting	600mm
Max. Size For Rectangular Cutting	400mm×900mm, 450mm×750mm

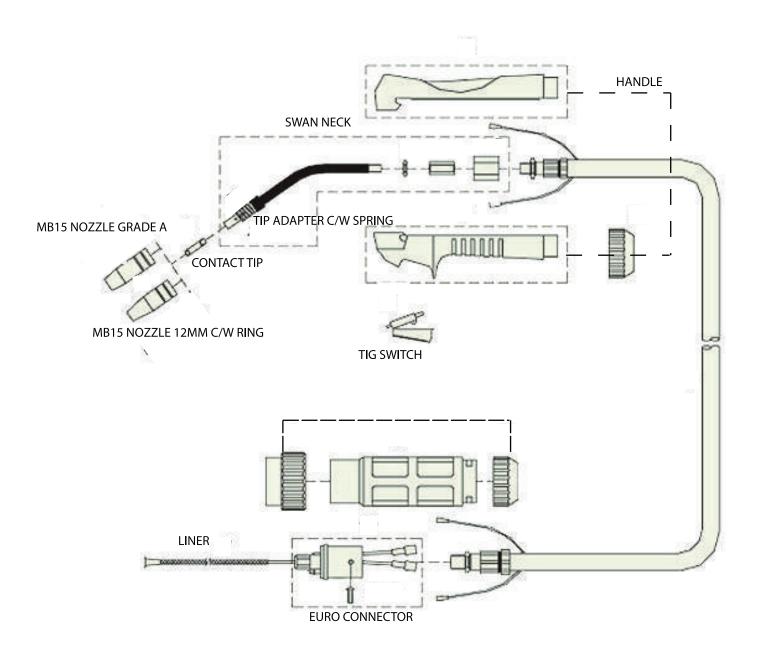


**MB15** 

	MB15 Complete Torch 3/4/5Meter
	MB15 Nozzle Grade A MB15 NOZZLE COPPER W/O CHROME
	CONTACT TIP M6 X 25 X 0.8MM/1.0MM/1.2MM
	MB15 Tip Adapter
	MB15 Swan Neck
	Liner Euro Fitting 3M, 4M, 5M Teflon Liner Japan Fitting Black 4.5M Teflon Liner Euro Fitting Black 4.5M
A SELL FRONT CONTLATOR	MB15 Front Insulator
MESS BACK KINI LATOR	MB15 Back Insulator



#### MB 15 MIG TORCH DIAGRAM



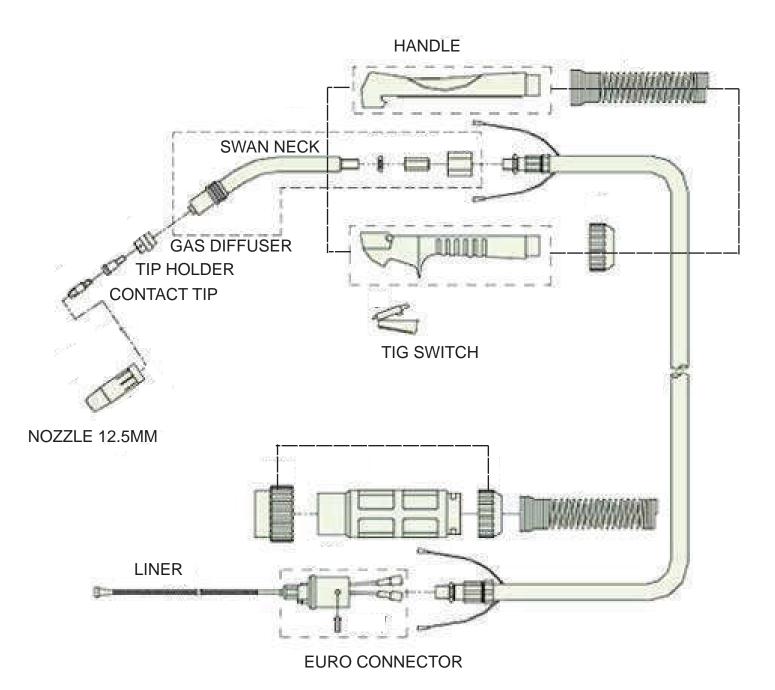


MB24

	MB24 Complete Torch 3/4/5Meter
12.5MM	MB24 Nozzle 12.5MM
<b>666666 1</b> 28MM	Contact Tip M6 X 28 X 0.8MM/1.0MM/1.2MM
	MB24 Tip Adapter
	MB24 Swan Neck
	Gas Diffuser Ceramic Gas Diffuser 'DMC' Gas Diffuser Silicon Rubber
	Liner Euro Fitting 3M, 4M, 5M Teflon Liner JAPAN Fitting BLACK 4.5M Teflon Liner Euro Fitting Black 4.5M



#### MB 24 MIG TORCH DIAGRAM





**MB36** 

	MB36 Complete Torch 3/4/5Meter
	MB36 Nozzle
€ C C C C C C C C C C C C C C C C C C C	Contact Tip M8 X 30 X1.0MM/1.2MM
	MB36 Tip Adapter (M8)
	MB36 Tip Adapter (M6)
	MB36 Swan Neck
	MB36 Ceramic Diffuser
	Liner Euro Fitting 3M, 4M, 5M Teflon Liner Japan Fitting Black 4.5M Teflon Liner Euro Fitting Black 4.5M



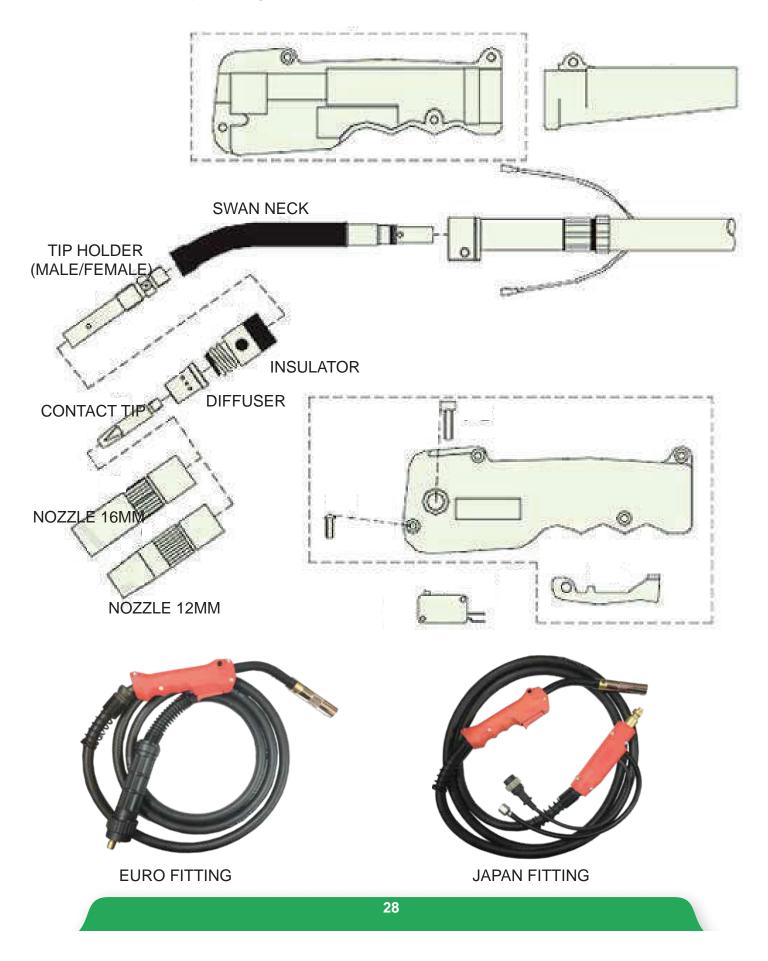
#### PANA TYPE 350A MIG LIST

	Pana 350A Mig Torch 3/4/5 Meter	
16mm	Pana 350A Nozzle 16mm	
	Pana 350A Nozzle 12mm	
45mm	Contact Tip M6X 45 X 0.8/1.0/1.2/1.4/1.6 Contact Tip M6X 45 x 1.2/1.6 CUCRZR Contact Tip M6 X42 X 1.0//1.2	
	Pana 350A Diffuser/ Orifice	
67mm	Pana 350A Tip Adapter Male	
72mm	Pana 350A Tip Adapter Female	
	Pana 350A Swan Neck	
	Pana 350A Insulator c/w ring	
<b>(</b>	Pana 350A/500A Liner Euro Fitting 4M/5M	
	Pana 350A/500A Liner Japan Fitting 3M/ 4M/ 5M	
	Teflon Liner Japan Fitting 4.5M (Black)	
	Teflon Liner Euro Fitting 4.5M (Black)	



### PANA TYPE 350A MIG DIAGRAM

#### Available in Euro & Japan Fitting





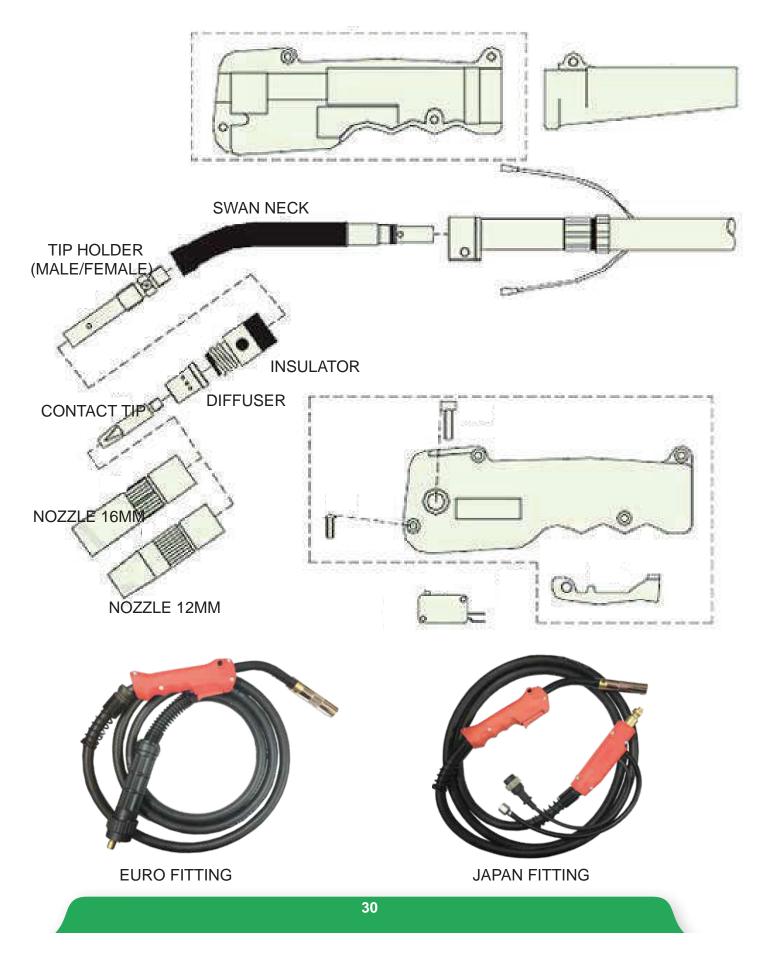
### PANA TYPE 500A MIG LIST

	Pana 500A Mig Torch 3M/4M/5M	
	Pana 500A Nozzle 19MM	
45mm	Pana 500A Contact Tip M6 X 45 X 0.8/1.0/1.2/1.4/1.6 Pana 500A Contact Tip M6 X 45 X 1.2/1.6 CUCRZR	
	Pana 500A Diffuser/ Orifice	
63mm	Pana 500A Tip Adapter (MALE)	
85mm	Pana 500A Tip Adapter (FEMALE)	
	Pana 500A Swan Neck	
	Pana 500A Insulator	
<b>d</b> =======	Pana 350A/500A Liner Euro Fitting 4M/5M	
<b>(</b>	Pana 350A/500A Liner Japan Fitting 3M/ 4M/ 5M	
	Teflon Liner Japan Fitting 4.5M (Black)	
	Teflon Liner Euro Fitting 4.5M (Black)	



### PANA TYPE 500A MIG DIAGRAM

## Available in Euro & Japan Fitting





## EURO CONNECTOR & Mig Red Handle

Euro Connector For Torch End (M10 x 1)
Euro Connector For Machine
Euro Converter From Japan Fitting
Mig Red Handle
Mig Trigger Switch "Red Handle"
Mig Trigger Switch "Yellow Handle"



#### **TIG TORCH & PARTS**

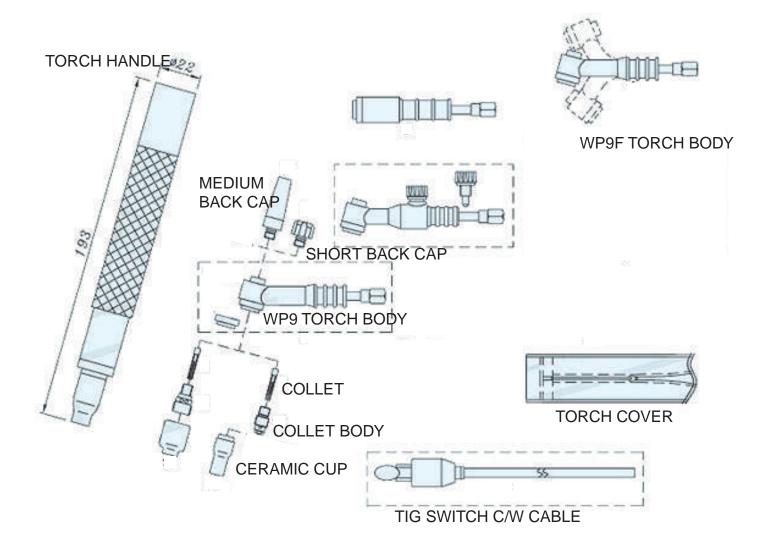
### WP9 Series 125Amps Air Cooled TIG Torches

	NO:	DESCRIPTION	PART NUMBER
	1	WP9 Collet 1.6MM	13N22
		WP9 Collet 2.4MM	13N23
6	2	WP9 Collet Body 1.6MM	12N27
		WP9 Collet Body 2.4MM	13N28
	3	WP9 Ceramic Cup #4	13N08
		WP9 Ceramic Cup #5	13N09
		WP9 Ceramic Cup #6	13N10
		WP9 Ceramic Cup #7	13N11
		WP9 Ceramic Cup #8	13N12
	4	WP9 Short Back Cap	41V33
	5	WP9 Medium Back Cap	41V35
	6	WP9 Torch Body c/w Handle	
	7	WP9P Torch Body c/w Handle	
8	8	WP9V Torch Body c/w Handle	
	9	WP9F Torch Body c/w Handle	
	10	WP9F-2-25 Tig Torch Complete	
	11	WP9-2-25 Tig Torch Complete	
	12	Micro/Tig Switch	
	13	Gas Len Ceramic Cup 53N59#5	53N59
9	14	Gas Len Ceramic Cup 53N60#6	53N60
	15	Gas Len Ceramic Cup 53n61#7	53N61
	16	Gas Len Collet Body 45v44	45V44
3		4	5
2		<b>1</b> 25MM	12



**TIG TORCH & PARTS** 

#### WP9 Series 125Amps Air Cooled TIG Torches





## **TIG TORCH & PARTS**

## WP17 Series 150 Amps Air Cooled TIG Torches



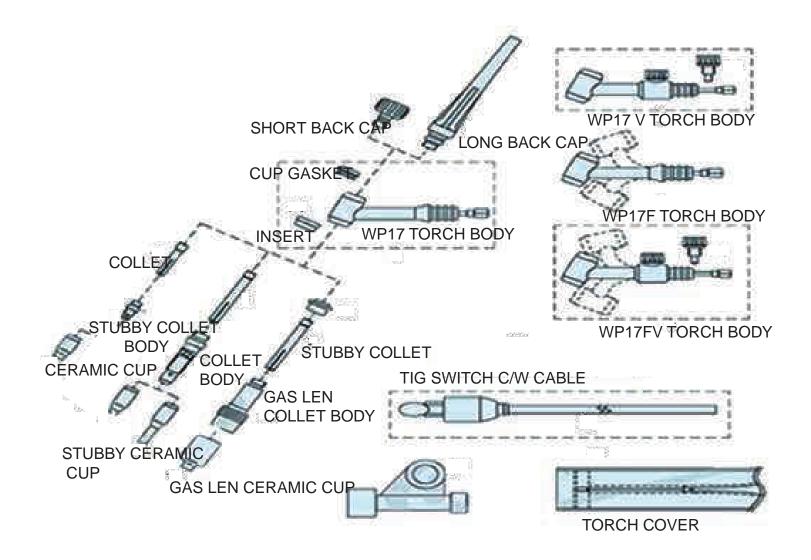


NO:	DESCRIPTION	PART NUMBER
1	WP17 Torch Body C/W Handle	
2	WP17V Torch Body C/W Handle	
	WP17F Torch Body C/W Handle	
	WP17FV Torch Body C/W Handle	
3	WP17V Valve Stem VS-2	
4	WP17 Short Back Cap	57Y04
5	WP17 Long Back Cap	57Y02
5.1	WP17 Medium Back Cap	57Y03
6.1	WP 17 CUP GASKET 18CG	57Y02
6.2	WP17 Insert 18-7	57Y03
7	WP17 Ceramic Cup #4 #5 #6 #7 #8 #10	10N50/ 49/ 48/ 47/ 46/ 45
7.1	Long Ceramic Cup #5 #6	10N49L/ 48L
8	WP17 Collet Body 1.0/1.6/2.4/3.2MM	10N30/ 31/ 32/ 28
9	WP17 Collet 1.0/1.6/2.4/3.2MM	10N22/ 23/ 24/ 25
10	Gas Lens Collet Body 1.6/2.4/3.2MM	45V25/26/27
11	Gas Lens Ceramic Cup #5 #6 #7 #8	54N17/ 16/ 15/ 14
11.1	Long Gas Lens Ceramic Cup #6 #7 #8	54N16L/ 15L/ 14L
12	Stubby Ceramic Cup	13N Series
13	Stubby Collet Body	17CB20
14	Stubby Collet 1.6/ 2.4MM	10N23S/ 24S
15	Micro/ Tig Switch	

DESCRIPTION
WP17-25-2 Tig Torch Complete
WP17-25-R Tig Torch Complete
WP17V-25-2 Tig Torch Complete
WP17V-25-R Tig Torch Complete



WP17 Series 150 Amps Air Cooled TIG Torches Diagram





## **TIG TORCH & PARTS**

### WP26 Series 200 Amps Air Cooled TIG Torches



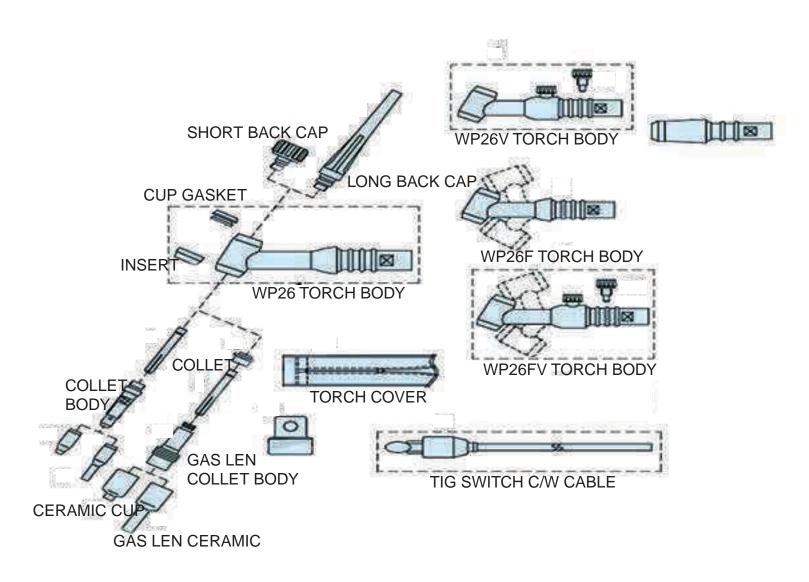




DESCRIPTION	
WP26V-25-2 Tig Torch	
WP26-25-2 Tig Torch	
WP26-25-R Tig Torch	



WP26 Series 200 Amps Air Cooled TIG Torches Diagram





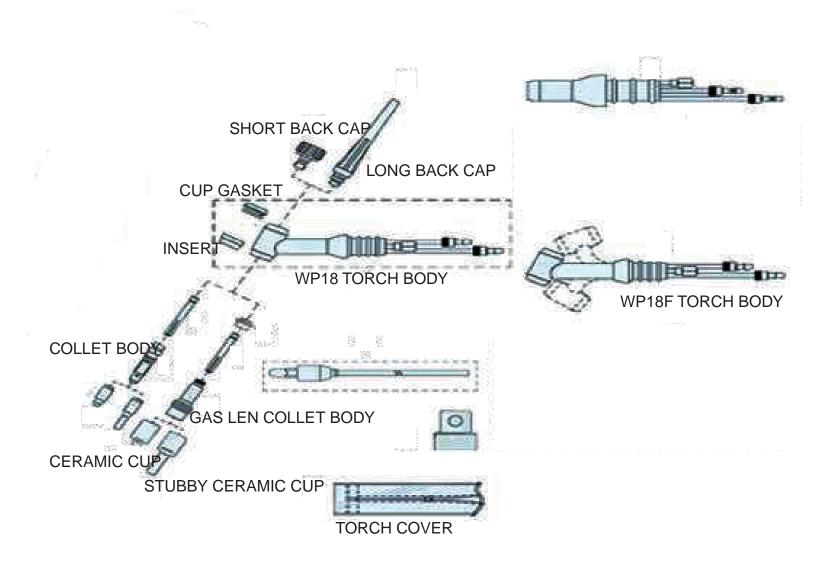
## **TIG TORCH & PARTS**

## WP18 Series 350 Amps Water Cooled TIG Torches





WP18 Series 350 Amps Water Cooled TIG Torches Diagram





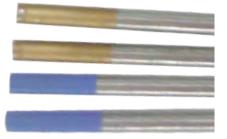
## **TIG TORCH**



\* Torch fitting can modified as per request with additional charges.

















## TUNGSTEN

### 2% Thoriated Red

#### **Description :**

2% Thoriated Tungsten contains a nominal 2 wt-% or thorium oxide (ThO2) that is evenly dispersed throughout the entire length of the Tungsten. The most common type of Tungsten used today. provides excellent resistance from weld pool contamination while at the same time offers the welder easier arc starting capabilities and more stable arc. Generally used for DC electrode negative or straight polarity applications such as carbon & stainless steels, nickel alloys and titanium.

#### 2% Lanthanated Blue / 1.5% Lanthanated Gold

#### **Description :**

2% Lanthanated or "rare earth" Tungsten contains a nominal 2wt-% Lanthanum oxide (LaO3). This type of Tungsten is very similar to ceriated as it too is a non-radioactive material. Lanthanated electrodes operate at a slightly different arc voltage than Thoriated or Ceriated electrodes. Were developed around the same time as Ceriated Tungsten to help combat the increasing awareness of the radioactivity of Thoriated Tungsten. Generally used to weld carbon and stainless steels, nicke alloys and titanium.

#### Pure Tungsten Green

#### **Description :**

Pure Tungsten contains a minimum of 99.5wt-% Tungsten with no other alloying elements. This allows the tip to form a clean, balled end which provides good arc stability on AC. Pure can be used with DC but does not compare with Thoriated or Ceriated as far as ease of arc starting. More susceptible to weld contamination than Thoriated, Ceriated or Lanthanated. Usually the least expensive of all Tungsten. Pure Tungsten is generally used in the welding of aluminum and magnesium alloys (AC).

### 2% Ceriated Grey

#### **Description :**

2% Ceriated Tungsten contains a nominal2wt-% of cerium oxide (CeO2). Ceriated is different from Thoriated as it is not a radioactive material. Ceriated Tungsten also tends to last longer than Thoriated and can be used proficiently with AC or DC. In manual applications the Ceriated Tungsten will provide slightly different electrical characteristics than the Thoriated Tungsten but generally no difference will be seen by the operator. generally used to weld carbon & stainless steel, nickel alloy and titanium.

#### 0.8% Tungsten White

#### **Description :**

**Principal Oxide: 0.7-0.9% Zirconium Oxide .** Non-Radioactive. Best for use in alternating current (a/c) for aluminum alloys and magnesium alloys using inverter or transformer based constant current power sources. Balls well, handles higher

amperage than pure tungsten with less spitting, better arc starts and arc stability than pure tungsten. Non alloy and low alloy steel, stainless steel, titanium allow, mickel alloy, copper alloy, anode and cathode of the thermal spraying special lighy sources, etc.

#### E3 Tugnsten Purple

#### **Description :**

Electrodes with rare earth (mixed oxides). In comparison to thoriated electrode is less harmful to the environment and not radioactive. the elctrodes offer excellent ignition characteristics and consistent welding propertise. They are universal and suitable for all applications in the whole range of DC and AC welding for non-alloyed and high-alloyed steel, aluminum, titanium, nickel, copper and magnesium alloys. Because of their great ignition properties they are also suitable for automated welding. Due to the low electrode temperature, they offer and increased current capacity and loger service life than thoriated electrodes.



## **TIG REPAIRING CATEGORIES**





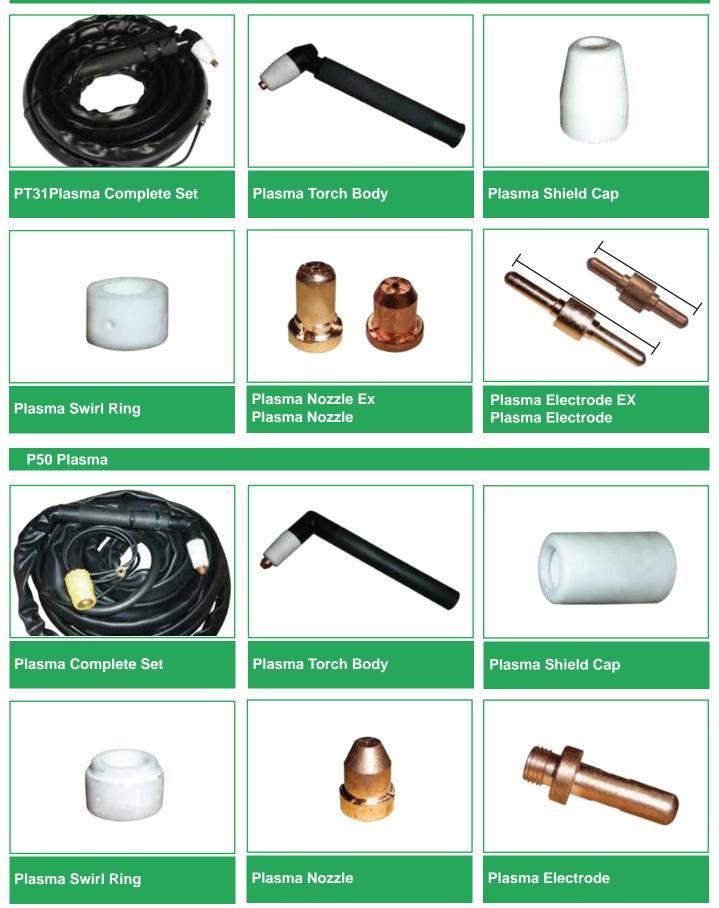
## **TIG TORCH & PARTS**

## CERAMIC CUP / ALUMINA NOZZLE SIZE

PART NUMBER	PRODUCT DESCRIPTION	WHERE USED	SIZE	US	METRIC (MM)	LENGTH
10N50	Nozzle Alumina, #4(1/4")	17,17V,18,18P,18V,26,26P,26V	4	1/4"	6	1-27/32"
10N49	Nozzle Alumina, #5(5/16")	17,17V,18,18P,18V,26,26P,26V	5	5/16*	8	1-27/32"
10N48	Nozzle Alumina, #6(3/8")	17,17V,18,18P,18V,26,26P,26V	6	3/8"	10	1-27/32"
10N47	Nozzle Alumina, #7(7/16")	17,17V,18,18P,18V,26,26P,26V	7	7/16"	11	1-27/32"
10N46	Nozzle Alumina, #8(1/2")	17,17V,18,18P,18V,26,26P,26V	8	1/2"	12.5	1-27/32"
10N45	Nozzle Alumina, #10(5/8")	17,17V,18,18P,18V,26,26P,26V	10	5/8"	16	1-27/32"
10N44	Nozzle Alumina, #12(3/4")	17,17V,18,18P,18V,26,26P,26V	12	3/4"	19	1-27/32"
13N08	Nozzle Alumina, #4(1/4")	9,9V,20,20V,22,23,25,280	4	1/4"	6	1-5/32"
13N09	Nozzle Alumina, #5(5/16")	9,9V,20,20V,22,23,25,280	5	5/16"	8	1-5/32"
13N10	Nozzle Alumina, #6(3/8")	9,9V,20,20V,22,23,25,280	6	3/8"	10	1-5/32"
13N11	Nozzle Alumina, #7(7/16")	9,9V,20,20V,22,23,25,280	7	7/16"	11	1-5/32"
13N12	Nozzle Alumina, #8(1/2")	9,9V,20,20V,22,23,25,280	8	1/2"	12.5	1-5/32"
13N13	Nozzle Alumina, #10(5/8")	9,9V,20,20V,22,23,25,280	10	5/8"	16	1-5/32"
54N18	Nozzle Alumina ,GL, #4(1/4*)	17,17V,18,18SP,18V,26,26P,26V	4	1/4"	6	1-5/8"
54N17	Nozzle Alumina, GL, #5(5/16")	17,17V,18,18SP,18V,26,26P,26V	5	5/16"	8	1-5/8"
54N16	Nozzle Alumina, GL, #6(3/8")	17,17V,18,18SP,18V,26,26P,26V	6	3/8"	10	1-5/8"
54N15	Nozzle Alumina, GL, #7(7/16")	17,17V,18,18SP,18V,26,26P,26V	7	7/16"	11	1-5/8"
54N14	Nozzle Alumina, GL, #8(1/2")	17,17V,18,18SP,18V,26,26P,26V	8	1/2"	12.5	1-5/8"
54N19	Nozzle Alumina, GL, Short, #11(11/16")	17,17V,18,18SP,18V,26,26P,26V	11	11/16"	17	1-5/8"
10N49L	Nozzle Alumina, Long, #5L (5/16*)	17,17V,18,18P,18V,26,26P,26V	5L	5/16"	8	3"
10N48L	Nozzle Alumina, Long, #6L (3/8")	17,17V,18,18P,18V,26,26P,26V	6L	3/8"	10	3"
10N47L	Nozzle Alumina, GL, Long, #7L (7/16")	17,17V,18,18P,18V,26,26P,26V	7L	7/16"	11	3"
54N17L	Nozzle Alumina, GL,Long, #5 (5/16")	17,17V,18,18SP,18V,26, 26V	5	5/16"	8	3"
54N16L	Nozzle Alumina, GL,Long, #6 (3/8")	17,17V,18,18SP,18V,26, 26V	6	3/8"	10	3"
54N15L	Nozzle Alumina, GL, Long, #7 (7/16")	17.17V,18,18SP,18V,26, 26V	7	7/16"	11	3"
54N14L	Nozzle Alumina, GL, Long, #8(1/2")	17,17V,18,18SP,18V,26, 26V	8	1/2"	12.5	3"

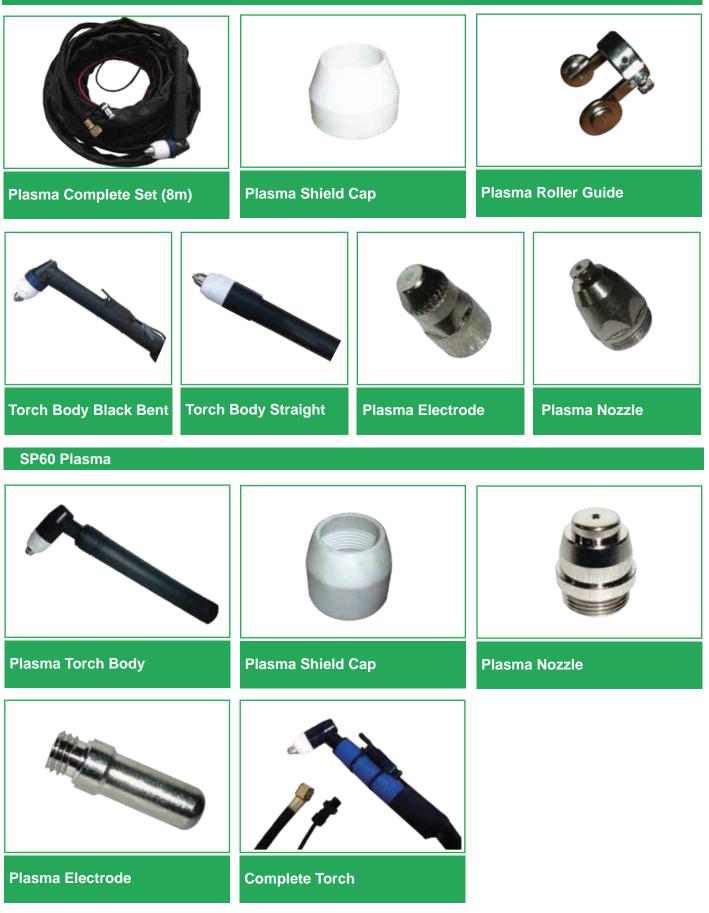


PT31 PLASMA





**P80 PLASMA** 





SG 51 PLASMA	SG 55 PLASMA / AG60
PLASMA SHIELD CAP CERAMIC PLASMA SHIELD CAP BLACK	PLASMA TORCH
PLASMA NOZZLE	PLASMA SHEILD CAP
SWIRL RING	PLASMA NOZZLE TIP-1.0MM



## CHEMICAL

### **ANTI SPATTER GEL**



### **MIG NOZZLE GEL (400G)**

For MIG Torch Nozzles and Contact Tips. Anti-spatter gel provides excellent protection against weld spatter build upon MIG gun nozzles, tips, positioners, stud welding chunks and electrode holders on all semi and automatic welding apparatus.

Dipping of the hot MIG gun nozzle into gel creates a protective anti-spatter coating that eliminate spatter build-up during erratic operation. It will not cause porosity in the subject metal and helps eliminate electrode fusion to the contact tip during burn back conditions.



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### **CHEMICAL**



#### **ANTI SPATTER LIQUID**

Water Based Weld-Spatter Agent

DESCRIPTION

Anti-Spatter liquid is a water based, paintable, cost effective and non-flammable agent for the prevention of weld-spatter adhering to metal surfaces during the welding process.

Anti-Spatter liquid has outstanding performance preventing spatter sticking to a wide range of steels, including mild steel, stainless, steels and aluminium.

Anti-Spatter liquid avoids the need for mechanical abrasion or grinding of weld spatter following welding. It contains corrosion inhibitors for base metal protection. It increases the life of torch components saving time and money. Eliminates spatter build up which results in poor gas flow causing pitting, porosity and burnbacks.

Appearance :	Light red mixes freely with water
Boiling Point (Deg C) :	100°C Specific Gravity : 1.008

#### **BENEFITS**

Reduces downtime for cleanup tasks	Non-toxic, biodegradable
No-flammable	Ozone safe
Uniform spray with no bubbles	Paintable, contains no silicones
User safe	Eliminates need for grinding unwanted spatter
Economical	Base Metal corrosion protection

#### **DIRECTION FOR USE**

#### **Welding Torch**

Spray Anti-Spatter liquid before welding in a thin and uniform film onto the areas to be protected. Hold spray can approximately 30 cm from the surface to be protected. Also use the spray to protect the interior and exterior of nozzles, the end and outer surface of contact tips, and all other potential areas which are subject to weld spatter. It may be advisable to spray diffusers and the base of the nozzle support as well.

#### **Base Metal**

Spray Anti-Spatter liquid hold spray can approximately 30 cm from surface to be protected. Spray a thin uniform coating. Do not over apply solution application may be detrimental to the weld quality.

#### **Application Methods**

Hand held spray applicator for welding torch components and base metal areas. Wiping and mopping may be used for base metal large areas.

#### NOTE

To remove Anti-Spatter liquid after use, clean the surface with Prosol Solvent Degreaser of equivalent steel compatible degreaser.

#### CAUTION

Avoid contact with eyes. Used in a well ventilated area. Avoid prolonged skin contact (>24 hours).



### **CHEMICAL**

#### ANTI-SPATTER & NOZZLE SHIELD

#### Date before use

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### **ANTI-SPATTER NOZZEL & SHIELD**

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#### CAUTION

Avoid contact with eyes. Used in a well ventilated area. Avoid prolonged skin contact (>24 hours).



**FLOOR TYPE ELECTRODE OVEN** designed for re-baking re-conditioning and holding of welding electrode for high quality weld.build in adjustable thermostat controlled with digital temperature display.

## SPECIFICATION

- Drive Off Moisture & Get Better Weld.
- Beware Of Electrode Coating With More Than 20% Moisture, Welding Release
- Hydrogen, Hydrogen Promotes Cracking.
- Stainless Steel Body to Prevent Rust & Iron Contamination.
- Removable Shelving for Multi Usage.
- Build In Isolator for easy on/off.



### Analogue Control with Digital





E200S

#### DESCRIPTION

FLOOR TYPE ELECTRODE OVEN (E200S)

### LIST PRICE

Capacity (Rod Lgth.450mm)

Temperature Range (Average Stabilized)

> Input Voltage AC- 50/60Hz

External Dimension HxDxW

Internal Dimension HxDxW

Body Insulation (Ceramic wool)

Net Weight

210 kgs (estimate)

30° C ~ 400° C 86° F ~ 752° F

1ph, 190 ~ 240 V 2700 W 965 x 635 x 610mm

38"x 25"x 24"

560 x 560 x 510mm 22" x 22" x 20"

50mm / 2"

65 kgs / 143 lbs



**BENCH TYPE ELECTRODE OVEN** designed for re-baking, re-conditioning and holding of welding electrode for high quality weld. With build in temperature gauge & adjustable thermostat control.

## SPECIFICATION

- Drive off Moisture & Get Better Weld.
- Beware of Electrode Coating with more than 20% Moisture, Welding release Hydrogen.
- Hydrogen promotes cracking.
- Tubular twin Heating Element struts on bottom of Oven providing Circular shape heats interior evenly.
- **FULLY STAINLESS STEEL** to Prevent Rust & Iron Contamination.
- Removable Shelving for Multi Usage.
- Adjustable Temperature Control with Pilot light indicates Heat On.
- Build in Temperature Gauge for Temperature Reading.





PRODUCT CODE	DESCRIP	TION	LIST PRICE	
BS151B	BENCH TYPE ELECT	RODE OVEN (BS151B)		
Capacity (Roo	d Lgth.450mm)	150kgs (estimate)		
•	ure Range Stabilized)	120º C ~ 4 (248º F ~ 7		
Input Voltage (Heating Element)		1ph, AC190 ~ 240 V-50/60hz (1800 W)		
External Dimension HxDxW		610 x 735 x 24" x 29" >		
	Dimension DxW	455 x 52 18" x 20		
Body Insulation (Rock wool)		50mm / 2"		
Net V	Veight	37kgs / 8	31 lbs	



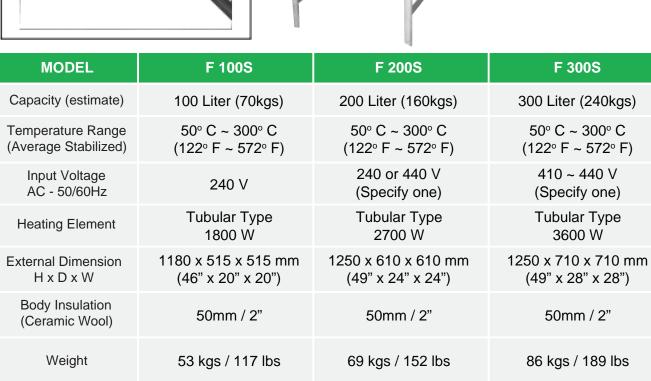
**VERTICAL TYPE FLUX OVEN** designed for re-baking re-conditioning and holding of sebmerged arc flux for high quality weld and assist you in protecting your welding profits.

## SPECIFICATION

- Drive off Moisture & Get Better Weld.
- Secure, Moisture-Proof Storage.
- **STAINLESS STEEL BODY** to Prevent Rust and Iron Contamination.
- Sloped Chamber for Gravity-Flow Dispensability.
- Adjustable Thermostatic Control with Pilot Light and Temperature Gauge for Temperature Setting and Reading.
- Insulated and Vented Hinged Top Cover for Loading Method.









**BENCH TYPE ELECTRODE OVEN** designed for re-baking, re-conditioning and holding of welding electrode for high quality weld.with build in temperature gauge & adjustable thermostat control.

## SPECIFICATION

- Drive off Moisture & get better Weld.
- Beware of Electrode Coating with more than 20% Moisture, Welding release Hydrogen, Hydrogen promotes cracking.
- Tubular twin Heating Element struts on bottom of Oven providing Circular shape heats interior evenly.
- Stainless Steel interior body Prevent Rust and Iron Free.
- Removable shelves for the drying of wire coil & pre-heat / post-heat of welded parts.
- Adjustable Temperature Control with Pilot light indicates Heat On.
- Build in Analog Control with Temperature Gauge or Digital Display.



Stainless Steel Interior	Ĺ	Stainless	Steel	Interior
--------------------------	---	-----------	-------	----------

MODEL	BM 151H	BM151B
Capacity (Rod Lgth.450mm)	155kgs (estimate)	155kgs (estimate)
Temperature Range (Average Stabilized)	50 °C - 300°C (Analog) (122°F - 572°F)	30 °C - 400°C (Digital) (86°F - 752°F)
Input Voltage (Heating Element)	1ph,Ac  190 -240 V - 50/60hz(1800W)	1ph,Ac 190 -240 V - 50/60hz(2700W)
External Dimension	610 x 735 x 570mm (24" X 29"X22.5")	610 x 735 x 570mm (24 " X 29"X22.5")
Internal Dimension dia. x deep	455 x 520mm (18" x 205")	455 x 520mm (18 " x 205")
Body Insulation(Rock wool)	50mm/2"	50mm/2"
Net Weight	41Kgs (90lbs)	41Kgs (90lbs)



**PORTABLE TYPE ELECTRODE OVEN** design for holding of welding electrode for high quality welds with its constant temperature.

## SPECIFICATION

- Drive Off Moisture & Get Better Weld.
- Beware Of Electrode Coating With More Than 20% Moisture, Welding Release
- Hydrogen, Hydrogen Promotes Cracking.
- Mild Steel interior Chamber coated with Heat Resistant paint for minimum heat loss.
- With its build in **Tubular Heating Element** it last longer and reliability than heating wire.







Ac only

PRODUCT CODE	DESCRIPTION	LIST PRICE
A5277000001 P05AC	PORTABLE TYPE ELECTRODE OVEN P 05A	
A5277000002 P10AC	PORTABLE TYPE ELECTRODE OVEN P 10A	
A5277000003 P05DC	PORTABLE TYPE ELECTRODE OVEN P 05D	
A5277000004 P10DC	PORTABLE TYPE ELECTRODE OVEN P 10D	

MODEL	P 05A	P 05D	P 10A	P 10D
Capacity(rod lght 450mm)	5kgs(estimate)	5kgs(estimate)	10kgs(estimate)	10kgs(estimate)
Input Voltage (+-10%)	AC 240V	DC 80V	AC 240V	DC 80V
Temperature (Approx)	150°C	150°C	150°C	150°C
Tubular Heating Element	135 W	115 W	135 W	115 W
Internal Dimension-mm	74 x 74 x 500	74 x 74 x 500	100 x 100 x 500	100 x 100 x 500
External Dimension-mm	145 x 150 x 625	145 x 150 x 625	180 x 180 x 625	180 x 180 x 625
Body Insulation(Rock wool)	25 mm / 1"			
Weight	5.3 kgs / 11.7 lbs	5.3 kgs / 11.7 lbs	6.3 kgs / 13.9 lbs	6.3 kgs / 13.9 lbs





MODEL : ACE WELD 5KG AC/DC ELECTRODE

DRYER AC/DC TYPE AC230V-50HZ DC60V-110V 450MM LENGTH ELECTRODE

### MODEL : ACE WELD 10KG AC/DC ELETRODE DRYER AC/DC TYPE AC230V-50HZ DC60V-110V 450MM LENGTH ELECTRODE

### STANDARD ACCESSORIES



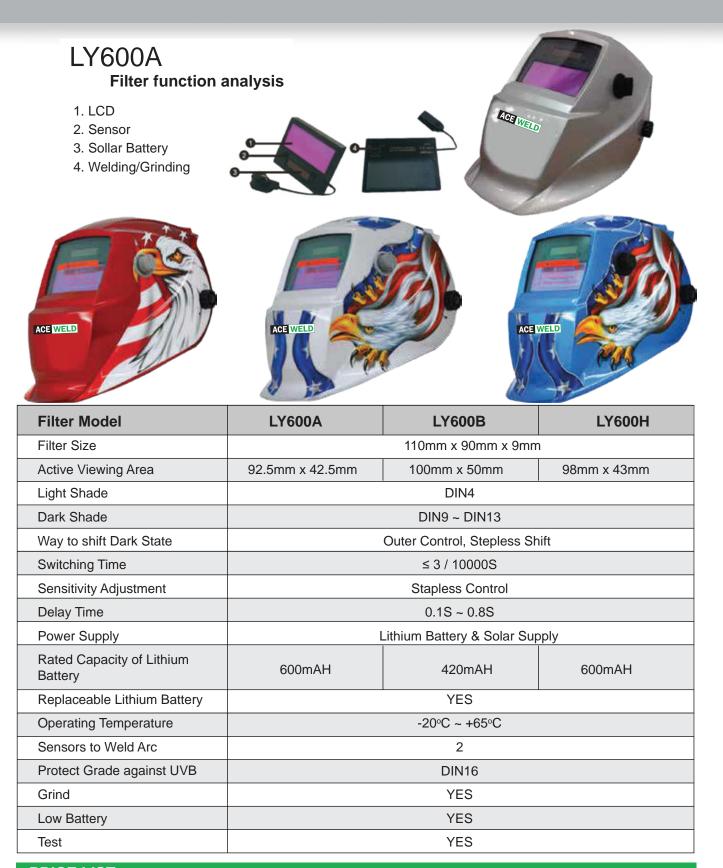
DC CABLE ADAPTOR



AC CABLE ADAPTOR



## **SAFETY & PROTECTION**



PRICE LIST		
PRODUCT CODE	DESCRIPTION	PRICE (RM)
A8200701001	SOLAR HELMET BLUE EAGLE	
A8200701002	SOLAR HELMET RED EAGLE	
A8200701003	SOLAR HELMET SILVER EAGLE	
A8200701004	SOLAR HELMET SILVER	



## **SAFETY & PROTECTION**





## **SAFETY & PROTECTION**

## SAFETY GLOVE



## Argon TIG Glove



## Welding Leather Hand Glove 13"





## ACE WELD CONSUMABLES

Ace Weld DC gouging carbons are suitable for boring, cutting, removing of defects in welds and casts and fushing excess metal of the weld.

### FEATURES

- Designed especially for the air cabon arc metal removal process, which melts metal with an electric arc, then blows it away with a jet of ordinary shop compressed air
- Contain a precisely formulated blend of carbon and graphite that produces the most efficient metal removal performance
- Excellent arc stability, superior metal<sub>removal</sub> rates, resistance to breakage, heat and oxidation, uniform diameter and clean slag free grooves



Carbon DC.	Delinted	
Garoon DC.	Pointeo	

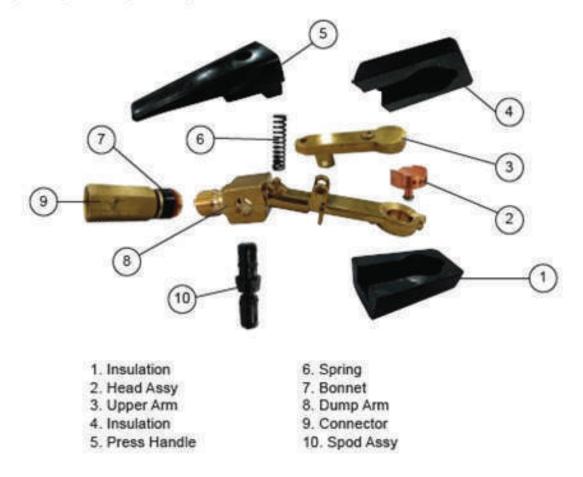
For general purpose grooving, cutting, weiging inspection and removing over-weiged parts					
PRODUCT CODE	DESCRIPTION	PRICE (RM)			
A5226074012	4.0mm x 305mm				
A5226075012	5.0mm x 305mm				
A5226076412	6.4mm x 305mm				
A5226078012	8.0mm x 305mm				
A5226079512	9.5mm x 305mm				
A5226071112	11.0mm x 305mm				
A5226071312	13.0mm x 305mm				
A5226040001	K4 Gouging Torch 2MTR				
A5226040002	K3 Gouging Torch 2MTR				



## Angle-Arc K4000 Gouging Torch

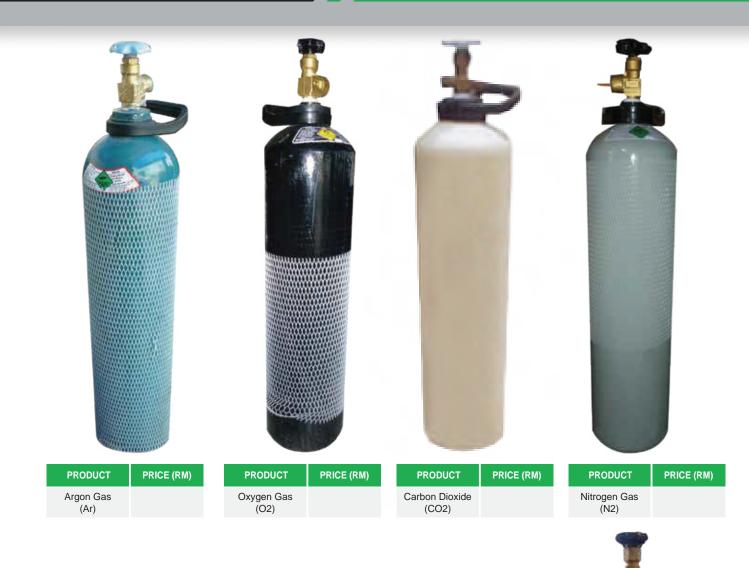


Heavy duty1000 amp(max) torch accepts 5/32"in (4.0mm) to 1/2"in (12.7mm) round electrod 3/8" (9.5mm) & 5/8"in (15.9mm) flat electrodes





## PORTABLE GAS CYLINDER



10L Seamless Steel Cylinder c/w Handle					
Cylinder Type	For O2, N2, Ar & CO2 Service	For DA Service c/w Porous Mass			
Standard	ISO9809	ISO9809			
Water Capacity	10L	10L			
Nominal Outside Diameter	159mm	159mm			
Wall Thickness	4.7mm	4.7mm			
Nominal Height	680mm	680mm			
Nominal Weight	14.3kg	14.3kg			
Work Pressure	150bar	150bar			
Test Pressure	250bar	250bar			
Material	37Mn	37Mn			





## PORTABLE GAS CYLINDER

## AW OXY – ACETY CUTTING SETS

- 10LITRE ACETYLENE CYLINDER
- 10LITRE OXYEN CYLINER
- AW ACETYLENE REGULATOR
- AW OXYGEN REGULATOR
- TWIN HOSE 10MTR
- AW CUTTING TORCH NM250(HEAVY DUTY)
- DOUBLE TWIN TROLLEY SMALL
- AW FLASHBACK ARRESTOR ACETYLENE FOR REGULATOR
- AW FLASHBACK ARRESTOR OXYGEN FOR REGULATOR

## Portable Two Wheel Cylinder Trolley

- PORTABLE TWO-WHEEL CYLINDER TROLLEY ARE FITTED 6" SOLID RUBBER WHEELS TO ACCOMMODATE A 1.4M3 OXYGEN CYLINDER/1.5M3 ACETYLENE CYLINDER AND IS PORTABLE YET STABLE.

## Industrial Two Wheel Cylinder Trolley

- INDUSTRIAL TWO WHEEL CYLINDER TROLLEY ARE FITTED WITH 8" SOLID RUBBER WHEELS TO ACCOMMODATE A 10.7M3 OXYGEN CYLINDER/ 6.3M3 ACETYLENE CYLINDER. STRONGLY WELDED AND A HIGHLY RECOMMENDED FOR ROUGH FLOOR, MEDIUM AND LARGE SHOP GARAGES.





## **IS168**

Affordable, Portable, Reliable, Stable



# Single MMA 1 PHASE 50 Hz DC

## **Functions & Features**

- 1. Auto Hot Start, Anti-stick, Arc Force
- 2. Intelligent Protection For Over-loading And Over-heating;
- 3. Micro Size, About 6500pcs/40HQ, 2600pcs/20GP.

Model	Input V oltage/Phase/Fr equency	Output Curr ent/V oltage/Duty Cycle (40°C)	Amps Input A t Rated Output	Output Range/ OCV	Dimension (mm)	Weight (kg)
IS168	240V/IP/50-60HZ	140	30A	20-160	230*100*150	2.8kg

## **ARC3000** Premium

Affordable, Portable, Reliable, Stable



Model	Input V oltage/Phase/Fr equency	Output Curr ent/V oltage/Duty Cycle (40°C)	Amps Input A t Rated Output	Output Range/ OCV	Dimension (mm)	Weight (kg)
ARC3000 PREMIUM	240V/1P/50-60HZ	200	28.6A	10-300	400*155*275	11.8kg



## **MMA200E**

Economical, Excellent, Affordable, Portable, Extremely Small Package



## ARC200GE II

Excellent, Professional, Reliable and Rugged



- Built- in M icroprocessor.
- Use the latest high grade IGBT inverter technology.
- Widerangeinputvoltage: 1P 220V±15%.
- Can b e u sed with m atching g enerator.
- VRD adjustable by press the stand\_by button for about 5 S.
- Anti-sticking, Arc force and Hot start function built-in, providing excellent experience in welding.
- Fan as needed function, reduces noise and dust inside the machine.
- Non-stop welding for 2.5mm and 3.2mm diameter electrode.
- Intelligent protection for over-loading, over-voltage and over-heating.
- Widely used in acid and basic electrode welding.
- Compact and p ortable (3.4Kg) with adjustable shoulder strap and h andle.
- Suitable for maintenance, installation, etc. indoor and outdoor requirements.

Model	Inputvoltage/Phase/Frequency	Outputcurrent/Voltage/Dutycycle	AmpsInputatRatedOutput	Outputrange/OCV	Dimension	Weight
ARC 200GE II	220V/1P/50-60HZ	140A/25.6V/20% 63A/22.5V/100%	25.5A@140A	40-140A/58V/17V(VRD)	290×123×216	3.4kg





## **Classic ARC250GE**

Excellent, Professional, Reliable and Rugged





#### **Features description**

- Use 100 KHz inverter COOL- MOSFET technology.
- With plastic corner, sloping front panel.
- Adopt new techniques that maximizing thermal dissipation with 4 separated heat sinks.
- Greatly improved the welding performance and stability; easy striking under low voltage.
- Intelligent protection: over-voltage, over-loading and over-heating.
- Auto-Adaptive arc force and hot start current.
- Anti-stick function built-in.
- Energy-efficient: power factor more than 0.7, efficiency more than 85%.
- Generator set okay.

Model	Inputvoltage/Phase/Frequency	Outputcurrent/Voltage/Dutycycle	Amps Input at Rated O utput	Outputrange/OCV	Dimension	Weight	
ARC250GE	220V/1P/50-60HZ	200A/28V/20%@40℃ 150A/26V/100%@40℃	42.8A@200A	30-200A/60V	402×1 60× 300	6.5kg	

## **NEW ARC200T**

Excellent, Professional, Reliable and Rugged



|--|



## **Classic ARC200CT**

Excellent, Professional, Reliable and Rugged





#### **Features description**

- Use 100 KHz inverter COOL-MOSFET technology.
- With plastic corner, sloping front panel.
- Adopt new techniques that maximizing thermal dissipation with 4 separated heat sinks.
- Greatly improved the welding performance and stability; easy striking under low voltage.
- Intelligent protection: over-voltage, over-loading and overheating.
- Auto-Adaptive arc force and hot start current.
- Anti-stick function built-in.
- Energy-efficient: power factor more than 0.7, efficiency more than 85%.
- · Generator set okay.

Model	Inputvoltage/Phase/Frequency	Outputcurrent/Voltage/Dutycycle	AmpsInputatRatedOutput	Outputrange/OCV	Dimension	Weight
ARC200CT	220V/1P/50-60HZ	170A/26.8V/20%@40℃ 120A/24.8V/100%@40℃	34.8A@170A	30-170A/60V	402×1 60×300	6.2kg

## **Classic ARC250CT**

220V/1P/50-60HZ

ARC250CT

Excellent, Professional, Reliable and Rugged



66

42.8A@200A

30-200A/60V

6.5kg

402×1 60×300

200A/28V/20%@40°C

150A/26V/100%@40°C



## ARC251C

Excellent, Professional, Reliable and Rugged





### **Features description**

- New technology to maximizing thermal dissipation with 4 separated heat sinks.
- VRD adjustable.
- Arc force adjustable.
- Self-adaptive Hot start built-in, Anti-sticking.
- Recommend for 4.0mm and 5.0mm electrode.
- Suitable for acid electrode, basic electrode and cellulosic electrode.

Model	Input Voltage/Phase/Frequency	Output Current/Voltage/Duty Cycle ( 40°C )	Amps Input At Rated Output	Output Range/ OCV	Dimension ( mm )	Weight ( kg )
ARC 251C	220V/1P/50-60Hz	230A/29.2V/30% 160A/26.4V/100%	47A@230A	30-230A/65V/15V(VRD)	472*203*357	8.5

## **ARC315C**

Powerful Output Current of 230A At Single Phase.



MOSFET DC/ 1 LE

- New technology to maximizing thermal dissipation with 4 separated heat sinks.
- VRD adjustable.
- Arc force adjustable.
- Self-adaptive Hot start built-in, Anti-sticking.
- Recommend for 4.0mm and 5.0mm electrode.
- Suitable for acid electrode, basic electrode and cellulosic electrode.

Model	Input Voltage/Phase/Frequency	Output Current/Voltage/Duty Cycle ( 40°C )	Amps Input At Rated 0utput	Output Range/ OCV	Dimension ( mm )	Weight ( kg )
ARC 315C	415V/3P/50-60Hz	270A/30.8V/20% 170A/26.8V/100%	16.8A@270A	40-270A/63V	472*203*357	12.5



## **Heavy Industrial MMA400G**

Dependable, Economical, Excellent, Basic Industrial Stick Welding





#### **Features description**

- IGBT technology, the core adopts advanced IGBT inverter device.
- Wide range for input voltage:380V±15%.
- Digital meter to preset and display welding current.
- Dust-Free Cooling System can Upgraded Duty Cycle.
- Arc force and Hot start adjustable, easy to strike the arc.
- VRD function, it is safe for welders.
- Remote control function (optional), enlarge your welding Area, easy to operate.
- Energy Saving More efficient compared with the traditional SCR machine.

Model	Inputvoltage/Phase/Frequency	Outputcurrent/Voltage/Dutycycle	AmpsInputatRatedOutput	Outputrange/OCV Dimension	Weight
MMA400G	415V/3P/50-60HZ	400A/36V/40%@40℃ 315A/32.6V/100%@40℃	27.6A@400A	40-400A/68V/15V(VRD) 485×234×425(m	n) 22kg

## **MMA500G**

The Priority Selection for Industry.





- VRD adjustable.
- Arc force adjustable.
- Hot start adjustable.
- Recommend for 5.0mm electrode.
- Suitable for acid electrode, basic electrode and cellulosic electrode.
- Tri-proof air duct design.

Model	Input V oltage/Phase/Fr equency	Output Curr ent/V oltage/Duty Cycle (40°C)	Amps Input A t Rated 0utput	Output Range/ OCV	Dimension (mm)	Weight (kg)
MMA 500G	415V/3P/50-60Hz	480A/39.2V/40% 304A/32.2V/100%	36.2A@480A	40-480A/68V	515*262*468	26



## ARC400IT

Reliable, Rugged, Heavy Duty Industrial Professional Choice





- Whatever 3.2mm, 4.0mm or 5.0mm diameter electrode, can be used casually.
- Hot start current adjustable, can fast ignite arc
- Arc force current adjustable, can effectively solve the small current sticky electrode.
- Equip with current and voltage meter, convenient for welding parameter monitoring.
- The standard with remote control socket, make it easy to adjust the welding current at long-distance.
- Wide range for input voltage (320-440V). Suitable for generator set.
- 200 meters and 35 square output cable; 4.0mm elctrode can be 24 hours without interruption

Model	Inputvoltage/Phase/Frequency	Outputcurrent/Voltage/Dutycycle	AmpsInputatRatedOutput	Outputrange/OCV	Dimension	Weight
ARC400IT	415V/3P/50-60HZ	400A/36V/60%@40°C	28.6A@400A	40-400A/62V/20V(VRD)	480×234×425(mm)	22kg





### MIG251GE

Economical, Compact, Efficient, Gas and Gasless Welder





MIC	G200CT					
			<ul> <li>New 4 sep</li> <li>Curre</li> <li>Wire</li> <li>Polar</li> </ul>	DC/ Construction technology to maximizing the parated heat sinks. ent, voltage and inductance and diameter selectable. rity change. patible with 1kg(100mm) and al.	djustable.	
Model	Input V oltage/Phase/Fr equency	Output Curr ent/V oltage/Duty Cycle (40°C)	Amps Input A t Rated 0utput	Output Range/ OCV	Dimension (mm)	Weight (kg)
MIG 200CT	220V/1P/50-60Hz	MIG: 200A/24V/25% 130A/20.5V/100% MMA: 180A/27.2V/30% 110A/24.4V/100%	MIG: 36.5A@200A MMA: 36@180A	MIG: 40-200A/59V MMA: 20-180A/59V	467*203*476	14

# **MIG251**

Compact, Portable, Professional, Excellent



### Features description

- Use 100KHz inverter MOSFET technology.
- Additional wire diameter selection of 0.8/1.0. Available to weld 0.8 and 1.0 wire by MIG251.
- Wire inching button near the wire feeder. Help you to push the wire quickly form wire feeder to MIG torch contact tip.
- Wide input voltage adaptive.Normal work under 187V 253V.
- Polarity change function inside, weld with no gas protection in this function by using flux-cored self-shield wire.
- 1KG/5KG/15KG spool adaptive, enrich the choice of different spool.
- Intelligent protection: over-heating, over-current, over-voltage protection, convoy for the welder to keep power.

Modle	Input Voltage/Phase/Frequency	Output Current/Voltage /Duty Cycle	Amps Input at Rated Output	Output Range/OCV	Dimension	Weight
MIG 251	220V/1P/50-60Hz	MIG: 220A/25V/30% 120A/20V/100% MMA:180A/27.2V/30% 100A/24V/100%	MIG: 40A@220A MMA: 35.6A@180A	MIG: 40-220A/45V MMA: 20-180A/45V	475*200*447	12.5 KG



### Power MIG271GW

Economical, Excellent, Flexible, Professional



# **Power MIG250GS**

Excellent, Dependable, Professional, Flexible, Simple and Rugged





### **Power MIG300GS**

Integrated, Efficient, Premium Welding Solution



# **Power MIG350GF**

Economical, Excellent, Flexible, Professional



Model	Inputvoltage/Phase/Frequency	Outputcurrent/Voltage/Dutycycle	AmpsInputatRatedOutput	Outputrange/OCV	Dimension	Weight
MIG350GF	415V/3P/50-60HZ	M IG: 350A/31.5V/35% @ 40℃ 2 50A/26.5V/100% @ 40℃ M M A:350A/34V/30% @ 40℃ 2 50/30V/100% @ 40℃	25.8A@350A	60-350A/61V	515×262×468(mm)	30kg



### Power MIG500GF

Economical, Excellent, Flexible, Professional





### 50 60<sup>Hz</sup>

#### **Features description**

- IGBT technology, the core adopts advanced IGBT inverter device.
- Infinite Voltage Control with optimized starting performance.
- Inductance Control for arc stability and spatter control.
- Digital Meters Voltage and Amperage; Preview and Hold capability.
- $\bullet$  Wire size and type selection,Help you match the welding parameters quickly.
- Dust-Free cooling system, Enhance higher Duty Cycle.
- Trigger Control 4T (Latch) eliminates operator fatigue.
- Overload Protection Shuts down the power source to protect the internal electrical components from overheating.

Model	Inputvoltage/Phase/Frequency	Outputcurrent/Voltage/Dutycycle	AmpsInputatRatedOutput	Outputrange/OCV	Dimension	Weight
MIG500GF	415V/3P/50-60HZ	MIG: 450A/36.5V/40% @40°C 3 55A/31.7V/100% @40°C M M A:450A/38V/40% @40°C 3 55A/34.2V/100% @40°C	31.8A@450A	60-450A/61V	515×262×468(mm)	30kg

# **Rugged MIG500I**

Powerful, Reliable, Rugged, Industrial DC MIG Welder





#### **TIG SERIES**

### TIG200SE

**Devoted In Welding Stainless Steel** 





#### **Functions & Features**

- New technology to maximizing thermal dissipation with 4 separated heat sinks.
- Post-gas adjustable.
- The success rate of arc striking is up to more than 99%.



Model	Input Voltage/Phase/Frequency	Output Current/Voltage/Duty Cycle ( 40°C )	Amps Input At Rated 0utput	Output Range/ OCV	Dimension ( mm )	Weight ( kg )
TIG 200 E	220V/1P/50-60Hz	190A/17.6V/30% 160A/16.4V/100%	26A@190A	10-190A/45V	402*160*300	6.5

## TIG250CE

**Devoted In Welding Stainless Steel** 





#### **Functions & Features**

- New technology to maximizing thermal dissipation with 4 separated heat sinks.
- Post-gas adjustable.
- The success rate of arc striking is up to more than 99%.



Model	Input Voltage/Phase/Frequency	Output Current/Voltage/Duty Cycle ( 40℃ )	Amps Input At Rated 0utput	Output Range/ OCV	Dimension ( mm )	Weight ( kg )
TIG 250CE	220V/1P/50-60Hz	220A/18.8V/25% 170A/16.8V/100%	31.5A@220A	10-220A/45V	402*160*300	6.5



#### **TIG SERIES**

### TIG250CT



#### **Functions & Features**

- New generation of MOSFET inverter welding machine.
- Dual function: HF-TIG and MMA.
- The whole machine is stable and reliable.
- Wide range for input voltage.
- With 100% success ignition rate.
- The post time of gas adjustable (0.5-10s).
- No fake on the output current of machine.
- Excellent welding performance for thin sheet metal.
- Very low cost of use.

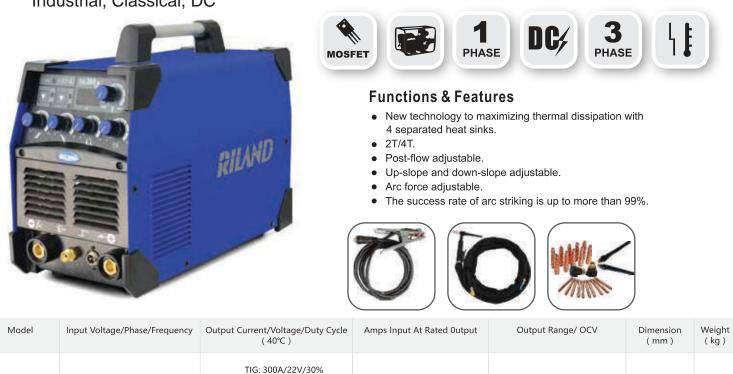
Modle	Input Voltage/Phase/Frequency	Output Current/Voltage /Duty Cycle	Amps Input at Rated Output	Output Range/OCV	Dimension	Weight
TIG 250CT	1 220V(+15%)/1P/50-60H7	MMA:190A/27.6V/30% @40℃ TIG:230A/19.2V/30% @40℃	MMA:40.8A@ 190A TIG:34.4A@ 230A	10-190A/65V(MMA) 10-230A/65V(TIG)	402×160×300(mm)	7.5KG

# **TIG300A**

TIG 300A

Industrial, Classical, DC

220V/1P/50-60Hz



TIG: 52A@300A

MMA: 49A@230A

TIG: 10-300A/15V

MMA: 20-230A/60V

472\*203\*357

12.5

164A/16.5V/100%

MMA: 230A/29.2V/30% 125A/25V/100%



### **New TIG200PAC/DC**

Excellent, Precise, Professional, Reliable and Rugged





Model	Input Voltage/Phase/Frequency	Output Current/Voltage/Duty Cycle	Amps Input At Rated Output	Output Range/ OCV	Dimension (mm)	Weight (kg)
TIG 250PAC/DC	220V/1P/50-60Hz	TIG: 210A/18.4V/30%@40°C 150A/16V/100%@40°C MMA: 160A/26.4V/30%@40°C 120A/24.8V/100%@40°C	TIG: 36.5A@210A MMA: 35.4A@160A	TIG: 10-210A/96V(AC)/68V(DC) MMA: 10-160A/60V	476*340*402	20



MULAND TIG 315 BP AC

# Pulse TIG315BPAC/DC

Multi-Process, Precision, Premium Welding Solution

RILIND



- Advanced inverter technology delivers superior TIG performance.
- Untouch Start DC TIG operation allows you to strike the arc easily with high frequency, and makes it easy to establish an arc under a variety of conditions.
- Pulse Width, Pulse Frequency, AC Blance, Up Slope and Down Slope Function Adjustable.
- Automatic Hot Start boosts the current during the beginning of making an arc striking easier.
- 2T/4T and Repeat Function Selectable on the front panel.
- Remote Control Function Ready! Remotely control your current level with a foot controllor.
- Auto-Protection against over-voltage,over-current and over-heated.
   Energy Saving More efficient compared with the traditional TIG machine.

Model	Inputvoltage/Phase/Frequency	Output current/Voltage/Duty cycle	Amps Input at Rated Output	Outputrange/OCV	Dimension	Weight
TIG315BPAC/DC	415V/3P/50-60HZ	TIG: 315A/22.6V/60%@25℃ 245A/19.8V/100%@25℃ M M A:250A/30V/60%@25℃ 195A/27.8V/100%@25℃	15A@315A(TIG) 14A@250A(MMA)	10-315A/ 56V(TIG) 30-250A/ 56V(MMA)	616×326×620(mm)	39kg

# **New TIG400PAC/DC Digital**

Excellent, Precise, Professional, Reliable and Rugged



Modle	Input Voltage/Phase/Frequency	Output Current/Voltage /Duty Cycle	Amps Input at Rated Output	Output Range/OCV	Dimension	Weight
TIG 400PAC/DC	380V/3P/50-60Hz	TIG: 400A/26V/40% 253A/20.1V/100% MMA: 310A/32.4V/60% 240A/29.6V/100%	TIG: 20.8A@400A MMA: 20.1A@310A	TIG: 12-400A/60V MMA: 30-310A-60V	670*320*640	40kg



#### **TIG SERIES**

### **Precision DC TIG400GT**

Excellent, Professional, Reliable, Rugged, Basic Industrial TIG Welding





#### **Functions & Features**

- Advanced IGBT inverter technology delivers superior TIG performance.
- Dual welding process: HF TIG and MMA.
- 2T/4T function selectable, which is convenient for welder.
- Untouch start DC TIG operation allows you to strike the arc easily with high frequency, and makes it easy to establish an arc under a variety of conditions.
- Arc force, up slope and down slope function adjustable.
- Pass the high voltage 375V AC dielectric strength test bringing you reliable quality.
- Energy-efficient: power factor more than 0.9, efficiency more than 80%.
- Intelligent protection: preventsover-voltage, over-loading and over-heating, low-voltage protection.
- Energy Saving More efficient compared with the traditional TIG machine.

Model	Inputvoltage/Phase/Frequency	Output current/Voltage/Duty cycle	Amps Input at Rated Output	Outputrange/OCV	Dim en sio n	Weight
TIG400GT	415V/3P/50-60HZ	TIG: 400A/26V/40%@40°C 310A/22.4V/100%@40°C MMA:380A/35.2V/40%@40°C 253A/30.1V/100%@40°C	22A@400A(TIG) 26.6A@380A(MMA)	10-380A/60V(TIG) 30-320A/60V(MMA )	508×244×423(mm)	25kg



#### **CUT SERIES**

## CUT40CT



#### **Functions & Features**

- New generation of MOSFET inverter plasma cutting machine.
- The post time of gas adjustable (5-20s).
- With 100% success ignition rate, quality narrow cutting and excellent travel speed.
- Recommended thickness(Carbon Steel):10mm.
- More compact and portable.
- The Most Cost-effective

Modle	Input Voltage/Phase/Frequency	Output Current/Voltage /Duty Cycle	Amps Input at Rated Output	Output Range/OCV	Dimension	Weight
CUT 40CT	220V(±15%)/1P/50-60Hz	40A/92V/30% @40℃	28.6A@ 40A	15-40A/300V	402×160×300(mm)	7KG

# CUT60CT

The Priority Selection For General Industrial Demand



# MOSFET DC/ 1 HASE

#### **Functions & Features**

- New technology to maximizing thermal dissipation with 4 separated heat sinks.
- Quality cut up to 10mm thickness carbon steel, max cut up to 16mm thickness carbon steel.
- Post-flow adjustable.
- Easy arc ignition with high frequency.
- Smooth and neat cutting surface.

Model	Input Voltage/Phase/Frequency	Output Current/Voltage/Duty Cycle (40℃)	Amps Input At Rated 0utput	Output Range/ OCV	Dimension ( mm )	Weight (kg)
CUT 60CT	220V/1P/50-60Hz	60A/104V/40% 40A/96V/100%	40.9A@60A	20-60A/300V	472*203*357	14



#### **CUT SERIES**

# CUT60C

The Priority Selection For General Industrial Demand





#### **Functions & Features**

- New technology to maximizing thermal dissipation with 4 separated heat sinks.
- Flash cutting for 10mm thickness carbon steel, recommend for 16mm thickness carbon steel.
- Post-gas adjustable.
- Easy arc ignition with high frequency.
- Smooth and neat cutting surface.
- Tri-proof air duct design.

Model	Input Voltage/Phase/Frequency	Output Current/Voltage/Duty Cycle (40°C)	Amps Input At Rated Output	Output Range/ OCV	Dimension (mm)	Weight (kg)
CUT 60C	415V/3P/50-60Hz	60A/104V/40% 40A/96V/100%	13.7A@60A	20-60A/300V	472*203*357	14

# CUT80GT

CNC Leads To Technological Innovation



Model	Input Voltage/Phase/Frequency	Output Current/Voltage/Duty Cycle (40°C)	Amps Input At Rated 0utput	Output Range/ OCV	Dimension (mm)	Weight (kg)
CUT 80GT	415V/3P/50-60Hz	80A/112V/40% 46A/98.4V/100%	17.6A@80A	20-80A/300V	508*244*423	21.7



# CUT100GT

CNC Leads To Technological Innovation



# **Bardiche CUT125I**

Focused, Heavy Duty, Industrial, Professional Excellect, Reliable



Model	Input Voltage/Phase/Frequency	Output Current/Voltage/Duty Cycle (40°C)	Amps Input At Rated 0utput	Output Range/ OCV	Dimension (mm)	Weight (kg)
CUT 1251	380V/3P/50-60Hz	120A/128V/60% 100A/120V/100%	32A@120A	30-120A/295V	550*280*545	34kg



### **CUT SERIES**

# **Bardiche CUT165I**

Focused, Heavy Duty, Industrial, Professional Excellect, Reliable





#### Functions & Features

- The advanced IGBT module inverter technology.Industrial assistor for cutting middle thickness steel with stable
- performance.Digital display of cutting current on the panel.
- Digital display of cutting current on the parel.
   Current and post-gas time adjustable, extend the life of consumable parts.
- Plasma gouging and cutting function selectable.
- 2T/4T function, abundant modes to service various cutting demands.
- Standard signal output socket for CNC on the back panel.
- Gas check; make sure the air flow fluently before working.
- Intelligent protection: over-heating, over-current, over-voltage protection, convoy for the welder to keep power.

Model	Input Voltage/Phase/Frequency	Output Current/Voltage/Duty Cycle (40°C)	Amps Input At Rated Output	Output Range/ OCV	Dimension (mm)	Weight (kg)
CUT 1651	380V/3P/50-60Hz	160A/144V/60% 125A/130V/100%	49A@160A	40-160A/370V	670*320*640	45kg



### **B<sup>®</sup> Paintstik<sup>®</sup>**

As Markal's most versatile and economic marker, the original B Paintstik solid paint marker combines the durability of paint with the convenience of crayons. The real paint formula has superior marking performance on oily, icy, wet, dry or cold surfaces and is weather and UV-resistant. This Paintstik works on rough, rusty, smooth, or dirty surfaces.

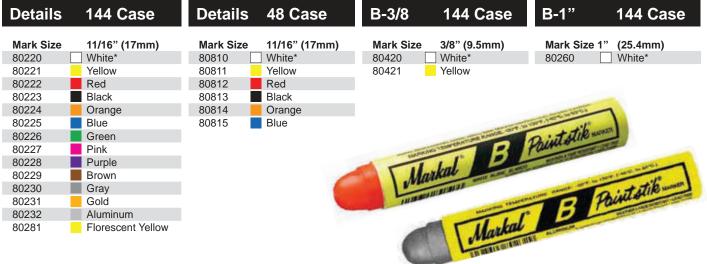
#### Features & Benefits

- · Real paint for long-lasting, highly visible marks
- Superior marking on rough, rusty, or dirty surfaces
- · Solid paint market eliminates replacement tips, sharpening or priming, increasing productivity
- · Weather- and UV-resistant for long-lasting marks
- Marking range: -50°F to 150°F (-46°C to 66°C)

#### **Industry Uses** Steel mills and warehouse Forge and casting foundries Ship building and repair Metal fabrication Plastic Tire repair and retreading Lumber/timber Glass Construction

#### Surface Uses

Steel and iron Pipes and tubes Rubber and tires Lumber/timber Concrete, stone



#### Valve Action<sup>®</sup> Paint Marker - Low Corrosion Colors

Xylene-free paint reduces user health risks and eliminates California Proposition 65, EPA HAPS and SARA 313 concerns in the U.S.A. Dura-Nib medium bullet tip resists wear to provide long marking life Durable metal barrel and clip-cap reduce breakage and store easily in pocket Marking range: -50°F to 150° (-46°C to 66°C)

#### Features & Benefits

Fast-drying paint formula is safe for use on stainless steel and eliminates concerns regarding corrosion, degradation, or pitting. Confirmed using a typical analysis to contain:

- 200 ppm chlorides and total halogens
- 250 ppm each low melting point metals
- 250 ppm sulfur

#### Industry Uses

### Power generation facilities

Oil refineries Ship building and repair Aviation and aerospace

Stainless steel Alloy and superalloy metals

Surface Uses



Markal

#### **THERMOMELT MARKERS**

### **Thermomelt® HEAT-STIK®**

Thermomelt HEAT-STIK markers are a quick, low-cost method to accurately measure surface temperatures of various metals and equipment. Available in 88 Fahrenheit temperatures, the stick-in-holder design provides convenience and durability for long-lasting use in the workshop or in the field

#### Features & Benefits

- · When the stick melts, the precise temperature is reached
- Long-lasting stick is 33% bigger than competition
- Accurate to within +/- 1% of Fahrenheit and +/- 3% Celsius rated temperatures; no need for sensor calibration
- Ideal for: pre-heating, post-weld heat treating, interpass temperature monitoring, stress-relieving and annealing
- Protective holder, shirt-clip and adjustment ring prevents breakaway and improves handling
- Meets welding codes: AWS D1.1, ANSI/ASME Code B32.1 & B31.3, ASME Code Sec. I, III, and VII, NIST Traceable

#### Industry Uses

Welding Ship building and repair Bridge fabrication Metal fabrication Forge and casting foundries Railroad Steel mills



TROFT MALENCE

Steel and iron

	F	С			
86400	100°F	38°C	86778	463°F	239
86409	109°F	43°C	86787*	475°F	246
86418	113ºF	45°C	86796	488°F	253
86418	113ºF	45°C	86805*	500°F	260
86427	119°F	48°C	86814*	525°F	274
86436*	125°F	52°C	86823*	550°F	288
86445	131ºF	55°C	86832	575°F	302
86454	138°F	59°C	86841	600°F	316
86463*	150°F	66°C	86850	625°F	239
86472	163°F	73°C	86859*	650°F	343
86481*	175°F	79°C	86868	700°F	371
86490	182°F	83°C	86877	750°F	399
86499	188°F	87°C	86886	800°F	427
86508	194°F	90°C	86895	850°F	454
86517*	200°F	93°C	86904	900°F	482
86522	206°F	97°C	86922	950°F	510
86526	213°F	101°C	86931	1000°F	538
86535	219°F	104°C	86940	1022°F	550
86544*	225°F	107°C	86949	1050°F	565
86553	238°F	114°C	86958	1100°F	593
86562*	250°F	121°C	86967	1150°F	621
86569	256°F	124°C	86976	1200°F	649
86571	263°F	128°C	86985	1250°F	677
86580	269°F	132°C	86994	1300°F	704
86589*	275°F	135°C	87003	1350°F	732
86598	282°F	139°C	87012	1400°F	760
86607	288°F	142°C	87021	1425°F	774
86616	294°F	146°C	87030	1450°F	788
86625*	300°F	149°C	87039	1480°F	804
86634	306°F	152°C	87048	1500°F	816
86643	313°F	156°C	87057	1550°F	843
86652	319°F	159°C	87066	1600°F	871
86661*	325°F	163°C	87075	1650°F	899
86670	331°F	166°C	87084	1700°F	927
86679	338°F	170°C	87093	1750°F	954
86688	344°F	173°C	87102	1800°F	982
86697*	350°F	177°C	87111	1850°F	101
86706	363°F	184°C	87120	1900°F	103
86715*	375°F	191°C	87129	1950°F	106
86724	388°F	198°C	87138	2000°F	109
86733*	400°F	204°C	87147	2050°F	112
86742	413°F	212°C	87156	2100°F	114
86751*	425°F	218°C	87165	2150°F	117
86760	438°F	225°C	87174	2200°F	120
86769*	450°F	232°C			120



\* Indicates that this marker color is low in chlorides, halogens, and sulfurs for low corrosion marking requirements

## **TASETO**

#### CHEMICAL

### TASETO COLOR CHECK

DESCRIPTION	LIST PRICE (RM)
COLOR CHECK – REMOVER / CLEANER (BLUE) NO.2	
COLOR CHECK – DEVELOPER (WHITE) NO.3	
COLOR CHECK – PENETRANT (RED) NO. 1	





TASETO COLOR CHECK is a Penetrant testing material which is widely used in the inspecting of surface discontinuities of Welds, Forgings, Pressure Vessels, Casting, General Metal Work, Power Plant Construction and Leak Testing.

Pre-cleaning	Penetrant Application	Removal of Excess penetrant	Developing	Interpretation
Remove oil, grease and dirt off the test surface with the remover to let flaws open, and then dry the surface well.	Apply the penetrant Over test surface. Dwelling time is the Range of 5 to 60 Minutes.	Wipe off excess Penetrant with a cloth dampened with the remover. If you used the Water washable Penetrant, spray Shower water.	Apply a thin coat of the well agitated developer to the test area.Development time is between 10 to 30 minutes.	Find flaw indication after the developer has dried

**TASETO** 

#### **MAGNETIC PARTICLE INSPECTION**

TASETO Contrast Paint (for magnetic particle inspection) forms a thin film on specimen surface, providing a white background to enhance visible magnetic particle indications.

**FEATURE** • Provide high contrast on the specimen surface for visible magnetic particle indications, to make the indications easy to see. • Very quick drying. • Easy to remove by acetone, or wire brush afteruse. • Non-Chlorinate and Non-CFC.

#### **TYPICAL PROPERTIES**

APPEARANCE	WHITE DISPERSION LIQUID	
Specific Gravity	0.97	

**METHOD OF USE** 1. Inspection area should be cleaned and dried prior to testing.

- 2. Shake aerosol can thoroughly until agitator rattles.
- 3. Keep aerosol can 10 ~ 20cm away from surface, apply a uniform thin film to the inspection area, wait about one minute to allow the film to dry.
- 4. Magnetize the inspection area and apply magnetic particle dispersion.
- 5. Removal it by acetone after use.

**PRECAUTION FOR USE** 1. Aerosol propellant contains LPG, which is very

inflammable, please does not use it near fire.

2. Avoid direct sunlight, high temperature, and high humidity.

#### TASETO JIKI Check B-200 (Aerosol type) is a magnetic particle inspection agent, which is composed of black magnetic powder suspended in mineral oil with high flash point.

Spray it to the magnetized inspection area, a black magnetic particle indication will appear upon the surface of defective regions.

**FEATURE** • Easy to defect very fine flaw. • Dispersion oil has less smell, and the flash point (more than 80°C).

Have good wettability over inspection surface.

#### **TYPICAL PROPERTIES**

COLOR	BLACK
Net Weight	300g
Setting Volume	About 1.5ml / 60 Minutes
Temperature Limit	36° ~ 140°F
Particle Size	0.3 ~ 0.6µm

#### METHOD OF USE 1. Before use, shake a can well.

2. Keep the aerosol can away from surface 10 ~ 20cm, spray uniformly.

#### **PRECAUTION FOR USE**

1. Aerosol propellant is LPG, which is very inflammable, please does not use it near fire.

2. Please avoid direct sunshine, high temperature and humidity for the storage



**PACKING UNIT** 420ml Aerosol Can (12 Bottles in one carton box)

**PACKING UNIT** 420ml Aerosol Can

> (12 Bottles in one carton box)

TASETO Paint







#### AVESTA CLASSIC MOLY-DROP

The Original molybden test

### Avesta Classic Moly-Drop test 960

#### Features

Avesta Moly-Drop test 960 is an easy to use chemical test that helps differentiate 304 grade stainless steel from 316 grade.

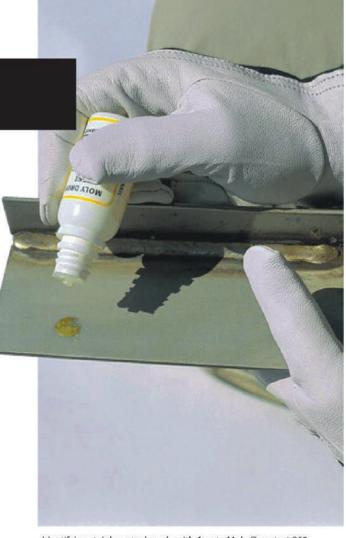
With this simple chemical test you can check if your stock piece or scrap of stainless steel is 304 or 316. The test will identify the grade within 5-10 minutes through a colour change.

#### General characteristics

Can be used on stainless steel 300 series material to test presence of Molybdenium to differentiate grade 304 (no moly) from 316 (with moly).

#### Chemical properties

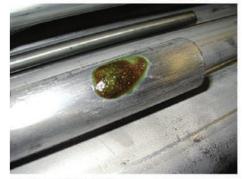
Composition: Form: Density: pH: Hydrochloric acid (HCl) Yellow liquid 1.3 kg/lit 0



Identifying stainless steel grade with Avesta Moly-Drop test 960.



Testing 304 (EN 1.4301)



Testing 316 (EN 1.4436)



#### AVESTA FINISHONE<sup>™</sup> PASSIVATOR 630

Improved safety when passivating

### Avesta FinishOne<sup>™</sup> Passivator 630

### An acid-free passivator !

Flash clouds or smut, seen as brown staining, can occasionally appear on any stainless steel surface after pickling.

Passivating with Avesta FinishOne<sup>™</sup> Passivator 630 eliminates these spots with ease, restoring the surface.

Avesta FinishOne<sup>™</sup> Passivator 630 is aimed for a wide-range of industrial passivating applications. It offers a good general passivating result on stainless steel surfaces.

- It is suitable for applications such as:
- Passivation after pickling
- Passivation after mechanical treatments such as grinding, brushing, blasting etc
- Removal of free iron (smut)
- Reducing the formation of toxic nitric fumes during pickling
- Preventing water staining caused by poor rinse water.

### Avesta FinishOne<sup>™</sup> Passivator 630

- Restores the passivation layer on stainless steel surfaces that have been damaged during fabrication or usage.
- Further improves the result after pickling and diminishes the risk of discoloured surfaces caused by fash clouds or smut.
- Reduces the formation of toxic nitric fumes during rinsing after pickling.
- · Creates no hazardous waste, contains no nitric acid.
- · Is easy to handle, classifed as non-dangerous goods.



Avesta FinishOne<sup>™</sup> Passivator 630- efficient and environmentally safe.



Avesta FinishOne<sup>™</sup> Passivator 630- removes free iron (the brown staining seen on the photo).



#### **AVESTA CLASSIC PICKLING GEL 122**

The original Pickling Gel

### **Avesta Classic** Pickling Gel 122

### **Cleaning of weld seams**

Avesta Classic Pickling Gel 122 is used to treat stainless steel surfaces that have been damaged by working operations such as welding, forming, cutting and blasting. It removes welding oxides, the underlying chromium-depleted layer, micro-slag particles and other contaminants that may cause local corrosion.

This gel is specifcally intended for standard brush pickling of weld seams and smaller surfaces.

### The free-flowing pickling gel

Avesta Classic Pickling Gel 122 is more free-fowing than a pickling paste to facilitate the application and to give a high coverage. It can hence be used to clean with a good result not only weld seams but also smaller stainless steel surfaces.

### Avesta Classic Pickling Gel 122

- · Standard and more highalloyed steel grades such as 304, 316, 904 L
- · Cold and hot rolled plates
- MIG/FCW/stick electrode welds
- · Brush pickling of weld seams and smaller surfaces
- Use and storage in warmer climates (the gel is heat-stable up to +45°C).

#### Avesta Pickling Gel 122





Scan here



and surfaces.

Avesta Classic Pickling Gel 122



Avesta Classic Pickling Gel 122 - easy to apply thanks to its free-flowing consistency.

Avesta Classic Pickling Gel 122 - for brush pickling of welds



#### BLUEMETALS TOTAL PERFORMANCE PICKING PASTE

#### **DESCRIPTION AND APPLICATIONS**

The corrosion resistance of stainless steel depends on thier ability to form a protective, invisible chromium oxide layer on the surface. Operations such as welding, forming, coarse grinding or handling with carbon steel tools damage this layer, reducing its protective capacity. The use of **BLUEMETALS PICKLING PASTE** will help obtain a clean surface neutralizes, passivates and restores to its original corrosion resistance properties of stainless steel after welding, brazing or grinding. Remove discoloration or oxide films on stainless steel.



### CAUTION

- BLUEMETALS PICKLING PASTE is highly blended acid. Direct contact causes burns of eye, skin and cloth. It is harmful if swallowed or inhaled. Wear safety goggles, rubber gloves and wash after handling.
- Use with adequate vent and avoid breathing vapor (Do not take internally).
- First aid if contact;
  - Flush immediately with water. Flush eyes with water for more than 10 minutes for eye to get prompt medical attention.
  - If swallowed, wash mouth throughly with water. Drink plenty of water or milk.
  - Contact physician.

#### **STORAGE** • Keep out of each of children.

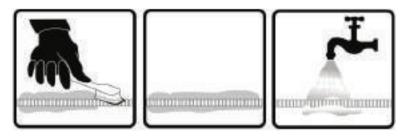
- Keep out of direct sunlight and away from heat. Always keep container closed.
- Before opening the container, loosen slowly to remove any pressure build-up.

#### **DIRECTION FOR USAGE**

- 1. Clean off slag and brush the weld with stainless steel brush.
- Stir BLUEMETALS PICKLING PASTE with wooden rod before use.
   Apply generous layer of BLUEMETALS PICKLING PASTE

with a plastic brush or wooden spatula.

- 4. Soak for 20-30 minutes.
- 5. Use plenty of water to rinse.



Net weight : 1 (one) Kg. (This cleans approx. 400 ft of weld joint.)

BlueMetals
TOTAL PERFORMANCE
PASTE
The entropy is presented of statement atoms more provide the bandward of per resulting per presented information (and the test performs department) and an assisting framework success to service
And building by particular that have not provide the same type methods to perform a particular distance provide the same that offer a distance database and have a method to same have a method to an advance.
Nor Wager Taylored Agence with a laterature







#### WELDBRITE PICKLING PASTE









# - All In One Chemical Solution -

Scale Removal & Pickling & Passivation For Stainless Steel







#### **NSC SUS CLEAN #300 SERIES**

Since its launch in 1972, SUS CLEAN has been favoured all over Japan. It promises to help you!



### Description: **#300E**

#300E Pickling Paste is a milky white paste for treatment of corroded, heated or welded austenitic stainless steel or welding seams.

### Description: **#300S**

Ideal for removing oxidesed scales, welding scales, heat scales, etc. on smaller items. Dip type allows you to pickle batches of small item simultaneously.

<u>Austenite Stainless Steel:</u> SS 304, SS 304L, SS 321, SS 316, SS 316L, SS 301, SS 302, SS 309S, SS 310S, SS 347

<u>Applications:</u> NSC Sus Clean #300E Pickling Paste is used for pickling of welding seams and surface od austenitic stainless steel in any kind of construction, such as: tanks, pipe, etc.

#### Directions For Use: **PRETREATMENT**

- 1. The surface should be pre-cleaned by degreasing.
- 2. Please read the Safety Data Sheet before use.
- 3. Apply the paste onto the surface and weld, allow the pickling paste to act for 30 minutes.
- 4. Rinse throughly with plenty of water after pickling.

#### Example of NSC SUS CLEAN Usage



**Passivation:** A protective chromium oxide layer will be formed on the stainless steel only if Oxidizing are present. We recommend passivation with **NSC AD Passive**, particularly if the stainless Steel is exposed to corrosive condition after pickling.

Category	Product Name	Application	Advantages	Packaging
Pickling	NSC SUS Clean #300E	Gel Type (Brush Application)	<ol> <li>Shorter descaling time</li> <li>Less Fume generating</li> <li>Less damage to material</li> </ol>	2kg / 20kg
(Stainless Šteel)	NSC SUS Clean #300S	Liquid Type	<ol> <li>Less fume generation by spelized agent</li> <li>Less corrosion and/or damage to the material surface</li> </ol>	2kg / 20kg



#### **NSC AD PASSIVE SERIES**

Since its launch in 1972, SUS CLEAN has been favoured all over Japan. It promises to help you!



Description: NSC AD Passive provides austenitic stainless steel with a protective chromium oxide layer after pickling. NSC AD Passive will aid and accelerate the passivation process after pickling.

<u>Applications</u>: NSC AD Passive is mainly used for passivation of austenitic stainless steel in any kind of construction, such as: tanks, pipe, etc. It can be used by means of circulation, spraying or in immersion baths.

<u>Austenite Stainless Steel:</u> SS 304, SS 304L, SS 321, SS 316, SS 316L, SS 301, SS 302, SS 309S, SS 310S, SS 347

#### Directions For Use:

- 1. Please read the Safety Date Sheet before use.
- 2. Apply the paste or soak into the tank, allow the treatment approx. 2 hours.
- 3. Rinse throughly with plenty of water after passivation.
- 4. Circulation method, applying gel type, soaking bath.

#### Example of NSC AD Passive Usage



Passivation Check: After drying test the Passivity of the stainless steel using our Ferro Check.

Category	Product Name	Application	Advantages	Packaging
Passivation	NSC AD Passive E	Gel Type (Brush Application)	1. Application for Austenite, Ferrite, Martensite metal.	2kg
(Stainless Steel)		2. Application for ferro-rust removal (Food/Medical/plant)	20kg / 200kg	



#### **FERRO CHECK**

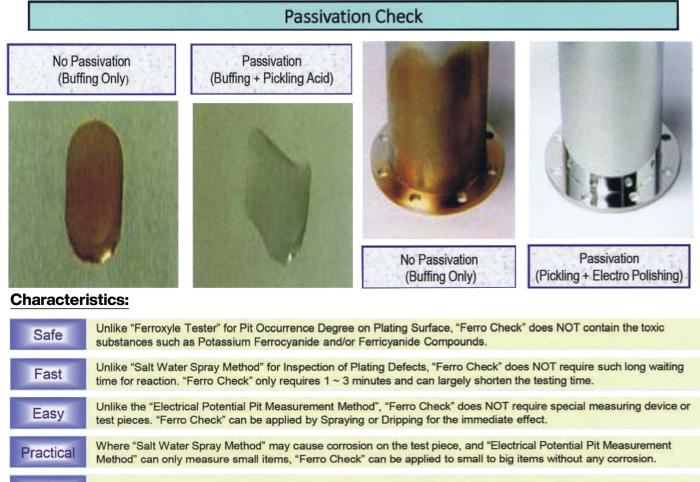


### **Handy Ferrous Bivalent Ion Detector**

The Ultimate Ferrouse Ion Detector for Metal Surfaces. Makes the 'Mechanically & Visually Impossible' A quick & easy Procedure. A Great Contribution to Quality Control.

#### Functions:

Simple & Easy Detection Test for Ferrous Bivalent Ion Determination Check of Passivation Condition Effective Inspection for Plating Defects on Ferrious Metals Provisional Check on Corrosion due to insufficient cleaning of Buff Residue



Precise Because of the clear indication of "Ferro Check's" instinctive Orange-Red Colour, the Test Result is 100% Obvious.

# **COMPANY INTRODUCTION**

Chem-Grow Pte Ltd a subsidiary of Heatec Jietong provides a wide range of specialized service to the marine and petroleum industries. By understanding the needs of our customers and maintain a good relationship with them, we are able to provide the highest level of services in this industry.

We value our customers as the foundation of our business. Our relationships with customers and suppliers are customer needs based on principles of respect and mutual benefits. We aim to develop profitable and last relationships. We want to build on what we do well and to innovate to meet change

#### Our Services - Workshop or On-site

- Piping System Fabrication and installation of all types of piping
- · Hot Oil Flushing Up to NAS / ISO standard for pipeline / oil
- Pressure Testing Up to 700 Bars
- Contamination Test Oil / Water / etc
- Pigging for pipe line or Hose
- Chemical Cleaning
  - Boilers Degreasing, Alkaline-Boil out, Descaling and Passivation.
  - 2. Pipeline Degreasing, Descaling and Passivation
  - Cooler Ultrasonic for the Fin Side and Chemical Cleaning for the Tube Side
  - 4. Tanks Super chlorination of Fresh Water Tank
  - 5. Manual Cleaning and Degreasing of Tank
- Stainless steel Passivation On Site
- Sales of Chemical

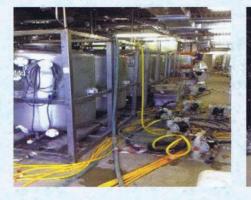






97

### On Site Cleaning & Passivation







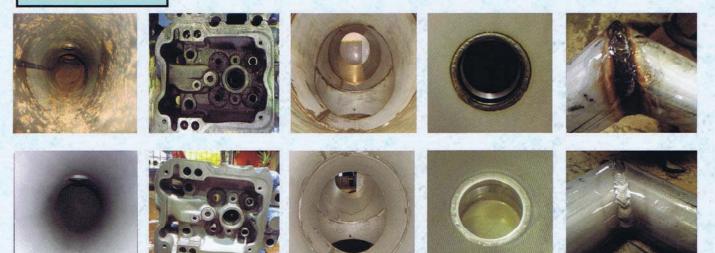
Workshop Cleaning & Passivation







Before & After



#### For more service information, please contact :

Chem-Grow Pte Ltd No. 15 Tuas Link 3 Singapore 638529 Tel : (+65) 6265 8751 Fax : (+65) 6863 3052

Email : <u>chemgrow@chemgrow.com</u> Website : www.chemgrow.com



# **SUPER SERIES – FLAWCHEK**

### Liquid Dye Penetrant Inspection System

- Will locate surface discontinuities or other indications on all non - porousmaterials (Metals, Plastics, Ceramics....):-
  - Cracks
  - Seams
  - Porosity
  - Laps
  - Laminations
  - **Cold Shuts**
- Used to detect welding, casting & forging  $\star$ defects, cracks & leaks in new - components and fatigue cracks on in - service components.
- Will detect wide spectrum of flaw sizes regard less of flaw orientation, up to 1 microns to 30 micron depth on standard Ni - Cr test panel.
- Superior capillary action, Non Toxic, Non Corrosive..... Free from halides & sulfides.....
- Confirms to MIL-1-25135, MILSTD 271, IS: 3658 1981"Code of practice for liquid \* penetrant flaw detection ".
- Three part system

#### 1. SUPER CLEANER :

#### 2. <u>SUPER PENETRANT :</u>

- a) Non Chlorinated solvent.
- b) Specific Gravity < 1.
- b) Fast drying.
- c) % Volatile by volume 100%. c) % Volatile by volume NA d) Non – toxic formulation.
- d) Specific Gravity < 1.
- e) Non toxic formulation.

#### **APPLICATION:**

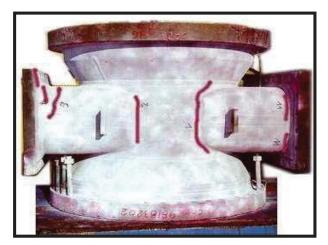
Evaluation of micro surface defects & flaws in weld deposits, wrought & cast products of both Ferrous &Non – Ferrous metals, powder metallurgy parts, ceramics, plastics & Glass objects.

Perfect for examining Stress corrosion and Fatigue cracks – Cranes, Bridges, Vessels, Piping, Railway's..... So as to prevent breakdowns, injuries or loss of life.

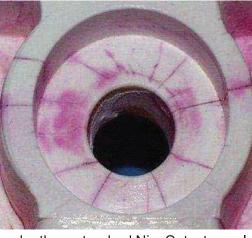
#### SHELF LIFE :18 Months warranty.



" Pipe JointDye Penetrant Inspection "



" Valve Dye Penetration Inspection "



#### 3. SUPER DEVELOPER :

- a) Red ultra high penetrationdie. a) % Volatile by volume: 94%.
  - b) Specific Gravity < 1.
  - c) Vapour Pressure 45-55 Psig.
  - d) Non-toxic formulation.



# **SUPER SERIES FLAWCHEK**

LIQUID DYE PENETRANT INSPECTION SYSTEM

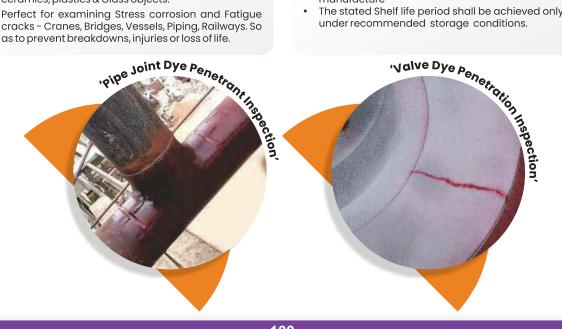
#### DESCRIPTION

Designed to locate surface discontinuities or other indications on all non-porous materials (Metals, Plastics, Ceramics), Cracks, Seams, Porosity, Laps, Laminations, Cold Shuts. Used to detect welding, casting & forging defects, cracks & leaks in new components and fatigue cracks on in - service components.

#### **KEY FEATURES**

- Will detect wide spectrum of flaw sizes regardless of flaw orientation up to 1 micron to 30 microns depth on standard Ni Cr test panel
- Superior capillary action, Non Toxic, Non -Corrosive, Free from halides & sulfides
- Confirms to MIL-1-25135, MILSTD 271, IS: 3658 198 'Code of practice for liquid penetrant flaw detection'
- CFC Free formulation









POW	<b>/ERW</b>	ELD	<b>S-12</b>	
AWS A5. EN ISO 2 EN ISO 2 JIS Z3212	- 560-А 560-В	: E6013 : E 38 0 R 11 : E 43 13 A : E4313		
Diameter	Standard Package	Standard Length	Standard Pallet	
2.0mm	2kg/5kg/20kg	300mm	1000kg	
2.6mm	2kg/5kg/20kg	300mm	1000kg	
3.2mm	5kg/20kg	350mm	1000kg	
4.0mm	5kg/20kg	400mm	1000kg	
5 0mm	5kg/20kg	400mm	1000kg	





Universal all position mild steel electrode. Good operability and easy slag removal- suitable to weld at low OCV wellding power source.

Applied in metal constructions, for piping systems, tanks, black-smithing, craft works. Construction steels for General use, Tube steels, Ship Steels.







POWERW	ELD G-13
AWS A5.1	: E6013

EN ISO 2560-A	: E 38 0 R 11
EN ISO 2560-B	: E 43 13 A
JIS Z3211	: E4313

Diameter	Standard Package	Standard Length	Standard Pallet
2.0mm	2kg/5kg/20kg	300mm	1000kg
2.6mm	2kg/5kg/20kg	300mm	1000kg
3.2mm	5kg/20kg	350mm	1000kg
4.0mm	5kg/20kg	400mm	1000kg
5 0mm	5kg/20kg	400mm	1000kg





POWERWELD

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Applications

Smooth running, rutile type of electrode for all position welding. Superb arc starting, low spatters levels and self-releasing slag for greater welder appeal. Suitable for welding mild steel, galvanized pipes and plates and structures which require Galvanized after welding.







### **POWERWELD G-200**

AWSA5.1 EN ISO 2560-A EN ISO 2560-B JIS Z3211		: E38 2 : E43 19	: E6019 : E38 2 RA 12 : E43 19 A U : E6019		
Dia	meter	Standard Package	Standard Length	Standard Pallet	
2.	.6mm	5kg/20kg	300mm	1000kg	
3.	2mm	5kg/20kg	350mm	1000kg	
4.	0mm	5kg/20kg	400mm	1000kg	
5.0	Omm	5kg/20kg	400mm	1000kg	

### Applications

Welding of heavy structures and thick plate of steels such as boilers, chemical machinery and slup building work in genaral.





## NICHIA SK-260-M

Applications

A١	WS A5.1		: E6013		
E	N ISO 25	560-A	: E 38 0	R 11	
E	N ISO 25	560-B	: E 43 13	3 A	
JI	S Z3211	L	: E4313		
	Diameter	Standard Package	Standard Length	Standard Pallet	
	2.6mm	2kg/5kg/20kg	300mm	1000kg	6
	3.2mm	5kg/20kg	350mm	1000kg	
	4.0mm	5kg/20kg	400mm	1000kg	V
					L
E					



We export to Middle East, Saudi, Qatar, UAE, Kuwait, Jordan, Thailand, Indonesia, etc

Excellent usability in all positions including vertical downward. Outside plate of vehicles, blowers, cultivating machines, pipes light gauge constructions, finish welding on structural works of steel plates and high duty structures.







BLU	EAR	C 60	10	
AWSA5.1 ENISO 25 ENISO 25 JIS Z3211	60-А 60-В	: E6010 : E 38 0 C 22 : E 43 10 A : E4310		
Diameter	Standard Package	Standard Length	Standard Pallet	
2.6mm	5kg/20kg	300mm	1000kg	
3.2mm	5kg/20kg	350mm	1000kg	
4.0mm	5kg/20kg	350mm	1000kg	
4.8mm	5kg/20kg	350mm	1000kg	
	oplications			

High cellulose all-position designed for deep penetration on root and filler layers of butt or fillet welding. It is used for welding mild steel in pipeline, storage tank, pressure vessels and heavy construction work.

# **BLUEARC 7010**

AWS A5.5		: E7010		
EN ISO 25	60-A	: E 42 0 C 22		
EN ISO 25	60-B	: E 49 10 A		
JIS Z3211		: 4910		
Diameter Standard Package		Standard Length	Standard Pallet	
2.6mm	5kg/20kg	350mm	1000kg	
3.2mm	5kg/20kg	350mm	1000kg	
4.0mm	5kg/20kg	350mm	1000kg	



High cellulose all-position designed for deep penetration on root and filler layers of butt or fillet welding. It is used for welding mild steel in pipeline, storage tank, pressure vessels and heavy construction work.

Designed for welding long distance pipe lines. Also designed for use on carbon moly piping used in high pressure, high temperature steam service, structure or plates where the molybdenum content it appro 0.50%.



#### **GOLDEN BRIDGE**



#### GOLDEN BRIDGE J38.12 AWS A5.1: E6013

Diameter	Standard Package	Standard Length	Standard Pallet
2 6mm	5kg/20kg	300mm	1000kg
3.2mm	5kg/20kg	350mm	1000kg
4.0mm	5kg/20kg	400mm	1000kg
5.0mm	5kg/20kg	400mm	1000kg

#### **O** Applications

J.38.12 has excellent performance on low carbon steel fabrication process which present superior roughness bead appearance for plate or structure welding work.

#### GOLDEN BRIDGE J502 AWS A5.1: E5003

Diameter	Standard Package	Standard Length	Standard Pallet
2.6mm	5kg/20kg	300mm	1000kg
3.2mm	5kg/20kg	350mm	1000kg
4.0mm	5kg/20kg	400mm	1000kg
4.0mm	5kg/20kg	400mm	1000kg

#### Applications

J502 is Lime-Titania type carbon steel electrode designed for all positions welding work. The product is widely used in key structure fabrication work such for vehicle manufacture, mechanical fabrication and building industry, etc. AC/DC power source.

### GOLDEN BRIDGE J507 AWS A5.1: E7015

Diameter 1	Standard Package	Length	Pallet
2.6mm	5kg/20kg	300mm	1000kg
3.2mm	5kg/20kg	350mm	1000kg
4.0mm	5kg/20kg	400mm	1000kg

#### Applications

E7015 is low hydrogen sodium type carbon steel electrode. The product is designed for all positions welding work which present excellent welding performance with smooth arc, low spatter level and effortless slag removal ability. The deposited metal has superior mechanical properties including good anti-cracking ability and high ipact toughness under low temperature. DCRP power source.



#### **CAST IRON ELECTRODE**



#### **CASTARC 50N** JIS Z3252 : DFCFe Diameter Standard Package Standard Standard Pallet 1kg/2.5kg 1000kg 300mm 3.2mm 1kg/2.5kg 350mm 1000kg 4.0mm 350mm 1000kg 0, Description and Application

CASTARC 50N is a graphite electrode using mild steel rod. Its weld metal shows high carbon content. Then it results high hardness, so it is suitable for welding the parts where machining is unnecessary. Its fusibility with cast iron is excellent.



#### **CASTARC 150N** AWS A5.15 : ENiFe-Cl EN ISO 1071 : E C NiFe-Cl 1 **JIS Z3252** : DFCNiFe Standard Package Standard Length Diameter Standard Pallet 1kg/2.5kg 300mm 1000kg 3.2mm 1kg/2.5kg 350mm 1000kg 4.0mm . 1kg/2 5kg 350mm 1000kg

Applications

Graphite basis coated electrode with a Fe-Ni alloy deposit and repairing cost iron products. Deposit is highly resistant against cracks. Good bonding and flow of the weld metal.





#### HIGH TENSIL STEEL ELECTRODE



# STABLEARC 18

AWS A5.1	: E7018
EN ISO 2560-A	: E 42 3 B 32 H10
EN ISO 2560-B	: E 49 18 A u H10
JIS Z 3211	: E4918

Diameter	Standard Package	Standard Length	Standard Pallet
2.6mm	5kg/20kg	300mm	1000kg
3.2mm	5kg/20kg	400mm	1000kg
4.0mm	5kg/20kg	400mm	1000kg
5.0mm	5kg/20kg	400mm	1000kg

STABLEARC 18

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Applications

SELLE

Steelwork, Shipbuilding, Railways, Boilers, Pressure Vessels. Recommended for pipe soldering.

General Purpose Structural Steels:	S235JRG2, S355J2G3, S355J2G4, S335K2G3, S355K2G4
Steels for Boilers and Pressure Vessels:	P235H, 265H, 295H, 355-GH
Fne Grain Steels:	P275, P355N, S255N, S355-N, S420N
Steel for Tubes:	P265, P295, L415Nb, L290MB, L415MB, X42-X60
Steel for Shipbuilding	Grades A-B-D-E
Cast Steels and Heat Treatment Steels:	GS-38, GS-45, GS-52 / C35-C40-C45





#### HIGH TENSIL STEEL ELECTRODE



<b>STABLE</b>	ARC 24
AWS A5.1	: E7024
EN ISO 2560-A	:E 42 A RR 53
EN ISO 2560-B	: E49 24 A
JIS Z3211	: E4924





High metal recovery rutile electrode (180%) with a high deposition rate. Applied for long beads and a uniform weld seams required. Soft fusion self releasing slag.

Frequently used for butt- welding plates with heavy thickness and for fillet welds. Construction steels for General use, Tube steels, Ship steels.

Base Materials	

EN-Designation	Ship Steels	ASTM
S185 - S355	Quality A and B	A285 Gr.C
P235 - P355		A442 Gr. 55,60
L210 - L360		A414 Gr. C,D,E,F







### **BLUEARC 16**

AWS A5.1 EN ISO 2560-A EN ISO 2560-B JIS Z3211 : E7016 : E38 3 B 12 H10 : E43 16 A U H10 : E4316

Diameter	Standard Package	Standard Length	Standard Pallet
2.6mm	5kg/20kg	300mm	1000kg
3.2mm	5kg/20kg	350mm	1000kg
4.0mm	5kg/20kg	400mm	1000kg
5.0mm	5kg/20kg	400mm	1000kg



Construction steels for general use, Tube steels, Ship steels, Steels for Boiler and Pressure Vessels, High strength steels, Heat resisting steels, Cold tough steels. Also recommended for root passes and fit upjoint.

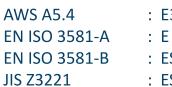
### Base Materials

EN-Designation	Ship Steels	ASTM	
S185 - S355	Quality A ,B,C and D	A285 Gr.C	
P235 - P355		A442 Gr. 55,60	
GP240R		A414 Gr. C,D,E,F	
P235GH - P355		A515 Gr. 55, 60, 65	
L210 - L360		A516 Gr.55,60,65,70	









:	E308L-16
:	E 19 9 L R 12
:	ES308L-16
:	ES308L-16

Diameter	Standard Package	Standard Length	Standard Pallet
1.6mm	1kg/2.5kg/20kg	250mm	1000kg
2.0mm	1kg/2.5kg/20kg	300mm	1000kg
2 6mm	1kg/2.5kg/20kg	300mm	1000kg
3.2mm	1kg/2.5kg/20kg	350mm	1000kg
4.0mm	1kg/2.5kg/20kg	350mm	1000kg
5 0mm	1kg/2.5kg/20kg	350mm	1000kg

STAINARC 308L-16





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AWS A5.4 EN ISO 3581-A EN ISO 3581-B JIS Z3221		: E309 : E 23 : ES30 : ES30	12 L R 12 9L-16
Diamete	er Standard Package	Standard Length	Standard Pallet
2.0mm	1kg/2.5kg/20kg	300mm	1000kg
2.6mm	1kg/2.5kg/20kg	300mm	1000kg
3.2mm	1kg/2.5kg/20kg	350mm	1000kg
4.0mm	1kg/2.5kg/20kg	350mm	1000kg



### STAINARC 309L-16 STAINARC 316L-16

AWS A	5.4	: E316	L-16
EN ISO 3581-A		: E 19	12 3 L R 12
EN ISO	3581-B	: ES31	6L-16
JIS Z3221 : ES316L-16			6L-16
Diamete	er Standard Package	Standard Length	Standard Pallet
2.0mm	1kg/2.5kg/20kg	300mm	1000kg
2.6mm	1kg/2.5kg/20kg	300mm	1000kg
3.2mm	1kg/2.5kg/20kg	350mm	1000kg
4.0mm	1kg/2.5kg/20kg	350mm	1000kg







<b>STAINARE 307</b>					
AWS A5.4		: E307-16	5		
EN ISO 3581-A		: E 18 9 N	/In Mo R 12		
EN ISO 35	81-B	: ES307-1	6		
JIS Z3221		: ES307-1	.6		
Diameter	Standard Package	Standard Length	Standard Pallet		
Diameter 2.6mm					
	Package	Length	Pallet		
2.6mm	Package	Length 300mm	Pallet		

<b>STAI</b>	NARG	C 310	)
AWS A5.4 EN ISO 358 EN ISO 358 JIS Z3221		: E310-16 : E 25 20   : ES310-1 : ES310-1	6
Diameter	Standard Package	Standard Length	Standard Pallet
Diameter 2.6mm			
	Package	Length	Pallet

### **STAINARC 312**

EN ISO 3581-A EN ISO 3581-B		: E312-16 : E 29 9 R : ES312-10 : ES312-10	5
Diameter	Standard Package	Standard Length	Standard Pallet
2.6mm	2.5kg/20kg	300mm	1000kg
3.2mm	2.5kg/20kg	350mm	1000kg
4.0mm	2.5kg/20kg	350mm	1000kg







				BEST SELLER
STAI	NARO	2316	5L-17	
AWS A5.4		: E316L-1	17	- SIA
EN ISO 35	81-A	: E 19 12	3 L R 12	
EN ISO 35	81-B	: ES 316L	-17	
JIS Z3221		: ES 316L	-17	
Diameter	Standard Package	Standard Length	Standard Pallet	STAIN I
2.0mm	2.5kg/20kg	300mm	1000kg	3 INARC 3081
2.6mm	2.5kg/20kg	350mm	1000kg	3091-17 081-17
3.2mm	2.5kg/20kg	350mm	1000kg	STAINARU
4.0mm	2.5kg/20kg	350mm	1000kg	



## STAINARC 309L-17

AWS A5.4	: E309L-17
EN ISO 3581-A	: E 23 12 LR 12
EN ISO 3581-B	: ES309L-17
JIS Z3221	: ES309L-17

Diameter	Standard Package	Standard Length	Standard Pallet
2.0mm	1kg/2.5kg/20kg	300mm	1000kg
2.6mm	1kg/2.5kg/20kg	300mm	1000kg
3.2mm	1kg/2.5kg/20kg	350mm	1000kg
4.0mm	1kg/2.5kg/20kg	350mm	1000kg
5.0mm	1kg/2.5kg/20kg	350mm	1000kg

STAINARC 308L-17

AWS A5.4	: E308L-17
EN ISO 3581-A	: E 19 9 L R 12
EN ISO 3581-B	: ES 308L-17
JIS Z3221	: ES308L-17
Diameter Standard	Standard Standard

Diamete	r Standard Package	Standard Length	Standard V Pallet
2.0mm	1kg/2.5kg/20kg	300mm	1 <sup>000kg</sup>
2.6mm	1kg/2.5kg/20kg	300mm	1 <sup>000kg</sup>
3.2mm	1kg/2.5kg/20kg	350mm	1 <sup>000kg</sup>
4.0mm	1kg/2.5kg/20kg	350mm	1 <sup>000kg</sup>
5.0mm	1kg/2.5kg/20kg	350mm	1 <sup>000kg</sup>



#### HARDSURFACING ELECTRODE



Single layer deposit hardness may vary depending on the base metal type and degree of dilution.



depending on the base metal type and degree

of dilution.







# HARDFACING ARC 33

CHROME CARBIDE HARDFACING ELECTRODE EN 14700 : E Z Fe14

Diameter	Standard Package	Standard Length	Standard Pallet		
32mm	5kg/20kg	350mm	1000kg		
4.0mm	5kg/20kg	400mm	1000kg		
5.0mm	5kg/20kg	400mm	1000kg		
DEPOSIT HARDNESS					
Single Layer o	n Mild Steel	Typical Hardn	ess 53-58 HRC		
Multi-l	.ayer	Typical Hardne	ess 60-65 HRC		

Single layer deposit hardness may vary depending on the base metal type and degree of dilution.





## **HARDFACING ARC 43**

CHROME CARBIDE 60HRC EN 14700 : E Z Fe15

Diameter	Standard Package	Standard Length	Standard Pallet
3.2mm	5kg/20kg	350mm	1000kg
4.0mm	5kg/20kg	400mm	1000kg
5.0mm	5kg/20kg	400mm	1000kg

#### DEPOSIT HARDNESS

Single Layer on Mild Steel	Typical Hardness 53-56 HRC
Multi-Layer	Typical Hardness 55-60 HRC

Single layer deposit hardness may vary depending on the base metal type and degree of dilution.







## HARDFACING ARC 9

CHROME CARBIDE HARDFACING ELECTRODE EN 14700 : E Z Feb

Diam	eter	Standard Package	Standard Length	Standard Pallet
3.2 r	mm	5kg/20kg	350mm	1000kg
4.0	mm	5kg/20kg	400mm	1000kg

### **DEPOSIT HARDNESS**

Single Layer on Mild Steel	44-49HRC
Multi-Layer as Welded	36-45HRC
Multi-Layer Work Hardened	48-53HRC

Single layer deposit hardness may vary depending on the base metal type and degree of dilution.

## HARDFACING ARC 65T

Hardfacing Electrode Against High Abrasives

### EN 14700: E Fe16

Diameter	Standard Package	Standard Length	Standard Pallet
.2 mm	5kg/20kg	350mm	1000kg
4.0 mm	5kg/20kg	400mm	1000kg

DEPOSIT HARDNESS					
PICAL HARDNESS 56-61 HRC					
PICAL HARDNESS 60-65 HRC					

#### Hardness 50 to 55HRC @ 600°C

Single layer deposit hardness may vary dependings in the base metal type and degree of dilution.









HARDFACING TC

V. HERE TO CA

### HARDFACING TC EN 14700 : EFe4

Hard, Shock Resistance Cr-Mo Deposit. Ideal for surfacing and Repairing High Speed Tool Steels. Suitable for repairing cutting edges, shear blades, punches, dies and lathe tools

					a 🦉	
Diameter	Standard Package		andard ength	Y	Standard Pallet	
2.6mm	5kg/20kg	3	00mm			
3.2mm	5kg/20kg	3	50mm			
4.0mm	5kg/20kg	5kg/20kg <b>400mm</b>				
	DEPOSI	T ŀ	IARDN	IE	SS	
Single Laye	r On Mild Steel	I			54-58 HRC	
Multi-Layer, As Welded					56-60 HRC	
Multi-Layer, Heat Treated					60-65HRC	

Single layer deposit hardness may vary dependings in the base metal type and degree of dilution.

## **HARDFACING Mn-Ni**

Rebuilding 3 EN 14700 Tough, work ha deposit. For rek steels. Deposite	: EF rdenable man building 11%-	<b>e9</b> ganese steel 14% mangane	se	HARDFA	CING Mn-Ni		
Diameter	Standard Package	Standard Length	Standard Pallet		All and		
3.2mm	5kg/20kg	350mm	1000kg				
4.0mm	5kg/20kg	400mm	1000kg				
5.0mm	5kg/20kg	400mm	1000kg				
	DEPOS	IT HARDNI	ESS				
Multi-Lay	er, As Welded	Туріса	l Hardness 18-	24HRC			
Multi-Layer,	Work Harden	ed Typica	l Hardness 40-	45HRC			
							_

Single layer deposit hardness may vary dependings in the base metal type and degree of dilution.





#### HARDSURFACING ELECTRODE



### **TUBUROD 33** (58-62HRC)

Hardfacing Tubular Electrode EN 14700 : E Fe9

OPERATIONAL AND PACKAGING DATA						
		WELDING	Packa	aging		
ELECTRODE SIZE (mm)	ELECTRODE LENGTH (mm)	CURRENT RANGE (amps)	РКТ	СТМ		
6-0	450	140 - 160	5	20		
8.0	450	150 - 180	5	20		

### Characteristics

Tubular electrode filled with chromium carbide powder. Deposit highly resistant to abrasion and mineral erosion. High amount of Cr carbides in an austenitic matrix, very compact. To consume with very low current. Agreeable melting. No slag. Deposit not machinable. Possibility to increase deposition by introducing a second electrode in the arc (double the recommended current). Surfacing of all austentic and Mn steels types, grey cast iron (without any preheating), tool steels or high alloyed steels (in this case, carry out a cushion layer with E307 electrodes.



Principally designed for Agriculture, Cement industries, Quarries, Brickyards, Civil engineering, for Screws of Brick press, for Excavating jars,....





### **POWERWELD Cu 112**

AWS A5.6: ECuSn-C DIN 1733: EL-CuSn7

			UNS	DIN	Material N
Standard	Standard		C50700	CuSn2	2.1010
Package	Length	Pallet	C51100	CuSn4	2.1016
		1000	C51900	CuSn6	2.1020
1kg/5kg/20kg	300mm	1000kg	C52100	CuSn8	2.1030
1kg/5kg/20kg	250.000	10001		CuSn6Zn	2.1080
ING/JNG/ZUNG	350mm	1000kg	C52400	G-CuSn10	2.1050
1kg/5kg/20kg	400mm	1000kg			
	Package 1kg/5kg/20kg 1kg/5kg/20kg	PackageLength1kg/5kg/20kg300mm1kg/5kg/20kg350mm	PackageLengthPallet1kg/5kg/20kg300mm1000kg1kg/5kg/20kg350mm1000kg	Standard PackageStandard LengthStandard PalletC507001kg/5kg/20kg300mm1000kgC511001kg/5kg/20kg300mm1000kgC521001kg/5kg/20kg350mm1000kgC52400	Standard PackageStandard LengthStandard PalletC50700CuSn21kg/5kg/20kg300mm1000kgC51100CuSn41kg/5kg/20kg300mm1000kgC52100CuSn81kg/5kg/20kg350mm1000kgCuSn6Zn1kg/5kg/20kg350mm1000kgC52400G-CuSn10

For Welding Bronze and Brass, as well as galvanised. Also suitable for Dissimilar Copper to Steel / Cast Iron Joint. AC/DC Electrode.





### **POWERWELD C & G**

### **CUTTING & GOUGING**



### C Applications

POWERWELD C & G electrodes are specially designed for powerfully effective cutting and grooving which can also be used for gouging and hole-piercing. It gives a concentrated forceful arc capable of penetrating plates up to 2.5mm in thickness.



#### **ALUMINIUM ELECTRODE**



POW	/ERV	NELC	) AL5	5		
AWS A5	5.3	: E40	)43			
DIN 173	32	: EL-	: EL-Al Si5			
EN 573	-3	: E A	lSi5			
Diameter	Standard Package	Standard Length	Standard Pallet			
2.6mm	1kg/6g	350mm	1000kg			
3.2mm	1kg/6g	350mm	1000kg			
4.0mm	1kg/6g	350mm	1000kg			
Applications						

Aluminium electrode with 5% Si for welding and repairing aluminium or aluminium alloy pieces (AiSi, AlCuSiMn, AlZnMg). For joints between aluminium and aluminium alloys. Can also used as a torch brazing alloy, for engine blocks, cylinder heads, tanks, containers, frames & lorry tipper.

DIN	Material N
G-AlSi6Cu4	3.2151
AIMgSil	3.2314
G-AISi5Mg	3.2341
G-AISi7Mg	3.2371
AIMgSiO,5	3.3206
AIMgSiO,7	3.3210
AIMgISiCu	3.3211

POV	<b>VER</b>	WEL	DA	L12
AWS A	5.3	: E4	4047	
DIN 17	32	: E	AlSi12	
EN 573	-3	: E	L-Al Si	12
Diameter	Standard Package	Standard Length	Standard Pallet	
2.6mm	1kg/6g	350mm	1000kg	
3.2mm	1kg/6g	350mm	1000kg	
4.0mm	1kg/6g	350mm	1000kg	
¢, App	olications	)		I

Aluminium electrode with 12.1% Si for welding and repairing aluiminium or aluminium alloy pieces (AiSi, AlCuSiMn, AlZnMg). For joint between aluminium and aluminium alloys. Can also be used as a torch brazing alloy, for engine blocks, cylinder heads, tanks, containers,

DIN	Material N
G-AlSi9Mg	3.2373
G-AlSi10Mg	3.2381
G-AlSi10MgCu	3.2383
G-AlSi 12	3.2581
G-AlSi 12Cu	3.2583







#### Racking for 1kg and 0.5kg of Electrode, Mig Wire, Tig Rod and Brazing Rod.

COREMAX 308LN is a self-shield rutile type flux cored wire, gas free, flat position welding support. It provides same function as conventional 308L. It mainly applied for welding thin plate base materials, some places like house repair, outdoor welding including island, dessert, or place that unable to provide gas cylinder easily and instead or smaller size stainless steel welding electrode, like size 1.6mm and 2.0mm.





### D100 Spool is available upon inquires for MIG wire products

SIZE AVAILABLE : 0.8mm, 0.9mm, 1.0mm, 1.2mm

### SOLID MIG WIRE

POWERMIG ES-4 | AWS A5.18 : ER70S-4 POWERMIG ES-6 | AWS A5.18 : ER70S-6 FLUX CORED WIRE

COREMAX 71 | AWS A5.20 : E71T-1C GASLESS | AWS A5.20 : E71T-GS

### STAINLESS STEEL SOLID MIG WIRE

MC-307M MC-309LSiM MC-309MoLM MC-310M

AWS A5.9 : ER307
AWS A5.9 : ER309LSi
AWS A5.9 : ER309LMo
AWS A5.9 : ER310

MC-312M MC-316LSiM MC-410M MC-308LSiM AWS A5.9 : ER312
AWS A5.9 : ER316LSi
AWS A5.9 : ER410
AWS A5.9 : ER308LSi

### ALUMINIUM SOLID MIG WIRE 0.5KG

MC-1100M	AWS A5.10 : ER1100
MC-4043M	AWS A5.10 : ER4043
MC-4047M	AWS A5.10 : ER4047
MC-5183M	AWS A5.10 : ER5183
MC-5356M	AWS A5.10 : ER5356







RECOMMENDED

Recommended for furniture manufacturing Industry with exellent wire feedability. Also recommended for thin plate application.

### **POWERMIG ES-G**

AWS A5.18	:	ER70S-G
EN ISO 14341-A	:	G 46 2 C1 Z
EN ISO 14341	:	G 46 2 M21 Z
EN ISO 14341-B	:	G 49A 2 C1 S11
EN ISO 14341	:	G 49A 2 M21 S11
JIS Z3312	:	YGW11

Diameter	Standard Package	Standard Pallet
0.8mm	1kg	1000kg
0.8mm	5kg	1000kg
0.8mm	15kg	1000kg





### **POWERMIG ES-6**

EN ISO 14341-B : EN ISO 14341-B :	G 42 3 C1 3Si1 G 42 3 M21 3Si1 G 49A 3 C1 S6	POWER POWERN	IG ES-G	
POWERMIG ES-6		ES-6		
		Diamete	r Standard Package	Standard Pallet
	are and a second se	0.6mm	5kg Spool	1080kg
	ĥ	0.6mm	15kg Spool	200kg
ac so	> 0	0.8mm	1kg Spool	1000kg
	WELDING WIRE ERTOS-4	0.8mm	5kg Spool	1080kg
	L-*2	0.8mm	15kg Spool	1080kg
WILDING WHILE DRYNG-1		0.8mm	250kg Pail Spool	1080kg
11 + <b>₹</b> .44 1981 - 18		1.0mm	15kg Spool	1080kg
		1.0mm	250kg Pail Spool	1080kg
		1.2mm	15kg Spool	1080kg
		1.2mm 1.2mm 1.6mm	15kg Spool 250kg Pail Spool 15kg Spool	1080kg 1080kg 1080kg

\*0.6mm MIG wire also available in 5kg and 15kg spool.





MC-309MoLM					
AWS A5.9	)	:	ER	309LMo	
EN ISO 14	343 A	:	W	23 12 2 1	
ENISO 14	343-B	:	SS	309LMo	
JIS Z3321		:	YS	309LMo	
Diameter	Standa Packa			Standard Pallet	
Diameter 0.8mm		ge			
	Packa	ge Spo		Pallet	



AWS A5.9 EN ISO 14 JIS Z3321	: ER3 343-A : W 2 : Y30	18 8 Mn
Diameter	Standard Package	Standard Pallet
1.0mm	12.5kg Spool	1000kg
1.2mm	12.5kg Spool	1000kg



## MC-309LSiM

AWS A5.9 EN ISO 14 EN ISO 14 JIS Z3321	343-A : G23 343 B : SS	309LSi 3 12 L Si 309LSi 309LSi
Diameter	Standard Package	Standard Pallet
0.8mm	5kg Spool	1000kg
0.8mm	12.5kg Spool	1000kg
1.0mm	12.5kg Spool	1000kg
1.2mm	12.5kg Spool	1000kg





#### STAINLESS STEEL MIG WIRE



## MC-312M

AWS A5.9 : ER312	
EN ISO 14343-A : SS 312	
EN ISO 14343 B : SS 312	Mastcord /
JIS Z3321 : YS312	Andrea more
Diameter Standard Standard Package Pallet	
1.0mm 12.5kg Spool 1000kg	
1.2mm 12.5kg Spool 1000kg	



### STAINLESS STEEL MIG WIRE

	BEST SELLER
MC-4 AWS A5.9 EN ISO 14 EN ISO 14 JIS Z3321	) : ER410 1343-A : G 13 1343-B : SS410
Diameter	Standard Standard Package Pallet
0.8mm	12.5kg Spool 1000kg
0.8mm 1.0mm	12.5kg Spool       1000kg         12.5kg Spool       1000kg



MC-316LSiM	ST SELLER
------------	-----------

AWS A5.9	:	ER316LSi
EN ISO 14343 A	:	G 19 12 3 L Si
EN ISO 14343 B	:	SS 316LSi
JIS Z 3321	:	YS316LSi

Diameter	Standard Package	Standard Pallet
0.8mm	1kg	1000kg
0.8mm	5kg	1000kg
0.8mm	12.5kg	1000kg
0.9mm	12.5kg	1000kg
1.0mm	12.5kg	1000kg
1.2mm	12.5kg	1000kg
1.6mm	12.5kg	1000kg







 1.0mm
 12.5kg

 1.2mm
 12.5kg

 1.6mm
 12.5kg

\*0.6mm also available in 5kg and 12.5kg spool.





### MC-Ni 55%

FOR WELDING DUCTILE PIPE AND CAST IRON BASE METAL Diameter Standard Package Standard Pallet 1.2mm 12.5kg/15kg Spool/D300 1000kg

High strength Fe-Ni alloy for welding of cast iron and for joining cast-iron to steel. Also suitable for welding ductile iron and pipe of which strength is required.



#### **ALUMINIUM SOLID MIG WIRE**

### **MC-1100M**

AWS A5.10	: ER110	00
EN ISO 1827	'3 : S AI 1	100 (Al99, OC
Diameter	Standard Package	Standard Pallet
0 <sub>.</sub> 8mm	500g Spool/D100	200kg
0.8mm	2kg Spool/D200	200kg
0.8mm	7kg Spool/D300	840kg
1.0mm	7kg Spool/D300	840kg
1.2mm	7kg Spool/D300	840kg

For welding unalloyed aluminium, pure aluminium AL 99.5. Suitable for base materials such as 1050A, 1070A, 1100 and 1200.





#### **MC-4043M** AWS A5.10 ER4043 EN ISO 18273 S AI 4043 (AISi5) Standard Pallet Diameter Standard Package 500g Spool/D100 0<sub>.</sub>8mm 200kg 0.8mm 2kg Spool/D200 200kg

0.8mm	7kg Spool/D300	840kg
1.0mm	7kg Spool/D300	840kg
1.2mm	7kg Spool/D300	840kg

 $\hat{\mathbf{O}}_{\mathbf{O}}$ Applications For welding of AISi and AIMgSi alloys containing up

7% Si. Suitable for base materials such as 3003, 3103, 3004, 4005, 6013, 6060 and 6082.

#### MC-4047M AWS A5.10 ER4047 EN ISO 18273 S AI 4047 (AISi 12) • Standard Pallet Diameter Standard Package 500g Spool/D100 0\_8mm 200kg 0.8mm 2kg Spool/D200 200kg 840kg 0.8mm 7kg Spool/D300 7kg Spool/D300 1.0mm 840kg 1.2mm 7kg Spool/D300 840kg 0<sub>0</sub> Applications

For welding of AISi and AIMgSi alloys containing up 12% Si. Suitable for base materials such as 3003 and 4045.







### MC-5183M

AWS A5.10 EN ISO 18273	: ER5183 : S AI 518	3 (AIMg4, 5N
Diameter	Standard Package	Standard Pallet
1.0 mm	7kg Spool/D300	840kg
1.2mm	7kg Spool/D300	840kg

For base material 5083, 5086, 5454, 5754 and 7020.

### MC-5356M

I ISO 18	273 :	S AI !	55356 (A
ameter	Standard P	ackage	Standard Pallet
0.8mm	500g Spoo	I/D100	200kg
0.8mm	2kg Spool/	/D200	200kg
0.8mm	7kg Spool,	/D300	840kg
1.0mm	7kg Spool,	/D300	840kg
1.2mm	7kg Spool,	/D300	840kg
1.6mm	7kg Spool,	/D300	840kg

AlSi and AlMgSi alloys containing a magnesium-alloyed AlMg5 wires for welding od seawater corrosion resistance AlMg5 wires for welding of seawater corrosion resistance AlMg alloys with up to 5% Mg. Suitable for base material such as 5005, 5019, 5050, 5052, 5086, 6013, 6060, 6061, 6063, 6082, 7005, 7021, 7029, 7039 and 7050.



#### COPPER ALLOY MIG WIRE

### MC-CuM

AWS A5.7 : ERCu ISO 24373 : S Cu 1898 (CuSn1)

Diameter	Standard Package	Standard Pallet
0.8mm	15kg Spool	1080kg
1.0mm	15kg Spool	1080kg
1.2mm	15kg Spool	1080kg
Application	s	

For welding pure copper base material.



### MC-CUSIM

AWS A5.7 : ERCuSi-A ISO 24373 : S Cu 6560 (CuSi3Mn1) JIS Z 3341 : Y CuSi B

Diameter	Standard Package	Standard Pallet
0.8mm	15kg Spool	1080kg
1.0mm	15kg Spool	1080kg
1.2mm	15kg Spool	1080kg
1.6mm	15kg Spool	1080kg

### Applications

Recommended for welding bronzes, brass and MIG-brazing of galvanized sheets.



		Fallet
0.8mm	15kg Spool	1080kg
1.0mm	15kg Spool	1080kg
1.2mm	15kg Spool	1080kg

Applications

**MC-CuAIM** 

Welding of aluminium bronze piping resistant to Seawater corrosion, erosion and cavitation.







SORE	X SI	FC-3	09L
AWS A5.22 EN ISO 17633 JIS Z3323	: 3-A : :	E309LT T 23 12 TS309L	2 L P C/M2
Diameter	Standar	d Package	Standard Pallet
0.9mm	5kg	Spool	1000kg
1.2mm	12.5	kg Spool	1000kg
1.6mm	12.5	kg Spool	1000kg

### **SOREX SFC-316L** AWS 45 22 F316IT1-1/4

: E31	.6611-1/4
3-A: T 19	9 12 3 L P C/M2
: TS3	16L-FB1
Standard Packa	ge Standard Pallet
5kg Spool	1000kg
12.5kg Spool	1000kg
	1000kg
	3-A : T 19 : TS3 Standard Packa 5kg Spool

## SOREX SFC-308L

AWS A5.22 EN ISO 17633 JIS Z3323	B-A: T19	8LT1-1/4 9 L P C/M2 08L-FB1
Diameter	Standard Packa	age Standard Pallet
0.9mm	5kg Spool	1000kg
1.0mm	12.5kg Spool	1000kg
1.2mm	12.5kg Spool	1000kg
1.6mm	12.5kg Spool	1000kg

#### **FLUX CORED WIRED**





1.01111	13Kg 36001	IUUUKg
1.2mm	15kg Spool	1080kg
1.6mm	15kg Spool	1080kg

\*Also available in 5kg D200 spool packing.

MC-71T is a gas shielded, general purpose, flux cored welding wire designed for all position welding of mild steel in applications requiring moderate levels of strength and very good notch toughness. Stable arc good slag removal and excellent X-ray quality. Suitable for butt and fillet welding of hulls, storage tanks, mechanical and constructional steel structure and bridge..

### **COREMAX 71L-T**

AWS A5.20	:	E71T-9C
AWS A5.36	:	E71TI-CIA2-CSI-H4
EN ISO 17632-A	:	T42 2 P CI I H5
EN ISO 17632-B	:	T49 3 TI-ICIA H5
JIS Z 3313	:	T43 3 TI-ICA H5

Diameter V	Standard Package	Standard Pallet
1.0mm	15kg Spool	1080kg
1.2mm	15kg Spool	1080kg
1.6mm	15kg Spool	1080kg



MC-71T is a gas shielded, general purpose, flux cored welding wire designed for all position welding of mild steel in applications requiring moderate levels of strength and very good notch toughness. Stable arc good slag removal and excellent X-ray quality. Suitable for butt and fillet welding of hulls, storage tanks, mechanical and constructional steel structure and bridge..

emax Ti



#### FLUX CORED WIRED



# **SOREX SFC- 71**

Diameter	Standard Package	Standard Pallet
.2mm	15kg Spool	1080kg
1.6mm	15kg Spool	1080kg

All-positional rutile flux cored wire designed to be used with CO2 or Ar/CO2 gas mixture. It can be used on all positional welds with both single and multiple pass welds for mild steel and low alloy steels. It is widely used for shipbuilding, storage vessels, structural fabrication, machinery and piping, etc.





# **COREMAX 71 - GS**

AWS A5.20 : E711-GS			
Diameter	Standard Package	Standard Pallet	
0.8mm	1kg/D100	1000kg	
0.8mm	5kg/D200	1000kg	
0.9mm	1kg/D100	1000kg	
0.9mm	5kg/D200	1000kg	
1.0mm	1kg/D100	1000kg	
1.0mm	5kg/D200	1000kg	

### Applications

Self-shielded flux cored wire for general purpose use and weldeing in all positions. It's especially suited for single pass and thin-gauge and galvanized steel.



#### HARDFACING FLUX CORED WIRE



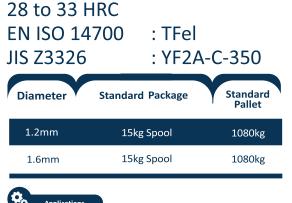
### COREMAX H33

CHROME CARBIDE 57 to 62 HRC EN ISO 14700 : TZ Fe14



Hard alloyed chromium cabide deposit for single layer welding very resistant to abrasion but very limited resistance to impact. The weld metal cracks to relieve cooling stresses. Ideal for application such as dredge pump component, wear plates, mixer blades, etc.

### COREMAX H350



Hard surfacing of parts which is suitable for intermetallic abrasion and soil abrasion with light impact. Ideal for applications such as various wheels, shafts, gears, steel casting rollers and part of bulldozer, etc.





#### **COREMAX H600** 55 to 60 HRC EN ISO 14700 : TFe2 **JIS Z3326** : YF3B-C-600 Standard Diameter **Standard Package** Pallet 1.2mm 15kg Spool 1080kg 15kg Spool 1.6mm 1080kg

Hard surfacing of parts which is suitable for stronger intermetallic and soil abrasion with light impact. Ideal for applications such as various wheels bucket edges, sprockets and dipper teeth.



#### MILD AND CARBON STEEL SAW WIRE



### **POWERWELD S-2** AWS A5.17 : EM-12K

Diameter	Standard Package	Standard Pallet
2.0mm	30kg Coil	1080kg
2.4mm	30kg Coil	1080kg
3.2mm	30kg Coil	1080kg
4.0mm	30kg Coil	1080kg
4.8mm	30kg Coil	1080kg

450kg/700kg/1000kg in Bulk Reel and without Reel also available.

# **POWERWELD S-1**

AVV5 A5.1		
Diameter	Standard Package	Standard Pallet
2.0mm	30kg Coil	200kg
2.4mm	30kg Coil/450kg/700kg	200kg
3.2mm	30kg Coil/450kg/700kg	840kg
4.0mm	30kg Coil/450kg/700kg	840kg

### Characteristics 450kg/700kg/1000kg in Bulk Reel and

without Reel also available.



POWERWELD S1 is a copper coated, nominal 0.5% Mn solid steel wire, suitable for a whole range of submerged arc fillet / butt welding and hard surfacing application. POWERWELD S1 wire is very low in deoxidant, must be used with agglomerated saw flux.





### **POWERWELD S-308L**

Diameter	Standard Package	Standard Pallet
2.4mm	25kg Coil	1000kg
3.2mm	25kg Coil	1000kg
4.0mm	25kg Coil	1000kg

It is an extra low carbon stainless wire used for common austenitic stainless steels referred to as "18% Cr- 8% Ni" steels. Typical for steels arc 302, 304 and 304L.

### **POWERWELD S-309L**

AWS A5.9: ER 309L

Applications



It is an extra low carbon stainless wire used for cladding and joining od dissimilar steels such as "18% Cr- 8% Ni" to mild steel. Also suitable for underlaying on ferritic steel for overlaying stainless steel weld metal.



### **POWERWELD S-316L**

#### AWS A5.9: ER 316L

Diameter	Standard Package	Standard Pallet
2.4mm	25kg Coil	1000kg
3.2mm	25kg Coil	1000kg
4.0mm	25kg Coil	1000kg

It is an extra low carbon stainless wire used for joining and cladding of 316 and 316L stainless steel. Can be used on "18% Cr 8% Ni" steels.

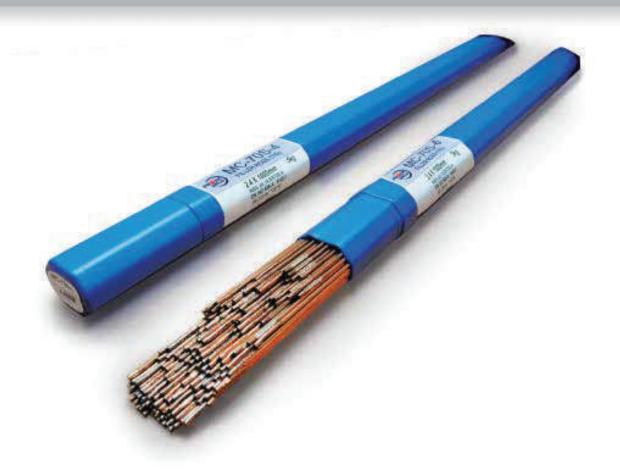


### SUBMERGED ARC WELDING FLUX





#### **CARBON STEEL TIG ROD**



## MC 70S-6

Diameter

1.2mm

1.6mm

2.0mm

2.4mm

3.2mm

AWS A5.18	:	ER70S-6
EN ISO 636-A	:	W 46 3 3Si1
EN ISO 636-B	:	W 49A 3U 6
JIS Z3316	:	W 49 A 3U 6

Standard Length

1000mm

1000mm

1000mm

1000mm

1000mm

Standard Package

5kg

5kg

5kg

5kg

5kg

## **MC 70S-4**

AWS A5.18 EN ISO 636-A EN ISO 636-B JIS Z3316			3 2Si1 A 3U 4
Diameter	Standard Package	Standard Length	Standard Pallet
1.2mm	5kg	1000mm	1000kg
1.6mm	5kg	1000mm	1000kg
2.0mm	5kg	1000mm	1000kg
- 2.4mm	5kg	1000mm	1000kg

1000mm

1000kg

3.2mm

5kg

Standard Pallet

1000kg

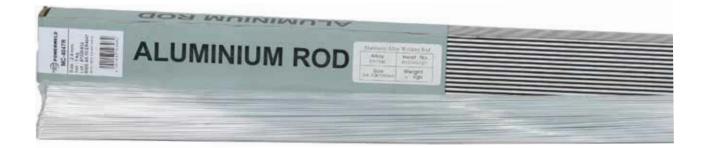
1000kg

1000kg

1000kg

1000kg







MC 4	0471	R		
AWS A5.	10 :	ER4047		
EN ISO 1	8273 :	S AI 404	7 (AISi 1	12)
Diameter	Standard Package	Standard Length	Standard Pallet	
1.6mm	5kg	1000mm	1000kg	
2.4mm	5kg	1000mm	1000kg	
3.2mm	5kg	1000mm	1000kg	
Applicatio	ons			

For welding of AlSi and AlMgSi alloys containing up 12% Si. Suitable for base materials such as 3003 and 4045.

## MC-5356R

AWS A5. EN ISO 1		ER5356 S AI 535	6 (AIMg
Diameter	Standard Package	Standard Length	Standard Pallet
1.6mm	5kg	1000mm	1000kg
2.4mm	5kg	1000mm	1000kg
2.0mm	5kg	1000mm	1000kg
3.2mm	5kg	1000mm	1000kg

### Applications

AlSi and AlMgSi alloys containing a magnesium-alloyed AlMg 5 wires for welding of seawater corrosion resistance AlMg alloys with up to 5% Mg. Suitable for base material such as 5005, 5019, 5050, 5052, 5086, 6013, 6060, 6061, 6063, 6082, 7005, 7021, 7029, 7039 and 7050.





## **MC-1100R**

AWS A5.10 : ER1100 EN ISO 18273 : S AI 1100(Al99, OCu)

Diameter	Standard Package	Standard Length	Standard Pallet
1.6mm	5kg	1000mm	1000kg
2.4mm	5kg	1000mm	1000kg
3.2mm	5kg	1000mm	1000kg

For welding unalloyed aluminium AL 99.5. Suitable for base material such as 1050A, 1070A, 1100 and 1200.

## MC-5183R

AWS A5.10 : ER5183 EN ISO 18273 : S AI 5183(AlMg4, 5Mn0, 7)

Diameter	Standard Package	Standard Length	Standard Pallet
1.6mm	5kg	1000mm	1000kg
2.4mm	5kg	1000mm	1000kg
3.2mm	5kg	1000mm	1000kg

Solid rod for gas protected welding of aluminium-magnesium alloys if similar composition the deposit shows de to the addtion of Mn superior mechanical resistance compared to AIMg5. Suitable for base material such as 5083, 5086 and 5454.

## MC-4043R

AWS A5.10 : ER1100 EN ISO 18273 : S AI 1100(Al99, OCu)

Diameter	Standard Package	Standard Length	Standard Pallet
1.6mm	5kg	1000mm	1000kg
2.4mm	5kg	1000mm	1000kg
3.2mm	5kg	1000mm	1000kg
Co Applicatio	ns		

For welding of AlSi and AlMgSi alloys containing up 7 % Si. Suitable for base materials such as 3003, 3103, 3004, 4005, 6013, 6060 and 6082.





### CAST IRON TIG ROD



## MC-Ni100R

Diameter	Standard Package	Standard Length	Standard Pallet
1.6mm	1kg/5kg	1000mm	1000kg
2.4mm	1kg/5kg	1000mm	1000kg

Weld deposit easy to machine. Repairing of engine blocks, gearboxes, valve and pump bodies.

### MC-Ni55R

Diameter	Standard Package	Standard Length	Standard Pallet
1.6mm	1kg/5kg	1000mm	1000kg
2.4mm	1kg/5kg	1000mm	1000kg

Used in welding and repairing of cast iron either cold or after moderate heating. Weld deposit can be machined.





## **MC-308LR**

AWS A5.9	:	ER308L
EN ISO 14343 A	:	G 19 9 L
EN ISO 14343 B	:	SS 308L
JIS Z3321	:	Y308L

Diameter	Standard Package	Standard Length	Standard Pallet
1.0mm	5kg	1000mm	1000kg
1.2mm	5kg	1000mm	1000kg
1.6mm	5kg	1000mm	1000kg
2.0mm	5kg	1000mm	1000kg
2.4mm	5kg	1000mm	1000kg
3.2mm	5kg	1000mm	1000kg

## MC-308LSiR

AWS A5.9:ER308LSiEN ISO 14343 A:G 19 9 L SiEN ISO 14343 B:SS 308LSiJIS Z3321:Y308LSi			
Diameter	Standard Package	Standard Length	Standard Pallet
1.0mm	5kg	1000mm	1000kg
1.2mm	5kg	1000mm	1000kg
1.6mm	5kg	1000mm	1000kg
- 2.0mm	5kg	1000mm	1000kg
2.4mm	5kg	1000mm	1000kg
3.2mm	5kg	1000mm	1000kg



MC-309MoLR FILLER RODS (TIG.)

## MC-309MoLR

AWS A5.9 : ER309LMo EN ISO 14343-A : W 23 12 2 L EN ISO 14343-B : SS 309LMo JIS Z3321 : YS309LMo

FILLER RODS (TIG)

MC-309LR

Diameter	Standard Package	Standard Length	Standard Pallet
1.6mm	5kg	1000mm	1000
	5kg	1000mm	1000kg

## **MC-309LR**

AWS A5.9 : ER309L EN ISO 14343-A : W23 12 L EN ISO 14343-B : SS 309L JIS Z3321 : Y309L					
Diameter	Standard Package	Standard Length	Standard Pallet		
1.0mm	5kg	1000mm	1000kg		
1.2mm	5kg	1000mm	1000kg		
1.6mm	5kg	1000mm	1000kg		
- 2.0mm	5kg	1000mm	1000kg		
2.4mm	5kg	1000mm	1000kg		
3.2mm	5kg	1000mm	1000kg		

## MC-309LSiR

AWS A5. EN ISO 1 EN ISO 1 JIS Z332	9LSi 12 L Si 9LSi 9LSi		
Diameter	Standard Package	Standard Length	Standard Pallet
1.0mm	5kg	1000mm	1000kg
1.2mm	5kg	1000mm	1000kg
1.6mm	5kg	1000mm	1000kg
- 2.0mm	5kg	1000mm	1000kg
2.4mm	5kg	1000mm	1000kg
3.2mm	5kg	1000mm	1000kg





## **MC-310R**

AWS A5	.9	: ER31	0	
EN ISO 1	.4343-A	: W 25	: W 25 20	
EN ISO 14343-B : SS 310				
JIS Z3321 : YS310				
Diameter	Standard Package	Standard Length	Standard Pallet	
Diameter 1.6mm				

### MC-307R AWS A5.9 : ER307 EN ISO 14343-A : W 18 8 Mn JIS Z3321 : Y307

Diameter	Standard Package	Standard Length	Standard Pallet
1.6mm	5kg	1000mm	1000kg
2.4mm	5kg	1000mm	1000kg

## MC-312R AWS A5.9 : ER312 EN ISO 14343-A : W 29 9 EN ISO 14343 B : SS 312 JIS Z3321 : YS312

Diameter	Standard Package	Standard Length	Standard Pallet
1.6mm	5kg	1000mm	1000kg
2.0mm	5kg	1000mm	1000kg
2.4mm	5kg	1000mm	1000kg



A Liver and A	
	MC-316LR N114 INFORMATION See
MC-410R AWS A5.9 : ER410 EN ISO 14343-A : W 13 EN ISO 14343-B : SS410 JIS Z3321 : YS410 Diameter Standard Length Standard Pallet	MC-410R FILLER RODS (TIO) AA VUMME WE ADDRESS WIT
1.6mm       5kg       1000mm       1000kg         2.4mm       5kg       1000mm       1000kg         MC-316LR         AWS A5.9       :       ER316L         EN ISO 14343-A       :       W 19 12 3 L         EN ISO 14343-B       :       SS 316L         JIS Z3321       :       YS316L	MC-316LSIR         AWS A5.9       : ER316LSi         EN ISO 14343 A       : G 19 12 3 L Si         EN ISO 14343 B       : SS 316LSi         JIS Z3321       : YS316LSi
DiameterStandard PackageStandard LengthStandard Pallet1.0mm5kg1000mm1000kg	DiameterStandard PackageStandard LengthStandard Pallet1.0mm5kg1000mm1000kg

	Раскаде	Length	Fallet
1.0mm	5kg	1000mm	1000kg
1.2mm	- 5kg	1000mm	1000kg
1.6mm	5kg	1000mm	1000kg
2.0mm	5kg	1000mm	1000kg
2.4mm	5kg	1000mm	1000kg
3.2mm	5kg	1000mm	1000kg

1.2mm 1.6mm

2.0mm

2.4mm

3.2mm

5kg

5kg

5kg

5kg

5kg

1000mm

1000mm

1000mm

1000mm

1000mm

1000kg

1000kg

1000kg 1000kg

1000kg



#### COBALT BASE TIG ROD



## MC-TIG C01

AWS A5.21 EN 14700 DIN 8555 : ERCoCr-C : S Co3

: WSG-20-G0-55-CSTZ

Cobalt Base continues cast hardfacing rod for TIG and oxy-acetylene welding. Very good resistance to metal-metal wear, abrasion and corrosion and heat up to 900°C. Excellent gliding characteristics, good to polish. Only machinable with tungsten carbide tools or by grinding.

Main applications: Cutting tools, shredding tools, mixing and drilling tools, hot working tools without thermal shock, extrusion screws.

Diameter	Standard Package	Standard Length	Standard Pallet
2.7mm	5kg	1000mm	1000kg
3.2mm	5kg	1000mm	1000kg
4.0mm	5kg	1000mm	1000kg

## MC-TIG C06

AWS A5.21 EN 14700 DIN 8555 : ERCoCr-A : S Co2 : WSG-20-GO-40-CTZ

Cobalt Base continues cast hardfacing rod for TIG and oxy-acetylene welding. Very good resistance to metal-metal wear, cavitation and corrosion as well as heat up to 900°C. Excellent gliding characteristics, good to polish, nonmagnetic. Machinable with tungsten carbide tools or by grinding.

Main applications: Valves, valve seats and other sealing faces, hot press tools, pump parts, extrusion screws.

Diameter	Standard Package	Standard Length	Standard Pallet
2.7mm	5kg	1000mm	1000kg
3.2mm	5kg	1000mm	1000kg
4.0mm	5kg	1000mm	1000kg



#### **COPPER ALLOY TIG ROD**

ADDITION OF A



## **MC-CuR**

AWS A5.7 : ERCu EN ISO 24373 : S Cu 1898 (CuSn1)

Diameter	Standard Package	Standard Length	Standard Pallet
1.6mm	5kg	1000mm	1000kg
	5kg	1000mm	1000kg
3.2mm	5kg	1000mm	1000kg

For welding copper where high electrical conductivity is required.

## **MC-CUAIR**

VVAWS A5.7 : ERCuAl-A2

EN ISO 24373 : S Cu 6180 (CuAl10Fe)

	Diameter	Standard Package	Standard Length	Standard Pallet
	1.6mm	5kg	1000mm	1000kg
	- 2.4mm	5kg	1000mm	1000kg
1				

#### Q<sub>0</sub> Applications

Use for welding of aluminium- bronze piping resistance to seawater corrosion and erosion.

# **MC-CuSiR**

## AWS A5.7 : ERCuSi-A

EN ISO 24373 : S Cu 6560 (CuSi3Mn1)

Diameter	Standard Package	Standard Length	Standard Pallet
1.6mm	5kg	1000mm	1000kg
	5kg	1000mm	1000kg

### Applications

It is used in welding of galvanized sheets and also for welding bronze and brass.



#### GAS WELDING ROD



### POWERWELD MSS ROD

UNCOPPER COATED ROD

Diameter	Standard Package	Standard Length	Standard Pallet
1.2mm	5kg	1000mm	1000kg
- 1.6mm	5kg	1000mm	1000kg
2.0mm	5kg	1000mm	1000kg
- 2.6mm	5kg	1000mm	1000kg
3.2mm	5kg	1000mm	1000kg

## **POWERWELD S-222**

### LOW FUME BRONZE ROD

Diameter	Standard Package	Standard Length	Standard Pallet
1.6mm	5kg	1000mm	1000kg
2.4mm	5kg	1000mm	1000kg
3.2mm	5kg	1000mm	1000kg

### **POWERWELD OSS-11**

COPPER COATED ROD

Diameter	Standard Package	Standard Length	Standard Pallet
1.2mm	5kg	1000mm	1000kg
1.6mm	5kg	1000mm	1000kg
2.0mm	5kg	1000mm	1000kg
2.6mm	5kg	1000mm	1000kg
3.2mm	5kg	1000mm	1000kg





#### TRANSFORMER ARC WELDING MACHINE

### TRANSFORMER ARC WELDING MACHINE 🖊 COPPER COIL



### AC-315

The AC-315 is mostly widely be used in welding field, AC arc welding machine. Widely be used in welding low carbon steel, low alloy steel. 35% rated duty cycle, overloading protection. Transformer is rolled around, with H level material, high welding efficiency, long using lifetime.

#### Specifications

Stel shrinkiddatatatatatat	
Input Voltage	415V 2ph 50HZ
NO-load Voltage	70A
Rated Output Current	315A
<b>Output Current Range</b>	70-315A
Duty Cycle	35% 315A / 100%185A
<b>Rated Input Capacity</b>	21KVA
Cooling mode	Air-cooling
Weight	72KG
Insulation	Н
Protection Class	IP21S
	1.6~5.0mm 5.0mm

### AC-400

The AC-400 is mostly widely be used in welding field, AC arc welding machine. Widely be used in welding low carbon steel, low alloy steel. 35% rated duty cycle, overloading protection. Transformer is rolled around, with H level material, high welding efficiency, long using lifetime.

	Sp	ecif	icat	ions	
--	----	------	------	------	--

Input Voltage	415V 2ph 5	OHZ	
NO-load Voltage	72A		
Rated Output Current	400A		
<b>Output Current Range</b>	85-400A		
Duty Cycle	35% 400A	1	100%236A
<b>Rated Input Capacity</b>	32.5KVA		
Cooling mode	Wind-coolin	g	
Weight	78KG		
Insulation	IP21S		
Protection Class	н		





### AC-500

The AC-500 is mostly widely be used in welding field, AC arc welding machine. Widely be used in welding low carbon steel, low alloy steel. 35% rated duty cycle, overloading protection. Transformer is rolled around, with H level material, high welding efficiency, long using lifetime.

#### Specifications

Input Voltage	415V 2ph 5	OHZ	2		
NO-load Voltage	70A				
Rated Output Current	500A				
Output Current Range	105-500A				
Duty Cycle	35% 500A	1	100%295A		
Rated Input Capacity	42KVA				
Cooling mode	Wind-coolin	g			
Weight	96KG				
Insulation	IP21S				
Protection Class	н			L	L
HANGE WITHOUT PRIOR NO	TICE & EXCLU	DE	5% GST***	1.6~5.0mm	5.0mm

\*\*\*PRICE ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE & EXCLUDE 6% GST\*\*\*

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#### MOULD REPAIRING TIG ROD



## **BK-660R**

Diameter	Standard Package	Standard Length
1.2mm	1kg/5kg	1000kg
1.6mm	1kg/5kg	1000kg

# CENA-R

Diameter	Standard Package	Standard Length
1.2mm	1kg/5kg	1000kg
1.6mm	1kg/5kg	1000kg



For base material SKD 11.

## BKD-61R

Diameter	Standard Package	Standard Length
0.8mm	1kg/5kg	1000kg
1.0mm	1kg/5kg	1000kg
1.2mm	1kg/5kg	1000kg
1.6mm	1kg/5kg	1000kg
2.4mm	1kg/5kg	1000kg

### Applications

For base material ASSAB 8407, SKD 61, CALMAX, DAC, FDAC, HDS-1, DHA 1 and DHZF.

For base material CENA 1.

Applications



### MOULD REPAIRING TIG ROD



## **NSM-R**

Diameter	Standard Package	Standard Length
1.6mm	1kg/5kg	1000kg
<b>O</b> Annelication		

For base material managing steel.

## **BKD-11R**

Standard Package	Standard Length
1kg/5kg	1000kg
	1kg/5kg 1kg/5kg 1kg/5kg 1kg/5kg

For base material SKD 11, XW-41, PD 613, HPM 31 and XW-10.

CM-3F	2	
Diameter	Standard Package	Standard Length
0. <b>8</b> mm	5kg	1000mm
1.0mm	5kg	1000mm
1.2mm	5kg	1000mm
1.6mm	5kg	1000mm
2.4mm	5kg	1000mm

### Applications

Build-up repairing if sun steel plastic needed , For base material KP-4, PDS3, HIT 82 Assab 718, MUM and SD61.



### MOULD REPAIRING TIG ROD



Diameter	Standard Package	Standard Length
0.9mm	1kg/5kg	1000kg
1.2mm	1kg/5kg	1000kg
1.6mm	1kg/5kg	1000kg

### Applications

For base material Nak-55, Nak-80, HPM 1 and HPM 50.

ITX-5	OR		BKH-1	3R	
Diameter	Standard Package	Standard Length	Diameter	Standard Package	Standard Length
0.8mm	1kg/5kg	1000kg	0.8mm	1kg/5kg	1000kg
1.0mm	1kg/5kg	1000kg	1.0mm	1kg/5kg	1000kg
1.2mm	1kg/5kg	1000kg	1.2mm	1kg/5kg	1000kg
1.6mm	1kg/5kg	1000kg	1.6mm	1kg/5kg	1000kg
2.4mm	1kg/5kg	1000kg	2.4mm	1kg/5kg	1000kg

For base material ASSAB 760,S45C and S50C

For base material STAVAX, RAMAX, HPM 38 and PD555.





Diameter	Size	Application and Description	Hardness
	0.3mm	For joining mild and high tensile steel. Also suitable	Hardness; ~200HB
NTG-M 0.4mm		for buffer layer and weld metal crack repairing. Suitable for base metal Awsab 7660, S45C, S48C,	
	0.6mm S50C, etc.		
	0.2mm	Build up repairing for SCM carbon steels mould and	Hardness;
	0.3mm	plastic mould. Also suitable for KP-4, HPM 17, PDS-3, HB, ASSAB 718.	28 to 31 HRC
CM-3M	0.4mm		
	0.5mm		
	0.6mm		
	0.2mm	Build up for various mould such as plastic	Hardness;
	0.3mm	precision mould, die casting mould, forging mould, hot forging dies etc. Also suitable for PD	48 to 53 HRC
ВКН-13М	0.4mm	555, HPM 38, STAVAX etc.	
	0.5mm		
	0.6mm		
BKD-11M	0.6mm	Build up repairing of SKD 11 tool steel mould. Also suitable for PD613, HPM31, XW-10,	Hardness; 35 to 38 HRC Hardening & 200C
DIG IIW	0.7mm	XW-41, STD 11.	Tempering; 58 to 62 HRC
	0.2mm	Hard surfacing for forging moulds or SKD-61 tool	Hardness;
	0.3mm	steels mould. Also suitable for ASSAB 8407, QRO 90, H13, DHA1.	51 to 55 HRC
BKD-61M	0.4mm		
	0.5mm		
	0.6mm		
	0.2mm	Build up repairing for NAK-50, NAK-80 and Cr Mo tool	Hardness;
	0.3mm	Steel moulds. Also suitable for HPM 50, KMS1, HP-70 and ASSAB 718 HI Hard.	51 to 55 HRC
NAK-80M	0.4mm		
	0.5mm		
	0.6mm		
AL-4043M	0.3mm	For welding aluminium alloys 6061, 6063, 5050, 5154, 3003 and 2024.	
AL-5356M	0.3mm	For welding aluminium 5005, 5050, 5052 and 5086.	
	0.3mm	For welding problem steels, high carbon steels, high	Hardness;
HE-500M 0.4mm		alloy steels, tool steels etc. Also suitable for buffering on problem steels.	20 to 23 HRC

#### **UNDER WATER CUTTING**

#### 水中切断棒

酸素アーク切断は、操作が簡単で安価な器具で行える事から、 長きにわたり行われてきた方法ですが、使用する電極棒の価格 (高価)やフラックスの保護(水中での剥離)等に問題がありました。 そこで弊社は、約30年前に特殊鋼管に二重コーティングを施した 画期的な水中切断電極棒を開発し、フラックスの剥離や電撃から の危険性が無くなりました。

W-7・SC9-5W・SC8-5W等の水中切断電極棒は、現在の海洋開発時代に自動器具にも負けない作業の高効率と経済性で皆様に認めて戴いている商品です。

#### **UNDER WATER CUTTING**

Oxygen Arc Cutting has been popular a long time because of easy operation and economical equipement, but there are some problems in price of electrodes, protect of flux, etc.Now, the Special Under-Water Cutting Electrodes with double coating on the special tube is developed, and there is no trouble in falling- out of coating on flux and electric strike.

The type of "SC9-5W" and "SC8-5W", "W-7" may realize the high efficient and economical under-water cutting in the age of sea-development even for automatic equipments.

## UnderWater Welding & Cutting Electrode & Torch



Scan here



Under water cutting 水中切断

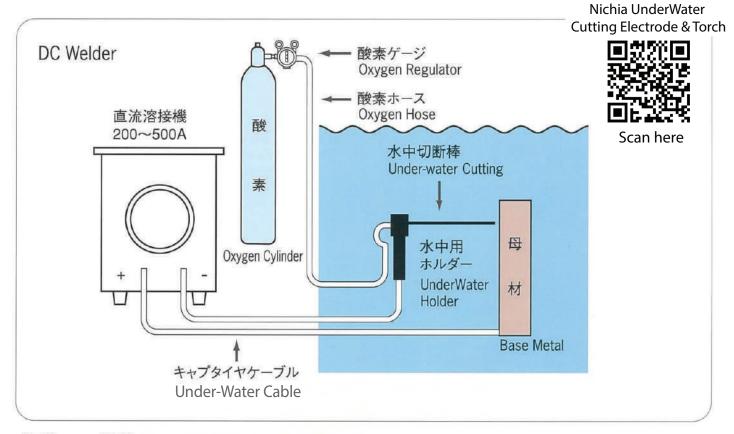


Under water cutting 水中切断



Under water weldomg 水中溶接

### UNDER WATER CUTTING



## 仕様および規格 Specification

商品名 MODEL NO.	断 面 CROSS SECTION	外径 (mm) O.D. (mm)	全長 (mm) LENGTH (mm)	重量 (kg/個) WEIGHT (kg/pcs)	酸素圧力 (MPa) OXYGEN PRESSURE (MPa)	目的•用途 PURPOSE/APPLICATIONS
W-7	$\bigcirc$	7.3	500	0.16	0.39 ~ 0.59	ᄹᅶᇊᇝᆚᇨᆋᄖᆀᄣ
SC8-5W		8.0	600	0.21		矢板の水中切断、 鋼管とH形鋼 Under-water Cutting of sheet pile, steel-pipe & H-shape steel
SC9-5W		9.0	600	0.25	0.49 ~ 0.69	



#### **UNDER WATER CUTTING**

\*1 特殊仕様品 The Oxy-Arc Electrodes of especialy order.



Nichia UnderWater Welding Electrode & Torch



\*1 特殊仕様品 The Holder is especialy order. 他にも、ご希望により特殊な形状及び長さのホルダーを製作致します。 *It is possible to product various shape & length.*  GOLD

## **ELECTRODES**

For Welding Cast Iron

### **PRODUCT GOLD: 410**

Description	Technical Details	Ømm
Electrode for cold repair welding of most	Rm (Mpa): 350	2.6
<b>different rtpes of cast Iron.</b> Use for welding and rebuilding of frames,	Hardness: ~180HB	3.2
gear box, machine and pump housings, engine blocks, casting defects, pulleys, compressors. Excellent machinability.		4.0
Weld metal composition : Ni>95, Fe Mn, C, Si		

## **PRODUCT GOLD: 420**

Description	Technical Details	Ømm
High strength Fe Ni Alloy electrode for cold	Rm (Mpa): 550	2.6
welding of different Cast Irons such as grey cast iron nodular cast ironand for joining	Re (Mpa): 350	3.2
cast iron to steel. Electrode will not overheat and has exceptional good mechanical	A5(%): 15	4.0
properties. Can also be used as a bonding layer on dirty or oily cast iron. Weld metal composition: Ni, Fe, Mn, C, Si	Hardness: 200~220HB	
Base Metal: Grey cast iron ASTM A48 class 25 B-60 B, A536 Grade 60-80 DIN GG15-GG40, GGG40 TO 60, GTS 35 to 65		



### **PRODUCT GOLD : 707**

Description	Technical Details	Ømm
Economy type Nickel base Electrode for repair	Rm (Mpa): 420	2.6
and fabrication of cast iron components.	Re (Mpa): 350	3.2
Recommended for welding gray, nodular and malleable cast iron and for joining cast	A5(%): 15	4.0
iron to steel.	Hardness:	
GOLD 707 is one of the <b>most economic</b> electrodes for welding of cast-iron.	200~220HB	







## **ELECTRODES**

For High Temperature & Special Applications

### **PRODUCT GOLD : 520**

Description	Technical Details	Ømm
Universal high nickerl maintenance	Rm (Mpa): 680	3.2
electrode for welding nickel alloys, dissimilaar steels, high temperature steel, (Incoloy 800) cryogenic stainless steels tool steel etc.	Re (Mpa): 420 A5 (%): 40	4.0
520 is the most versatile electrodes for all difficult weld repairs.	Hardness: ~220,240HB	
For weld repairs in Power stations, steelworks, chemical industries.	Temperature Resistance: >1200°C	

## **ELECTRODES**

For Non Ferrous Metal Overlaying-Presstools

### **PRODUCT GOLD : 610**

Description	Technical Details	Ømm
ELECTRODE FOR ALUMINIUM	Rm (Mpa): 180	2.6
Use for repairs and joining of Al Plates, sheets, pipes, extrusions etc.	Re (Mpa):80	3.2
Applications include al, engine blocks, cylinder heads, boats construction,	A5 (%): 6	4.0
housings, pumps, tanks, moulds, frames, truck bodies, bus bars etc.	Weld metal compositions: AL+Si	

### **PRODUCT GOLD: 620**

Description	Technical Details	Ømm
Maintenance electrode with a complex	Rm (Mpa): 660	2.6
Cu-bronze deposit for joining and surfacing of copper-alloys, steel and cast	Re (Mpa): 420	3.2
iron also for dissimilar joints between copper alloys and steels.	A5 (%): 22	4.0
The deposit is corrosion, seawater and cavitations resistant with a low coefficientof friction.	Weld metal compositions: Cu, Mn, Ni, Al	
Used in ship building, for pumps impellors, ppropellers, screws, for surfacing of shafts, bearings, hydraulic piston heads, cable guides and machinery parts, automotive forming dies etc.		
Excellent for protection of parts against metal-metal wear.		
As a overlay for deep drawing of mild steel, stainless steel, aluminium and titanium		







GOLD

## **ANTI-WEAR PROTECTION**

Against Pressure and Impact Using Gold Electrodes

### **PRODUCT GOLD: 1015**

Description	Technical Details	Ømm
Especially for rebuilding edges of cutting	Hardness:	2.6
tools, knives, shear blades, drills, punching dies, press tools, forging hammers, and other parts subjected to metal to metal wear up to 550°C. Weld Deposit is machinable.	~45-50 HRC Weld Metal Analyse: Cr, V, W	3.2

### **PRODUCT GOLD: 740**

Description	Technical Details	Ømm
	Hardness: ~250HB	3.2
Manganese alloy electrode for overlays which are subjected to extreme impact. The overlay has a strong work hardening temdency, is highly crack resistant and the thickness is not limited. One or two final layers with Gold 750 increase the abrasion resistance.	After work hardening ~480 HB Weld Metal Analyse: Mn, Cr, Ni, Fe, Si	4.0



## **ELECTRODES**

For Abrasion, Heat, Metal/ Metal Wear-Corrosion Tools and Dries

FOR HIGH TEMPERATURE COMBINED WEAR

### **PRODUCT GOLD : 1045 (770)**

Description	Technical Details	Ømm
Electrode with a complex Co-Cr	Hardness:	3.2
composition alloyed with W for surfacing of parts which are aubjected to a combination of metal / metal wear, corrosion and heat up to 800°C and shortly up to 1000°C. For valve seats, hot forging tools, screws	~42-45 HRC at 20oC 38 HRC at 60oC Weld Metal : Cobalt Base, Tungsten Chrome, Iron	4.0





## **ELECTRODES**

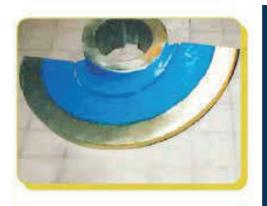
For Mineral Abrasion

### **PRODUCT GOLD : 750 (1033)**



Description	Technical Details	Ømm
Stick electrode for hard facing of parts	Hardness:	3.2
subject to mineral abrasion. For anti rear protection in cement works,	~58-62 HRC	4.0
earthmoving, quarries, steelworks, foundaries, and sugar industries.	Weld Metal : Chromium Carbide	
Use to protect buckets, <b>bulldozer blades,</b>		
crusher rollers, impellors, screw conveyors, mixer blades, fans etc.		

### **PRODUCT GOLD : 760**



Description	Technical Details	Ømm
For hard facing of parts subject to extreme	Hardness:	3.2
mineral abrasion and heat. Use to protect buckets, bulldozer blades, crusher rollers, impellors, screw conveyors, mixer blades, dredger teeth, fans etc.	~64 HRC Weld Metal : Chromium, Niobium, Molybdenum	4.0



EN1600

ISO 3581-A

E 25 20 R 32

Si

Ni

Cr

Fe



### **SELECTARC INOX 308B**

Classification	Weld metal Composition(%)		Characteristic and Applications	Mechanical Properties		ØxL (mm)	(øxL (mm) Param	
AWS A5.4	С	<0.04	Low carbon stainless steel electrode, basic	Rm(MPa)	>560	2.5 x 300	70A	
~E308 -15	Mn	0.6	type coating. Excellent in all position and especially on bad prepared joints. Very good	Rp0,2(MPa)	>380	3.2 x 350	90A	= +
EN1600	Si	0.4	mechanical properties.	A5(%)	>35	4.0 x 350	120A	
ISO 3581-A	Ni	9.5	Used on 18/8 stainless steels for service	KV(J)	+20°C→>90			
E 199LB42	Cr	19.0	temperatures from -196°C up to +350°C.		-196°C→ >30			
	Fe	Rem.						



Mechanical Properties

>550

Rm(MPa)

ØxL (mm)

2.0 x 300

Parameters

= +

~70 V

45A

70A

100A

135A

180A

SELECTA	SELECTARC 25/20R						
Classification	Weld metal Composition(%)		Characteristic and Applications				
AWS A5.4	С	0.1	Rutile-basic electrode with a high temperature				
~E310-16	Mn	2.0	resistant austenitic stainless steel deposit. Resistant				

ı	2.0	resistant austenitic stainless steel deposit. Resistant to corrosion and oxidation up to 1200°C, good	Rp0,2(MPa)	>400	2.5 x 300
	0.9	resistant against hot cracking, easy slag removal	A5(%)	>30	3.2 x 350
	20.5	and nice bead aspect.	KV(J)	+20°C→ >60	4.0 x 350
	25.5	Construction of steam boilers, chemical installations, gas industry, ovens, thermal			5.0 x 450
	Rem.	equipement.			



SELECTARC 29/9								
Classification	Weld metal Composition(%)		Characteristic and Applications	Mech Prope	anical erties	ØxL (mm)	Parar	neters
AWS A5.4	С	0.1	Rutile-basic electrode with an austenitic-ferritic	Rm(MPa)	700-850	1.6 x 250	35A	
~E312-16	Mn	0.6	stainless steel deposit, adapted for welding dis- similar steels (stainless steels with low alloyed	Rp0,2(MPa)	>500	2.0 x 300	45A	= +
EN1600	Si	1.0	steels) and steels difficult to weld as tool steels,	A5(%)	>20	2.5 x 300	70A	
ISO 3581-A	Ni	9.5	Mn steels, spring steels	KV(J)		3.2 x 350	110A	~50 V
E 29 9 R 32	Cr	29.0	Weld deposits highly resistant to cracks,	Hardness	~240 HB	4.0 x 350	135A	
	Мо	0.5	suitable for buffer layers before hardfacing and for building up cutting tools. Soft fusion,			5.0 x 450	180A	
	Fe	Rem.	smooth and fine ripple beads.		-			

Selectarc



### SELECTARC INOX 316NG

Classification	Weld metal Composition(%)		Characteristic and Applications	Mecl Prop	nanical perties	ØxL (mm)	Parar	neters
AWS A5.4	С	<0.04	Low carbon basic coated stainless steel elec-	Rm(MPa)	>560	2.5 x 300	70A	
~E316L-15	Mn	1.6	trode. For welding and cladding on austenitic Cr-Ni-Mo stainless steels and clad plates. Good	Rp0,2(MPa)	>380	3.2 x 350	90A	= +
EN1600	Si	0.4	behavior in positional welding and especially on bad prepared joints. Applied for service	A5(%)	>35	4.0 x 350	120A	
ISO 3581-A	Ni	12.0	on bad prepared joints. Applied for service temperatures from -196 c up to +350 c.	KV(J)	+20 c→>80			
E 19 12 3 L B <b>4</b>	Cr	18.0	Chemical and petrochemical, refineries and		-120 c→ >50	-		
	Мо	2.7	in shipbuilding to weld pipes, tanks, heat		1000			
	Fe	Rem.	exchangers smooth and fine ripple beads.					
				Selec	Selectarc			

SELECTA	RC INOX 385
	Weld metal

Classification	Weld metal Composition(%)		Characteristic and Applications	Mechanical Properties		(mm)	Paran	neters
AWS A5.4	С	<0.03	Rutile-basic coated electrode for welding fully	Rm(MPa)	>570	2.5 x 300	50-70A	
~E385-16	Mn	1.4	austenitic highly corrosion resistant stainless steels (904L,B6). Due to its alloy composition, high Mo-con-	Rp0,2(MPa)	>370	3.2 x 350	70-100A	= +
EN1600	Si	0.8	tent and Cu, the weld metal is resistant against attacks by phosphoricand sulphuric acids, it shows a	A5(%)	>35	4.0 x 350	90-130A	~70 V
ISO 3581-A	Ni	25.0	high resistance against pitting and stress corrosion in	KV(J)	+20°c <b>→</b> >70			
E 20 25 5 Cu L R2	Cr	20.5	choride containing media. Can be used at operating					
	Мо	4.5	temperatures up to 400 C Chemical and petrochemical, refineries and in					
	Fe	1.5	shipbuilding to weld pipes, tanks, heat exchang-					
		Rem.	ers smooth and fine ripple beads.					





### **SELECTARC INOX 308B**

Classification	Weld metal Composition(%)		Characteristic and Applications	Mechanical Properties		ØxL (mm)	Parar	neters
AWS A5.4	С	<0.04	Low carbon stainless steel electrode, basic	Rm(MPa)	>560	2.5 x 300	70A	
~E308 -15	Mn	0.6	type coating. Excellent in all position and especially on bad prepared joints. Very good	Rp0,2(MPa)	>380	3.2 x 350	90A	= +
EN1600	Si	0.4	mechanical properties.	A5(%)	>35	4.0 x 350	120A	
ISO 3581-A	Ni	9.5	Used on 18/8 stainless steels for service	KV(J)	+20°C→>90			
E199LB42	Cr	19.0	temperatures from -196°C up to +350°C.		-196°C→ >30			
	Fe	Rem.						



## SELECTARC 25/20R

Classificatio	n Weld Compos	metal sition(%)	Characteristic and Applications	Mech Prop	nanical perties	ØxL (mm)	Paran	neters
AWS A5.4	С	0.1	Rutile-basic electrode with a high temperature	Rm(MPa)	>550	2.0 x 300	45A	
~E310-16	Mn	2.0	resistant austenitic stainless steel deposit. Resistant to corrosion and oxidation up to 1200°C, good	Rp0,2(MPa)	>400	2.5 x 300	70A	= +
EN1600	Si	0.9	resistant against hot cracking, easy slag removal	A5(%)	>30	3.2 x 350	100A	~70 V
ISO 3581-A	Ni Ni	20.5	and nice bead aspect.	KV(J)	+20°C→ >60	4.0 x 350	135A	
E 25 20 R 3	2 Cr	25.5	Construction of steam boilers, chemical installations, gas industry, ovens, thermal			5.0 x 450	180A	
	Fe	Rem.	equipement.					



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SELEC	TARC 29	9/9						
Classification	Weld metal Composition(%)		Characteristic and Applications	Mechanical Properties		ØxL (mm)	Parar	neters
AWS A5.4	С	0.1	Rutile-basic electrode with an austenitic-ferritic	Rm(MPa)	700-850	1.6 x 250	35A	
~E312-16	Mn	0.6	stainless steel deposit, adapted for welding dis- similar steels (stainless steels with low alloyed	Rp0,2(MPa)	>500	2.0 x 300	45A	= +
EN1600	Si	1.0	steels) and steels difficult to weld as tool steels,	A5(%)	>20	2.5 x 300	70A	
ISO 3581-A	Ni	9.5	Mn steels, spring steels	KV(J)		3.2 x 350	110A	~50 V
E 29 9 R 32	Cr	29.0	Weld deposits highly resistant to cracks,	Hardness	~240 HB	4.0 x 350	135A	
	Мо	0.5	suitable for buffer layers before hardfacing and for building up cutting tools. Soft fusion,			5.0 x 450	180A	
	Fe	Rem.	smooth and fine ripple beads.					
						and the second second		



### SELECTARC INOX 316NG

Classification	Weld metal Composition(%)		Characteristic and Applications	Mechanical Properties		(mm) Pa		neters
AWS A5.4	С	<0.04	Low carbon basic coated stainless steel elec-	Rm(MPa)	>560	2.5 x 300	70A	
~E316L-15	Mn	1.6	trode. For welding and cladding on austenitic Cr-Ni-Mo stainless steels and clad plates. Good	Rp0,2(MPa)	>380	3.2 x 350	90A	= +
EN1600	Si	0.4	behavior in positional welding and especially on bad prepared joints. Applied for service	A5(%)	>35	4.0 x 350	120A	
ISO 3581-A	Ni	12.0	on bad prepared joints. Applied for service temperatures from -196 c up to +350 c.	KV(J)	+20 c→>80			
E 19 12 3 L B <b>4</b>	Cr	18.0	Chemical and petrochemical, refineries and		-120 c→ >50	_		
	Мо	2.7	in shipbuilding to weld pipes, tanks, heat		1000			
	Fe	Rem.	exchangers smooth and fine ripple beads.		-			
				Selec	Can a second			



	Wold motal			Mechanical		ØxL		
Classification	Weld metal Composition(%)		Characteristic and Applications	Prop	erties	ØxL (mm)	Paran	neters
AWS A5.4	С	<0.03	Rutile-basic coated electrode for welding fully	Rm(MPa)	>570	2.5 x 300	50-70A	
~E385-16	Mn	1.4	austenitic highly corrosion resistant stainless steels (904L,B6). Due to its alloy composition, high Mo-con-	Rp0,2(MPa)	>370	3.2 x 350	70-100A	= +
EN1600	Si	0.8	tent and Cu, the weld metal is resistant against attacks by phosphoricand sulphuric acids, it shows a	A5(%)	>35	4.0 x 350	90-130A	~70 V
ISO 3581-A	Ni	25.0	high resistance against pitting and stress corrosion in	KV(J)	+20°c <b>→</b> >70			
E 20 25 5 Cu L R <b>2</b>	Cr	20.5	choride containing media. Can be used at operating					
	Мо	4.5	temperatures up to 400 C Chemical and petrochemical, refineries and in					
	Fe	1.5	shipbuilding to weld pipes, tanks, heat exchang-					
		Rem.	ers smooth and fine ripple beads.					





#### **SELECTARC AI 112**

Classification	Weld Compo	metal sition(%)	Characteristic and Applications	Mechanical Properties		ØxL (mm)	Parar	meters
AWS A5.3	Si	12.0	Aluminium electrode wiith 12% Si for welding	Rm(MPa)	180	2.5 x 300	60A	
~E4047	Mn	<0.5	and repairing aluminium or aluminium alloy	Rp0,2(MPa)	80	3.2 x 350	90A	= +
DIN 1732	Fe	<0.5	pieces ( AISi, AICuSiMn, AISiMg, )	A5(%)	>5	4.0 x 350	120A	~70 V
EL-AISi12	AI	Rem.	Specially designed for welding cast or ex- truded aluminium alloys with Si levels higher	KV(J)	-			
			than 7%. Dissimilar joints between aluminium	Hardness	~50 HB			
			and aluminium alloys.					

### SELECTARC INOX 2209

				-				
Classification	Weld metal Composition(%)		Characteristic and Applications	Mechanical Properties		ØxL (mm)	Param	neters
AWS A5.4	С	< 0.03	Rutile-basic electrode with an austhenitic-ferritic	Rm(MPa)	>700	2.5 x 300	50-75A	
E2209-17	Mn	0.9	microstructure (duplex), Stable arc, regular drop transfer, easy slag removal. For operation	Rp0,2(MPa)	>550	3.2 x 350	70-100A	= +
EN 1600	Si	0.9	temperatures up to 250°C and resistant in chloride	A5(%)	>22	4.0 x 350	90-150A	~70 V
ISO 3581-A	Ni	9.0	containing media against pitting corrosion as well as	KV(J)	+20°C >50			
E 22 9 3 N L R 32	Cr	22.5	crevice and stress corrosion. For butt welding and cladding of steel and castings		-40°C >37			
	Мо	3.0	with an austhenitic-ferritic structure of a similar					
	Ν	0.18	composition. For pumps, vessels, piping systems attacked by chloride containing solutions. But also					
	Fe	Rem.	for impellers and other components which require					
			strength combined with corrosion attack.					

### **SELECTARC INOX 2209B**

Classification	Weld metal Composition(%)		Characteristic and Applications	Mechanical Properties		ØxL (mm)	Param	eters
AWS A5.4	С	<0.03	Basic coated electrode with an austenitic- ferritic	Rm(MPa)	>810	2.5 x 300	50-75A	
E2209-15	Mn	1.0	microstructure (duplex). The weld deposit is characterised by a high resistance against pitting,	Rp0,2(MPa)	>620	3.2 x 350	70-100A	= +
EN 1600	Si	0.5	crevice and stress corrosion in chloride containing	A5(%)	>25	4.0 x 350	90-150A	
ISO 3581-A	Ni	9.0	media, like sea water, combined with a very high	KV(J)	+20°C→>100			
E 22 9 3 N L B 42	Cr	22.5	tensile strength. For operation temperatures up to 250 C.		-40°C→>45			
	Мо	3.0	For butt welding and cladding of steels and					
	Ν	0.18	castings with an austenitic- ferritic structure,					
	Fe	Rem.	of a similar composition. For pumps, vessels, piping systems attacked by chloride					
			containing solutions.					

### **SELECTARC B60**

Classification	Weld metal Composition(%)		Characteristic and Applications	Mechanical Properties		ØxL (mm)	Parar	neters
AWS A5.5	С	<0.1	Low hydrogen basic coated electrode with Mo for	Rm(MPa)	>550	2.5 x 350	80A	
E7018-A1	Mn	0.8	welding creep resisting steels used at temperatures up to 500°C. Good resistance to hydrogen attack	Re(MPa)	>450	3.2 x 350	115A	= +
ISO 3580-A	Si	0.4	(chemical installations).	A5(%)	>22	4.0 x 450	150A	
E Mo B 4 2 H5	Мо	0.5	Used for piping systems, vessels	<b>KV(J)</b> +20°C→ >100		5.0 x 450	190A	
	S	<0.025						
	Р	< 0.025		After heat treatment at 650°C/1h.				
	Fe	Rem.		000 07 11				





#### SELECTARC HB14Mn

SELECTA	RC HB14Mn				Parar	neters
Classification	Characteristic and Applications	Mecł Prop	nanical perties	( <sup>Ø</sup> xL (mm)	Paran	neters
-	Rutile-basic coated electrode suitable to surface all pieces subject to			3.2 x 450	120A	
	high impact. Allows to build up and then to apply final layer, using HBA or HB63. The deposit is austenitic and is exceptionally resistant	As Welded	200-250HB	4.0 x 450	160A	= + -
	to impact and wear.			5.0 x 450	200A	05.14
	Repairing of used pieces or preventive protection of new pieces.					~65 V
	Used for railway applications (rails, switches, crossings, tongues) in quarries and mines (crusher jaws, excavator and grab teeth, mill	Work hardened	400-500HB			
	hammers, rock crusher).					

### SELECTARC Cu114

Classification	Weld metal Composition(%)		Characteristic and Applications	Mechanical Properties		( <sup>Ø</sup> xL (mm)	Paran	neters
AWS A5.6	Mn	0.8	Basic coated tin bronze electrode for welding	Rm(MPa)	300	2.5 x 350	70-90A	
E CuSn-A	Fe	0.1	copper tin bronzes (Cu-Sn 6-8%) and brasses (Cu-Zn). Also used for dissimilar joints. For repairing	Rp0,2(MPa)	120	3.2 x 350	90-110A	= + -
DIN 1733	Sn	6.0	wrought bronzes (Cu-Sn), for surfacing on brasses,	A5(%)	>20	4.0 x 350	110-130A	
EL-CuSn7	Р	0.1	steels and cast iron. The weld deposit is resistant to salt water corrosion.	KV(J)	-			~60 V
	Cu	Rem.	This electrode is especially designed to weld	Hardness	100HB			
			with alternative current, but it can also be					
			used either on DC + or Naval constructions and installations for sea water desalination,					
			repair works.					

### SELECTARC Cu116

Classification	Weld Compos	metal sition(%)	Characteristic and Applications	Mech Prop	nanical Perties	ØxL (mm)	Paran	neters
AWS A5.6	Mn	1.0	Basic coated aluminium bronze electrode for	Rm(MPa)	420	2.5 x 350	80-100A	
~E CuAl-A2	Fe	0.7	joining and surfacing on aluminium bronzes with up to 10%Al and for dissimilar joints between	Rp0,2(MPa)	180	3.2 x 350	90-120A	= +
DIN 1733	Al	8.0	steels and CuAl-bronzes. Also recommended for	A5(%)	>20	4.0 x 350	120-140A	
EL-CuAl9	Cu	Rem.	overlays on cast iron, steels and copper alloys. Excellent weldability, stable arc, low spatters, easy	KV(J)	-			
			slag removal.	Hardness	180HB			
			Shipbuilding, sea water applications,					
			desalination plants, chemical industry, pump parts which are attacked by salt water					
			(propellers, bearings,).					

### SELECTARC HMn

Classification	Characteristic and Applications	Mech Prop	nanical perties	ØxL (mm)	Parar	neters
-	Rutile-basic coated electrode suitable to surface all pieces subject to			3.2 x 450	120A	
	high impact. Allows to build up and then to apply final layer, using HBA or HB63. The deposit is austenitic and is exceptionally resistant	As Welded	200-250HB	4.0 x 450	150A	= + -
	to impact and wear.			5.0 x 450	200A	0.5.14
	Repairing of used pieces or preventive protection of new pieces.					~65 V
	Used for railway applications (rails, switches, crossings, tongues) in quarries and mines (crusher jaws, excavator and grab teeth, mill	Work hardened	400-500HB			
	hammers, rock crusher).					





#### **SELECTARC D22-09**

	Classification			We	eld m	netal	con	npos	sition	(%)			Mecha	nical Prc	perties	
AWS A5.9	ISO 14343-A	С	Si	Mn	Cr	Мо	Ni	Ν	Ρ	S	Fe	Rp0.2(MPa)	Rm(MPa)	A5(%)	K\	(L) \
ER2209	W 22 9 3 N L	0.012	0.5	1.7	23.0	3.2	8.8	0.14	<0.02	<0.01	Balance	600	780	26	+20°C→ 150	-50°C→100

**DESCRIPTION:** Low carbon filler metal used for Duplex welding steels (austhenitic-ferritic) such as Uranus 45N, 2205, 2304. Resistant to severe corrosive environments (inter crystalline attack, pitting corrosion, crevice, stress corrosion).

**APPLICATION:** Pumps, vessels, pumping systems attacked by cloride containing solutions (sea water).

#### SELECTARC 20/25CU

	Classification				We	eld m	ietal	con	npos	sition	(%)			Mecha	anical Pro	operties	
AWS A5.9	ISO 14	343 <b>-</b> A	С	Si	Mn	Cr	Мо	Cu	Ni	Ρ	S	Fe	Rp0_2(MPa)	Rm(MPa)	A5(%)	к٧	(L) /
ER385	W 20 25 5 CuLG	20 25 5 CuL	0.01	0.4	1.8	20.0	4.5	1.5	25.0	<0.02	<0.01	Balance	350	550	36	+20°C <b>→</b> 120	-196°C <b>→</b> 80

DESCRIPTION: Filler metal used for welding fully austenitic steels type 904L, such as Uranus B6. Very good resistance to corrosion by sulfuric, hydrochloric or phosphoric acids.

**APPLICATION:** Chemical and petrochemical industry, agriculture.

#### SELECTARC 20/10C

	Classification				Wel	d me <sup>.</sup>	tal co	ompos	sition	(%)			Mecha	anical Pro	operties
AWS A5.9	ISO 14	343-A	С	Si	Mn	Cr	Ni	Р	S	Fe	FN	Rp0.2(MPa)	Rm(MPa)	A5(%)	KV (J)
ER308H	W 199H	G 19 9 H	0.01	0.4	1.8	20.0	4.5	<0.02	<0.01	Balance	6	380	580	35	+20°C → 100

**DESCRIPTION:** Filler metal used for welding 304H stainless steels with higher carbon content (0.04% to 0.08%).

**APPLICATION:** Parts to have creep resistance and resistance to temperature oxidation (400°C-750°C): piping systems, pressure vessels.

#### SELECTARC D25/09

	Classification				We	e <b>l</b> d m	netal	cor	mpos	sition	(%)			Mecha	anical Pro	operties	
AWS A5.9	ISO 14	343 <b>-</b> A	С	C Si Mn Cr Mo Ni N P S Fe						S	Fe	Rp0.2(MPa)	Rm(MPa)	A5(%)	K١	(L)	
ER2594	W 25 9 4 N L	G 25 9 4 N L	0.012	0.5	0.6	25.5	4.0	9.2	0.25	<0.03	<0.015	Balance	630	820	25	+20°C→ 130	-40°C→ 90

**DESCRIPTION:** Low carbon filler metal used for Super Duplex welding steels (austhenitic-ferritic) such as Uranus 52N, 52N+, 70N. Resistant to severe corrosive environments (inter crystalline attack, pitting corrosion, crevice, stress corrosion).

**APPLICATION:** Pumps, vessels, pumping systems attacked by chloride containing solutions (sea water).

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SELEC	TARC 21/10Ma													
	Classification			Wel	d me <sup>.</sup>	tal co	ompo	ositior	า (%)			Mecha	anical Pr	operties
AWS A5.9	ISO 14343-A	С	Si	Mn	Cr	Ni	Ν	Р	S	Fe	Rp0.2(MPa)	Rm(MPa)	A5(%)	KV (J)
	W Z 21 10 N H	0.08	1.5	0.5	21.0	10.0	0.15	< 0.02	<0.01	Balance	450	650	38	+20°C→ 120

DESCRIPTION: Filler metal used for welding steels of similar compositions 253MA kind. Temperature resistance up to over 1000°C, high creep resistance. **APPLICATION:** Oven, petrochemical, refinery.

#### **SELECTARC NI82**

	Classification			We	eld m	neta	cor	npo	sitior	(%)			Mecha	anical Pr	operties	
AWS A5.14	ISO 18274	С	Si	Mn	Cr	Nb	Ti	Fe	Ρ	S	Ni	Rp0.2(MPa)	Rm(MPa)	A5(%)	K٧	( L)
ERNiCr-3	S-Ni 6082 (NiCr20Mn3Nb	0.03	0.2	3.2	20.5	2.3	0.3	2.0	<0.01	<0.01	Balance	430	670	42	+20°C→ 200	-196°C→ 100
DESCRIPTIO	<b>ON:</b> Filler metal used for welding his steel or Nickel base.	gh Nic	kel	cont	ent a	loys	such	n as I	ncone	e <b>l</b> 600,	800 Inco	o <b>ll</b> oy. Used for	dissimilar jo	ining: <b>l</b> ow	alloy steel v	vith stain <b>l</b> ess

**APPLICATION:** Cryogenics (5% base and 9% Nickel), equipment subject to acid at very high temperatures, repair of difficult to weld steels, buffer layer.

### **SELECTARC NI625**

	Classification				We	eld m	netal	con	npos	sition	(%)			Mecha	nical Pro	operties	
AWS A5.14	ISO 18274	AMS	С	Si Mn Cr Mo Fe Nb P S							S	Ni	Rp0.2(MPa)	Rm(MPa)	A5(%)	K\	/ (J)
ERNiCrMo-3	S-Ni 6625 (NiCr22Mo9N♭	5837	0.01	0.15	0.1	22.0	8.7	0.3	3.6	<0.01	<0.01	Balance	520	790	40	+20°C →160	-196°C → 10

DESCRIPTION: Filler metal used for welding high Nickel content alloys like Inconel 625, stainless steel super alloyed or heterogeneous welding low alloy steel an stainless steel or Nickel base. Good resistance to various types of corrosion.

APPLICATION: Cryogenics (9% Ni steels), device under oxidizing or corrosive attacks, aeronautics.





### **SELECTARC NI276**

	Classification		١	Weld	meta	l com	positic	on (%)	)		Mecha	nical Pro	perties
AWS A5.14	ISO 18274	С	Si	Mn	Cr	Мо	Fe	W	Ni	Rp0.2(MPa)	Rm(MPa)	A5(%)	KV (J)
ERNiCrMo-4	S-Ni 6276 (NiMo16Cr15Fe6W4)	0.01	0.05	0.4	16.0	16.0	6.0	3.5	Balance	480	780	35	+20°C→ 100

DESCRIPTION: Filler metal used for welding high Nickel content alloys, such as Alloy C 276, NiMo16Cr15W, Hastelloy 276. Excellent resistance to oxides, chlorides, acids and saline environment.

APPLICATION: Piping systems or main part equipment used in the chemical industry or cleaning pollution units (gas desulfurization).

#### **SELECTARC AZ92A**

	Classification			١	We <b>l</b> d	meta	l com	positi	on (%)		Mec	hanical Properties	
AWS A5.19	AFNOR	AMS	AI	Si	Mn	Cu	Fe	Zn	Ве	Mg	Rp0.2(MPa)	Rm(MPa)	A5(%)
ERAZ92A	Mg AI9	4395	9.0	0.01	0.3	0.001	0.002	1.8	0.0005	Balance			

**DESCRIPTION:** Filler metal used for the welding of most magnesium alloys. **APPLICATION:** Welding of AM100A, aerospace.

#### **SELECTARC T40**

	Classification			Weld	metal c	omposit	ion (%)	)	Mec	hanical Properties	i
AWS A5.19	ISO 24034	AMS	С	Ν	н	0	Fe	Ti	Rp0.2(MPa)	Rm(MPa)	A5(%)
ERTi-2	Ti 0120 (Ti 99,6)	4951	<0.03	<0.015	<0.008	0.08-0.16	<0.12	Balance	290	390 -540	20

**DESCRIPTION:** Filler metal used for the welding of pure Titanium Grade 2 type.

APPLICATION: Aeronautics, navy, chemical industry.

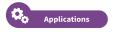
#### **SELECTARC TIG**



## PHOSBRAZ M73 COPPER PHOSPHOROUS BRAZING ALLOY Size Standard Package Standard Length 3.2mm X 1.2mm 5kg 500mm

#### Characteristics

PHOSBRAZ M73 Alloy with a higher fluidity, specially madde for strong brazing of fitting, pipes and Fit up, with average joint gaps. It's Phosphorus alloy wih self-fluxing properties. The corrosion resistance this alloy is comparable to that of copper excepts when the joint is exposed to sulphur containing gas or at elevated temperatures as in a cooking range. Under these conditions, it is expected that, this alloy will undergo progressive deterioration as other copper phosphorus alloy with Silver or without silver.



PHOSBRAZ M73 joining copper to copper it is act a self-fluxing alloy and does not required additional flux It can be used on cuprous alloys (bronze, brass) wit Phosbraz flux, electrical industry and Plumbing trade This brazing alloy is not recommended to be used fo the media having sulphur. Also it is not allowed to us for joining steels (Fe) or materials containing Iron (Fe) Nickel (Ni), Cobalt (Co) as it will form brittle phase i the joint. In Air conditioning and refrigeratio application, PHOSBRAZ M73 can be used for th service temperature between +150oC (without loss i strength) upto -20oC. This alloy can be used fo flame... Maximum short service joint operatin

### PHOSBRAZ AG20

CuP-Ag 2% Manual brazing

Size	Standard Package	Standard Length
1.5mm	5kg	500mm
2.0mm	5kg	500mm
2.5mm	5kg	500mm

#### Characteristics

PHOSBRAZ AG20 is CuP alloy with Silver, which lowe the liquidus point, refines the alloy, improvi electrical conductivity and increasing ductility. Al increase its resistance to vibration and cyclic pressu Polyvalent alloy suitable for copper brazing, witho need of using a flux, Good fluidity when brazi sleeves/ tubes and copper connections, machin junctions, and so forth, which produce strong le proof joints. This alloy has good gap filling properti and is well suited to bridge wide gaps. Its low melti temperature gives very good resistance.

This brazing alloy is not recommended to be used f the media having sulphur. Also it is not allowed to u for joining steels (Fe) or materials containing Iron (Fe Nickel (Ni), Cobalt(Co) as it will form brittle phase in t joint. The corrosion resistance of this alloy comparable to that of copper excepts, when the joint exposed to sulphur containing gas or at elevate temperatures. Under these conditions, it is expected that, this alloy will undergo progressive deterioration as other copper phosphorus alloy with Silver

### C Applications

PHOSBRAZ AG20 It is mainly used in Plumbing, Electrical components, Refrigeration and Heating/Ventilation. An economical alloy used in joining copper to copper. It can also use to join copper to low zinc brasses with Phosbraz flux. In Air conditioning and refridgeration application, PHOSRAZ AG20 can be used for the service temperature between +150oC (without loss in strength) to -20oC. This alloy can be used with flame.



#### SELECTARC BRAZII

### PHOSBRAZ AG50

CuP-Ag 5% Manual brazing

Size	Standard Package	Standard Length
1.5mm	1kg	500mm
2.0mm	1kg	500mm
2.5mm	1kg	500mm

#### Characteristics

PHOSBRAZ AG50 is CuP alloy with Silver and lowers the liquids point, the greater the ductility of the brazed joint. This addition also refines the alloy, increasing the brazed joints mechanical characteristics and improving electrical conductivity. This is special alloy for high strength capillary brazing.

This brazing alloy is not recommended to be used for the media having sulphur. Also it is noy allowed to use for joining steels (Fe) or materials containing Iron (Fe), Nickel (Ni), Cobalt (Co) as it is expected that, this alloy will undergo progressive deterioration as other copper phosphorus alloy with Silver or without Silver.



PHOSBRAZ AG50 is recommended for hard brazing of copper and optionally copper brass pipes of combustible installations. As well as all low temperature applications. In Air conditioning and refrigeration application, PHOSBRAZ AG 50 can be used for the service temperature between +150oc (without loss in strength) to-50oC. This alloy can be used with flame.

### PHOSBRAZ AG150

CuP-Ag 15% Manual brazing

Size	Standard Package	Standard Length
1.5mm	5kg	500mm
2.0mm	5kg	500mm
2.5mm	1kg	500mm

#### Characteristics

PHOSBRAZ AG50 is CuP alloy with Silver and lowers the liquids point, refines the alloy, improving electrica conductivity and increasing ductility due to high % of Ag Also increase its resistance to vibration and cyclic pressure Polyvalent alloy suitable for copper brazing, without need of using a flux, Good fluidity when brazing sleeves/tubes and copper connections, machine junctions, and so forth, whch produce strong leak proof joints. This alloy has good gap filling properties and is well suited to bridge wide gaps. Its low melting temperature gives very good resistance.

This brazing alloy is not allowed to use for joining steels (Fe) or materials containing Iron (Fe), Nickel (Ni), Cobalt (Co) as it will form brittle phase in the joint. The corrosion resistance of this alloy is comparable to that of copper excepts, when the joint is exposed to sulphur containing gas or at elevated temperatures. Under these conditions, it is expected that, this alloy will undergo progressive deterioration as other copper phosphorus alloy with Silver or without Silver.



PHOSBRAZ AG50 is mainly used in Plumbing, Electrical components, Refridgeration and Heating/Ventilation. An economical alloy used in joining copper to copper. It can also use to join copper to low zinc brasses with Phosbraz flux. In the electric and electromechanic Industry in Air conditioning and refridgeration application, PHOSBRAZ AG150 can be used for the service temperature between +150°C (without loss in strength) to-70°C. This alloy can be used with flame.



#### **SELECTARC BRAZIIG**

## **BRAZARGENT 5034**

#### **BARE RODS**

Cadmium Free Silver (34%) Brazing Alloy

Size	Standard Package	Standard Length
1.5mm	5kg	500mm
2.0mm	5kg	500mm
2.5mm	1kg	500mm

BRAZARGENT 5034 is a very widely used Cd free alloy which main elements are: Copper, Zinc, Silver (34%) and Ti. Silver and Tin contents lowers the melting point, increases fluidity and exhibits good wetting properties.

### **BRAZARGENT 5045**

#### **BARE RODS / COATED RODS**

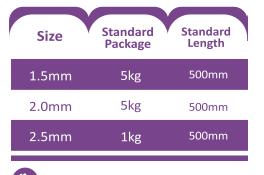
Cadmium Free Silver (45%) Brazing Alloy

Size	Standard Package	Standard Length
1.5mm	5kg	500mm
2.0mm	5kg	500mm
2.5mm	1kg	500mm
Characteris	tics	

BRAZARGENT 5045 is a widely used Cd free alloy which main elements are: Copper, Zinc, Silver (34%) and Tin. Silver and Tin. Silver and Tin contents lowers the melting point, increases fluidity and exhibits good wetting properties.

### **BRAZARGENT 5056**

**BARE RODS / COATED RODS / TBW** Cadmium Free Silver (56%) Brazing Alloy



#### Characteristics

BRAZARGENT 5056 is a widely used Cd free alloy which main elements are: Copper, Zinc, high Silver (56%) and Tin content (5%). Silver and Tin contents lowers the melting point, increases fluidity and exhibits good wetting properties. Its excellent fluidity makes it suitable in closely fitting joints as able to penetrate very tight gaps



#### **SELECTARC BRAZIIG**

## **ZINAL 4 TBW**

Seamless Flux Cored Soldering Wire Joining Cu-Ai

Size	Standard Package	Standard Length
1.6mm	1kg	500mm
2.0mm	1kg	500mm

**ZINAL 4 TBW** 



Scan here

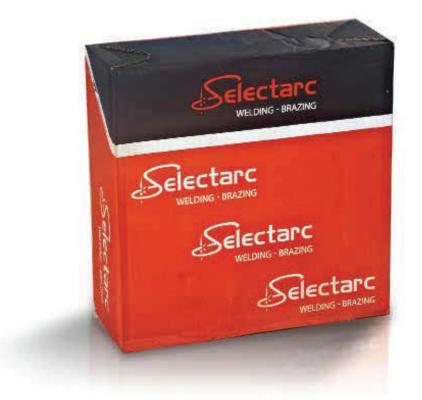
#### Applications

ZINAL A TBW is used for joining aluminium alloys of 100, 3000, 6000 series. It can also be used for joining Aluminium to Copper, Aluminium to brass, and Aluminium to stainless steel joints. For dissimilar metal application the long term galvanic corrosion potential should be considered. Also its main usages are in the field of heat-exchangers, air-conditioners and condensers and automative refrigeration systems.

### Characteristics

ZINAL A TBW Seamless tubular soldering wire of alloy of Zn-AI (98:2) with non-corrosive flux at the core of the wire. No External flux required. This wire is adaptable for joining of grades of aluminium without magnesium Alloy. Being low melting alloy it reduce the possibility of overheating of the parts. Flux being non-corrosive nature, no need of post brazing cleaning. Give very strong joints. No separate flux to apply. No need flux handling systems or corrosive flux to apply. Product does not fume.





## SELECTARC FCW D29/09-APFCW 2209P



## **SELECTARC 253 MA-AP**





# In Stock Welding Alloys

### MIG & TIG

Nickel Alloy	/S
Alloy C-276 Alloy 59 Alloy 60 Alloy 61 Alloy 67 Alloy 82 Alloy 617 Alloy 622 Alloy 625 Alloy 718 Alloy 825	(ERNICrMo-4) (ERNICrMo-13) (ERNICu-7) (ERNI-1) (ERCUNI) (ERNICr-3) (ERNICrCoMo-1) (ERNICrMo-10) (ERNICrMo-3) (ERNIFeCr-2) (ERNIFeCr-1)
Stainless St	eel
ER308H ER308L ER308LSi ER309 ER309L ER309LSi ER309LMo ER310 ER312 ER316H ER316L	ER316LSi ER317L ER320LR ER330 ER347 ER385 (904L) ER410 ER410 ER420 ER420 ER630 (17-4PH) ER16-8-2
Duplex & St	uper Duplex
ER2209	ER2594
Chrome Mo	bly
ER80S-B2 ER80S-B6 ER80S-B8	ER90S-B3 ER90S-B9
Mild Steel	
<ul> <li>ER70S-2</li> <li>ER70S-3</li> <li>ER70S-6</li> </ul>	<ul> <li>♦ ER80S-D2</li> <li>♦ ER80S-Ni1</li> <li>♦ ER80S-Ni2</li> </ul>
Aluminum	-
ER4043 ER5183	ER5356
Titanium &	Zirconium
ERTI-1 ERTI-2 ERTI-5	ERTI-7 ERZr-2
Bronze Allo	ys
Alum Bronze A- Deox Copper Low Fuming Br Silicon Bronze	(ERCu)

## COATED ELECTRODES

Nickel Allo	ys
Alloy A Alloy C-276 Alloy 55 Alloy 59 Alloy 99 Alloy 112 Alloy 117 Alloy 122 Alloy 141 Alloy 182 Alloy 187 Alloy 187 Alloy 190	(ENICrFe-2) (ENICrMo-4) (ENIFe-CI) (ENICrMo-13) (ENICrMo-3) (ENICrMo-3) (ENICrCoMo-1) (ENICrMo-10) (ENICrMo-10) (ENI-1) (ENICrFe-3) (ECUNI) (ENICu-7)
Stainless St	eel
E308H-16 E308L-16 E309H-16 E309L-16 E309LMo-16 E310-16 E312-16 E316H-16 E316H-16	E317L-16 E320LR-16 E330-16 E347-16 E385-16 (904L) E410-16 E410NiMo-16 E630-16 (17-4PH)
<b>Duplex &amp; S</b>	uper Duplex
E2209-16	E2594-16
Chrome Mo	oly
E8018-B2 E8018-B6 E8018-B8	E9015-B9 E9018-B3
Mild Steel	
E7018	♦ E7018-A1

### FLUX CORED

Nickel Allo	γs
82T-1 625T-1	(ENICr3T1-1/4) (ENICrMo3T1-1/4)
Stainless St	leel
E308HT1-1/4 E308LT0-1/4 E308LT1-1/4 E309LT0-1/4 E309LT1-1/4	E316LT0-1/4 E316LT1-1/4 E317LT0-1/4 E317LT1-1/4 • E347T0-1/4 • E347T1-1/4
Duplex & S	uper Duplex
E2209T1-1/4	E2594T1-1/4
Chrome M	oly
♦ E81T1-B2	♦ E91T1-B3
Mild Steel	
* E71T1-1M	

### SAW & FLUX

Nickel Allo	oys
Alloy 60 Alloy 82 Alloy 625	(ERNICu-7) (ERNICr-3) (ERNICr-Mo-3)
Stainless S	iteel
ER308H ER308L ER309L ER309LMo	ER316L ER317L ER347
Duplex &	Super Duplex
ER2209	ER2594
Chrome M	loly
<ul> <li>EB2</li> <li>EB3</li> </ul>	<ul> <li>◆ EB6</li> <li>◆ EB8</li> </ul>
Flux	
NI Flux	OXF300 Flux

Stock in USA only



A REAL PROPERTY AND ADDRESS OF	P	acka	ging 8	& Dir	nensio	ns	The second			and share of	
Product Form	USA Packaging Specifications Asia Pacific Packaging Specification							lications			
Coated Electrodes	Hermetico	lly Seale	d Tube	· AWS	Marking						
	Dia Inch	Length Inch			Carton QTY Lbs	Dia mm	Length	Tube 6 Kgs		Carton QTY Kgs	
	3/32	12	10		30	2.6	300 4		12		
	1/8	14	10		30	3.2	350	5		15	
	5/32	14	10		30	4.0	350	5		15	
	3/16	14	10		30	5.0	350	5		15	
TIG Wire	Plastic Tube + Imprinted with AWS, Diameter, Heat Number										
Oxford	Dia Inch	Length	Tube e		Carton QTY Lbs	Dia mm	Length	Tube QTY Kgs		Carton QTY Kgs	
and the second s	1/16	36	10		40	1.6	914	5		20	
www.pidwidality's peer	5/64	36	10		40	2.0	914	5		20	
All states	3/32	36	10		40	2.4	914	5		20	
	1/8	36	10		40	3.2	914	5		20	
	5/32	36	10	40		4.0	914	5		20	
MIG & FCW Wire	Precision I	Precision Layer Wound • Precise Cast & Helix									
	Spool DIM	\$100 inch	S200 inch	\$300 inch		Spool DIM	\$100 mm	\$200 mm	\$30 mn	Contraction of the Contraction o	
ANS Oxford	Flange O.D.	4	8	12	14	Flange O.D.	102	203	305	5 355	
2 Mar A Statement	Hub I.D.	0.63	2.03	2.03	2.03	Hub I.D.	16.5	50.5	50.	5 50.5	
Outert States	Outer Width	1.75	2.16	4.0	4.0	Outer Width	45	55	103	3 103	
	STD QTY	1 lbs	10 lbs	33 lb	s 55 lbs	STD QTY	1Kgs	5 Kgs	15 K	gs 25 Kgs	
SAW Wire & Flux	Superior Fe	Superior Feedability									
	Coil	Coil DIM inch			Flux		Coll DIM mm		4	Flux	
	Flange O.D.	Flange O.D.				Flange O.D	2	400	7		
	Hub I.D.	Hub I.D.		li u		Hub I.D.		300			
	Outer Width		4	1		Outer Width	3	100			
	STD QTY		55 lbs			STD QTY		25 kgs	1		

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