

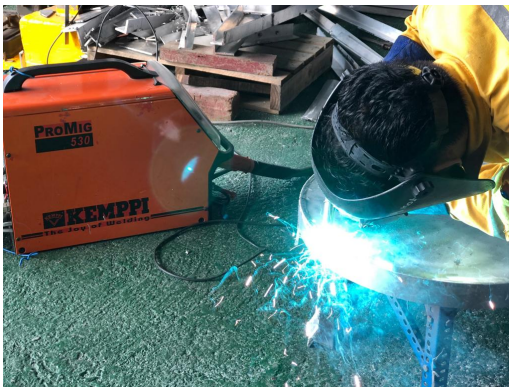
**BY INDUSTRIES**

# ***PRODUCT CATALOG***





## BY INDUSTRIES SDN. BHD.



BY Industries Sdn Bhd was established in 2016 and we are one of the leading providers of compelling welding, cutting, safety sales and service solutions in the region. We specialize in providing effective and customizable solutions, designed specifically to meet the requirements of the industry and ensuring a clean, safe and healthy working environment for all users.



Over the years we have played a major role in the industry and have developed a comprehensive selection of welding products and safety services that have made us more competitive. We aspire to be the preferred choice in the industry by delivering premium products and services. Thus, we wish to integrate our cost-effectiveness, unique expertise and experiences into your businesses.



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DESCRIPTION	PRODUCT CODE	PACKING	LIST PRICE (RM)
CO2 Fin Type Regulator	A5266000034	6	300.00



DESCRIPTION	PRODUCT CODE	PACKING	LIST PRICE (RM)
Ace Weld Argon/CO2 Mix Regulator with Flowmeter (Piston)	A5266000001	10	85.00
Ace Weld CO2 Regulator with Flowmeter (Piston)	A5266000002	10	85.00



DESCRIPTION	PRODUCT CODE	PACKING	LIST PRICE (RM)
Ace Weld Argon/CO2 Mix Regulator with Flowmeter (Diaphragm)	A5266000038	10	85.00
Ace Weld CO2 Regulator with Flowmeter (Diaphragm)	A5266000039	10	85.00



DESCRIPTION	PRODUCT CODE	PACKING	LIST PRICE (RM)
Ace Weld Edge Oxygen Regulator	A5266000058	10	250.00
Ace Weld Edge Acetylene Regulator	A5266000059	10	250.00

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





DESCRIPTION	PRODUCT CODE	PACKING	LIST PRICE (RM)
Ace Weld Oxygen Regulator	A5266000007	12	60.00
Ace Weld Acetylene Regulator	A5266000006	12	60.00



DESCRIPTION	PRODUCT CODE	PACKING	LIST PRICE (RM)
Ace Weld Professional Oxygen Regulator	A5266000063	12	100.00
Ace Weld Professional Acetylene Regulator	A5266000064	12	100.00



DESCRIPTION	PRODUCT CODE	PACKING	LIST PRICE (RM)
Ace Weld Oxygen Regulator Y Series	A5266000060	12	95.00
Ace Weld Acetylene Regulator Y Series	A5266000061	12	95.00



DESCRIPTION	PRODUCT CODE	PACKING	LIST PRICE (RM)
Ace Weld CO2 Heater Regulator C/W Flowmeter 36V	A5266000005	8	220.00
Ace Weld CO2 Heater Regulator C/W Flowmeter at 220V	A5266000004	8	220.00
Ace Weld CO2 Heater Regulator C/W Flowmeter at 110V	A5266000003	8	220.00



DESCRIPTION	PRODUCT CODE	PACKING	LIST PRICE (RM)
LPG / Propane Regulator	Industrial Type	6	
	Household Type	6	

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DESCRIPTION	PRODUCT CODE	PACKING	LIST PRICE (RM)
Ace Weld - Oxygen Check Valve	A5266000013	10	15.00
Ace Weld - Acetylene Check Valve	A5266000012	10	15.00



DESCRIPTION	PRODUCT CODE	PACKING	LIST PRICE (RM)
Ace Weld Flashback Arrestor – Oxygen (Regulator end)	A5266000010	10	45.00
Ace Weld Flashback Arrestor – Acetylene (Regulator end)	A5266000011	10	45.00



DESCRIPTION	PRODUCT CODE	PACKING	LIST PRICE (RM)
Ace Weld Flashback Arrestor – Oxygen (Torch Side)	A5266000067	10	45.00
Ace Weld Flashback Arrestor – Acetylene (Torch Side)	A5266000068	10	45.00



DESCRIPTION	PRODUCT CODE	PACKING	LIST PRICE (RM)
Ace Weld Cutting Torch (Heavy Duty)	A5266000008	10	120.00
Ace Weld Cutting Torch (Medium Duty)	A5266000009	10	95.00

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## CUTTING NOZZLE

CUTTING NOZZLE	SIZE	PRODUCT CODE	PACKING	LIST PRICE (RM)
ANME (OXYGEN+ACETYLENE)	1/16	A5237141161	10	15.00
	1/8	A5237141801		
	1/32	A5237141321		
	3/32	A5237143321		
	3/64	A5237143641		
	5/64	A5237145641		
PNME (OXYGEN+LPG)	1/16 9L	A5237141162	10	15.00
	1/32 9L	A5237141322		
	1/8 9L	A5237141802		
	3/64 9L	A5237143642		
	5/64 9L	A5237145642		
	1/16 18L	A5237141163		
	1/32 18L	A5237141323		

### Cutting

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

Feasible for most backfire torches in new condition.												
Mild Steel Plate Thickness mm in		Nozzle Size	Operation Pressure				Gas Consumption					
			Oxygen ber	lb/ft <sup>2</sup>		Fuel ber	Gas lb/ft <sup>2</sup>	Cutting Oxy L/M ft <sup>3</sup> /H		Heat Oxy L/M ft <sup>3</sup> /H		Fuel 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	3/64	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	*3/32	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

L/M=Litres per min.

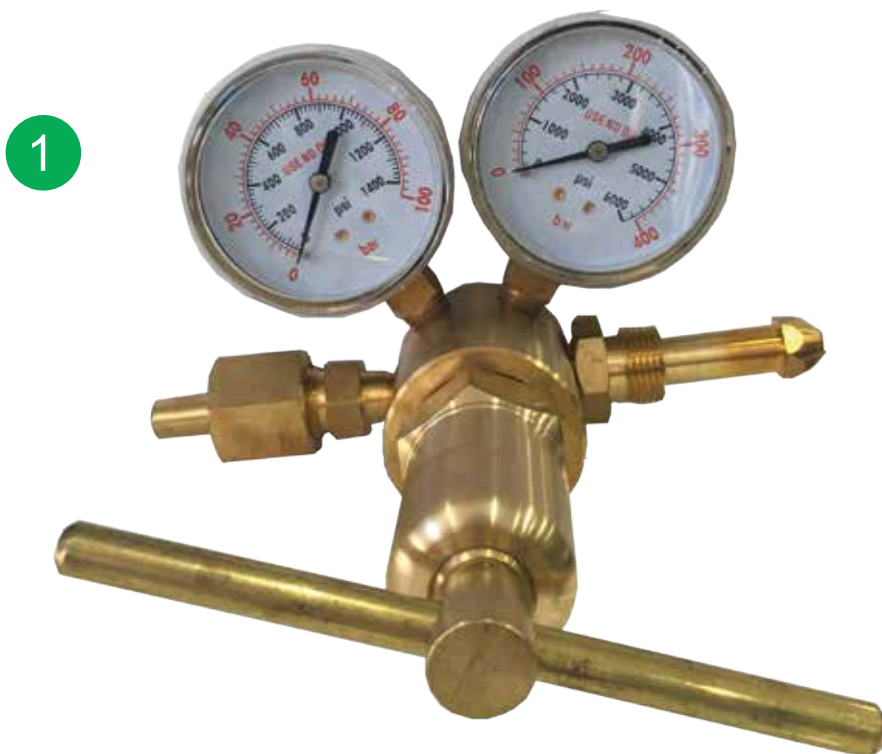
Nozzle Type PNE/PNME using 6.3mm x 10m fitted hose with resettable flashback arrestors - all in new condition.

Mild Steel Plate Thickness mm in		Nozzle Size	Operation Pressure			Gas Consumption						
			Oxygen ber	Fuel lb/ft <sup>2</sup>	Gas ber	Cutting Oxy L/M	Heat Oxy L/M	Fuel L/M	ft <sup>3</sup> /H	ft <sup>3</sup> /H	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	3/64	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	*5/64	3.4	50	.3	4	113	240	41.5	88	10.4	22
150	6	*3/32	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

L/M=Litres per min.



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\* Working Pressure 14.5psi = 1bar  
\* Original Oxygen / Nitrogen Fitting

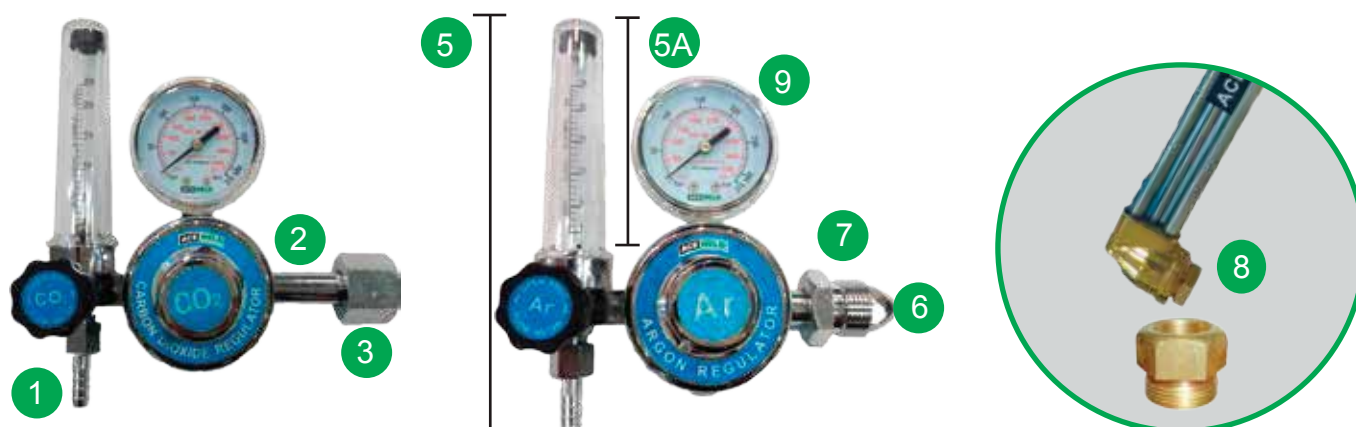
DESCRIPTION	PRODUCT CODE	PACKING	LIST PRICE (RM)
High Pressure Regulator 1000psi	TZAW6600003		550.00
High Pressure Regulator 450psi	TZAW6600014		450.00

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## REGULATOR PARTS

DESCRIPTION	PRODUCT CODE	
1. CO2 / Argon Regulator Nipple & Nut	A5266000046	
2. Inlet Stem CO2	A5266000042	
3. Inlet Stem Nut CO2	A5266000041	
4. CO2 Washer	A5266000035	
5. Flowtube c/w Indicator W Bottom Casing 1/4" (Dia)	A5266000037	
5A. Flowtube Complete		
6. Inlet Stem Argon/Oxygen/Acetylene Bull Nose	A5266000014	
7. Inlet Stem Nut Argon/Oxygen (Bull Nose Nut)	A5266000015	
8. Cutting Torch Head Nut	A5266000018	
9. Argon / CO2 gauge	A5266000048	
10. Outer Tube (Square / Round)		
11. LPG Bull NPSE Nut		



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## REGULATOR PARTS

3

Oxygen Low Pressure Gauge

**RM12.00**

4

Oxygen High Pressure Gauge

**RM12.00**

1

Oxygen Regulator Nipple & Nut

**RM5.00**

7

Oxygen Bull Nose & Nut

**RM25.00**

5

Acetylene Low Pressure Gauge

**RM12.00**

6

Acetylene High Pressure Gauge

**RM12.00**

2

Acetylene Regulator Nipple & Nut

**RM5.00**

8

Acetylene Bull Nose & Nut

**RM25.00**





# ***Accessories***





DESCRIPTION	PRODUCT CODE	PACKING	LIST PRICE (RM)
Earth Clamp 300 Amp	A5211000010	-	8.00
Earth Clamp 500 Amp	A5211000011	-	12.00



DESCRIPTION	PRODUCT CODE	PACKING	LIST PRICE (RM)
DINSE CONNECTOR 200AMPS 10/25 (MALE)	A5211000001		10.00
DINSE CONNECTOR 300AMPS 35/50 (MALE)	A5211000003		12.00
DINSE CONNECTOR 400AMPS 50/70 (MALE)	A5211000005	-	15.00
DINSE CONNECTOR 500AMPS 70/95 (MALE)	A5211000007	2 Alloy Key	18.00
DINSE 500AMPS (FEMALE) 70/95	A5211000008		18.00



DESCRIPTION	PRODUCT CODE	PACKING	LIST PRICE (RM)
DINSE SOCKET 200AMPS (PANEL FEMALE) 10/25	A5211000002	-	10.00
DINSE SOCKET 300AMPS (PANEL FEMALE) 35/50	A5211000004	-	12.00
DINSE SOCKET 400AMPS (PANEL FEMALE) 50/70	A5211000006	-	15.00
DINSE SOCKET 500AMPS (PANEL FEMALE) 70/95	A5211000009	-	18.00



DESCRIPTION	PRODUCT CODE	PACKING	LIST PRICE (RM)
Electrode Holder 300Amp	A5211000014	25PC/BOX	25.00
Electrode Holder 500Amp	A5211000015	25PC/BOX	35.00
Electrode Holder 600Amp	A5411000016	25PC/BOX	45.00

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## WELDING GAUGE



DESCRIPTION	PRODUCT CODE	PACKING	LIST PRICE (RM)
Ace Weld Welding Gauge MG-8	TZAW0000212	1 Pc	180.00



DESCRIPTION	PRODUCT CODE	PACKING	LIST PRICE (RM)
Ace Weld Welding Gauge MG-11	TZAW0000213	1 Pc	180.00



DESCRIPTION	PRODUCT CODE	PACKING	LIST PRICE (RM)
AW Welding Gauge MG-1/HJC40B	TZAW0000214	1 Pc	180.00



DESCRIPTION	PRODUCT CODE	PACKING	LIST PRICE (RM)
AW HI-LO GAUGE	TZAW0000216	1 Pc	

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**WELDING CURTAIN & FIRE BLANKET**

# WELDING CURTAIN

**INCREASE PRODUCTIVITY IN THE WORK PLACE BY CREATING A SAFER, CLEANER, MORE 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.



## SPECTRA Red/Orange Screen

Constitutes the near-ideal transparent welding curtain.

Offering good visibility, 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.

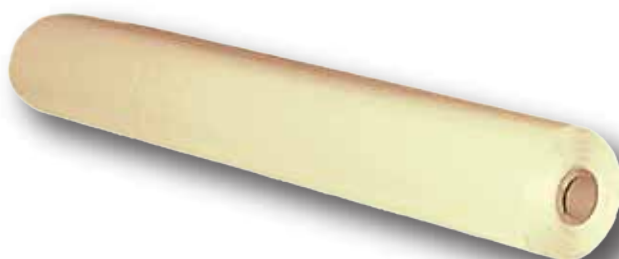


## EXTRA Dark Green

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.

# FIRE BLANKET

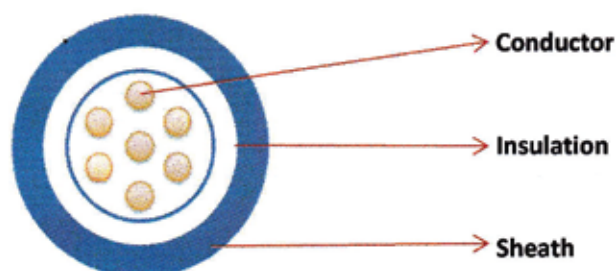


DESCRIPTION	PRODUCT CODE	PACKING	LIST PRICE (RM)
Welding Curtain 6FT x 6FT	A8150000004	1 Pck	400.00
Welding Curtain 50M x 1.93M	A8150000001/2/3	1 Roll	2500.00
Fire Blanket Size: 1.0MMx1Mx50M	A52L0000018	1 Roll	600.00
Fire Blanket Size: 1.5MMx1Mx30M	A52L0000019	1 Roll	500.00
Fire Blanket Size: 3.0MMx1Mx30M	-	-	-

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## WELDING CABLE

### ACE WELD WELDING CABLE 100% PURE COPPER (BLUE)



Size :	200AMP (25mm)	300AMP (35mm)	400AMP (50mm)	500AMP (70mm)
<b>Conductor :</b>				
Number of wire	512	720	1200	1600
Diameter of single wire	0.16mm ± 0.003 mm	0.16mm ± 0.003 mm	0.16mm ± 0.003 mm	0.16mm ± 0.003 mm
<b>Insulation :</b>				
Thickness	1.40mm ± 0.15 mm	1.80mm ± 0.15 mm	2.00mm ± 0.15 mm	2.20mm ± 0.10 mm
Overall Diameter	7.20mm ± 0.30 mm	8.90mm ± 0.30 mm	10.75mm ± 0.30 mm	12.20mm ± 0.20 mm
<b>Sheath :</b>				
Thickness	1.40mm ± 0.15 mm	1.90mm ± 0.15 mm	2.00mm ± 0.15 mm	2.20mm ± 0.15 mm
Overall Diameter	10.00mm ± 0.30 mm	12.70mm ± 0.30 mm	14.80mm ± 0.30 mm	16.60mm ± 0.30 mm
<b>Construction :</b>				
Number of core	1 Core	1 Core	1 Core	1 Core
Conductor	Flexible stranded plain annealed copper		Flexible stranded plain annealed copper	
Insulation	PVC compound according to BS 6746		PVC compound according to BS 6746	
Colour of insulation	White	White	White	White
Sheath	PVC compound according to BS 6746		PVC compound according to BS 6746	
Colour of sheath	Blue	Blue	Blue	Blue
<b>Technical data :</b>				
Max conductor temperature in normal use	70°C	70°C	70°C	70°C
Testing Voltage U	2500V / 15 min	2500V / 15 min	2500V / 15 min	2500V / 15 min
Absence of harmful substances	according to RoHS regulation 2002 / 95 /EC		according to RoHS regulation 2002 / 95 /EC	

### Price List

PRODUCT CODE	DESCRIPTION	PRICE (RM)
A5212000010	Welding Cable Blue 300AMP/ 90MM	1100.00
A5212000011	Welding Cable Blue 400AMP/ 90MM	1700.00
A5212000012	Welding Cable Blue 500AMP/ 90MM	2000.00

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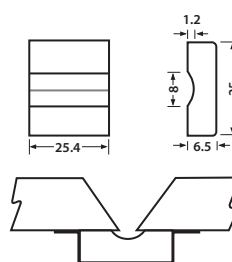
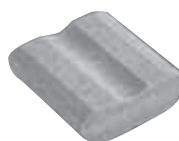
# Ceramic Backing

## FEATURES

- Thick aluminum adhesive backing contains no halogen and no chemical reactions occur during the process
- Excellent resistance to temperature surges
- Ceramic materials have the fine property of acid and alkali receptivity
- A wide range of sizes and types of ceramic blocks available and customizable to user needs

### CBS-1-1

P/N: 260200011

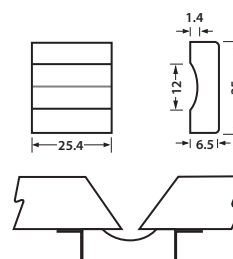
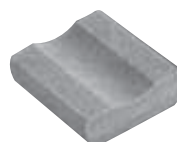


#### FCAW & GMAW

Applied ROOT GAP  
3-5mm below 10t ship,  
MIG welding possible

### CBS-1

P/N: 260200021

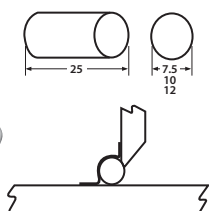


#### FCAW & GMAW

Applied ROOT GAP  
3-5mm steel structure  
of the ocean,  
shipbuilding, plant etc.

### CBS-6

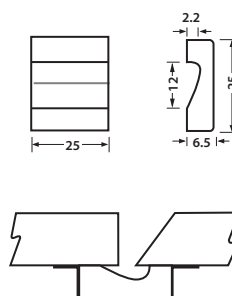
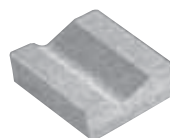
P/N: 260200161



**FCAW & GMAW**  
Applied T joint and  
"X" cutting part  
size 7, 8, 10, 12, 15

### CBS-1"H"

P/N: 260200031



#### FCAW & GMAW

Applied ROOT GAP  
3-8mm, part different  
plate thick

## Price List

PRODUCT CODE	DESCRIPTION	PRICE (RM)
A5126020011	Ceramic Backing CBS-1-1 / 0.6 meter per length	36 meter per box
A5126020002	Ceramic Backing CBS-1 / 0.6 meter per length	36 meter per box
A5126020003	Ceramic Backing CBS-1"H" / 0.6 meter per length	36 meter per box
A5126020004	Ceramic Backing CBS-6 / 0.6 meter per length	72 meter per box



**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-casting..
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



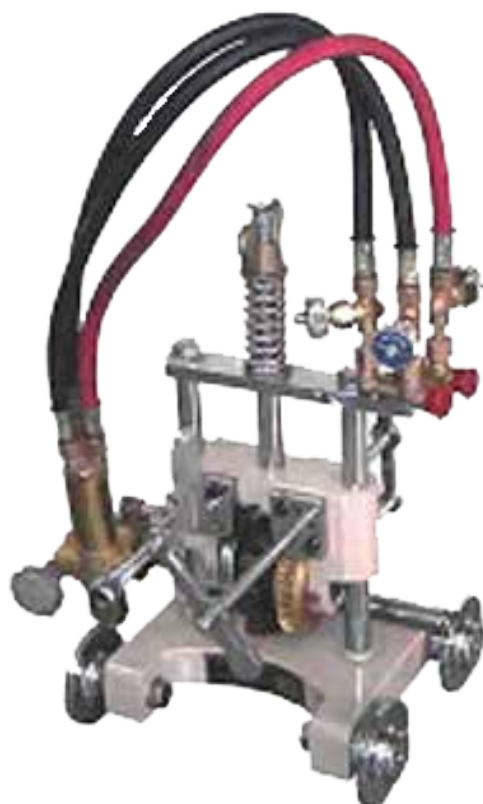
<b>Contents of package</b>	
Main unit:	1 set
Torch holder with rack:	1 set
Torch:	1 pc
Gas distributor:	1 pc
Hose 600mm:	2 pcs
Power cord, 5m:	1 pc
Tip (102 or 106 type #0,1,2, one each):	3 pcs
Straight rail:	2 pcs (1.8m each)

**Price List**

PRODUCT CODE	DESCRIPTION	PRICE (RM)
A5236120100	Straight Line Cutter c/w track 1.8 meter	1600.00

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

**MANUAL PIPE GAS CUTTER**



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

**Price List**

PRODUCT CODE	DESCRIPTION	PRICE (RM)
A5236120100	Manual Pipe Gas Cutter c/w 80pc chain	1600.00

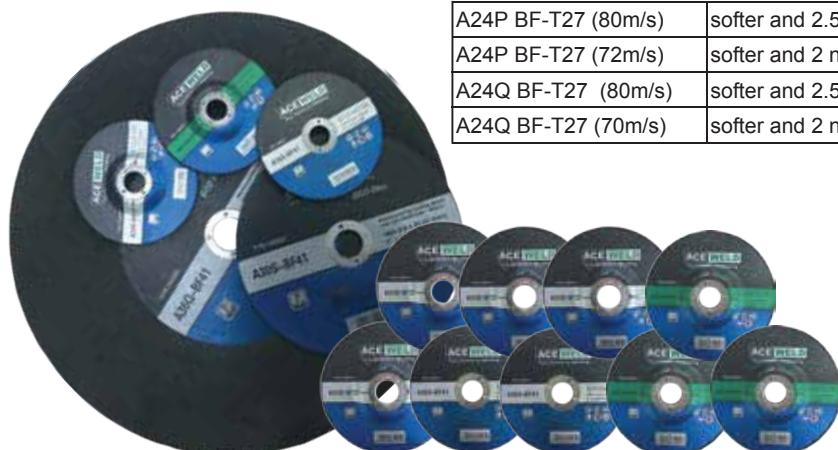
\*\*\*PRICE ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE & EXCLUDE 6% GST\*\*\*

**ACE WELD ABRASSIVE GRINDING & CUTTING**

Product No	DESCRIPTION	GRINDING & CUTTING		PACK SIZE	List Price (RM)
<b>METAL</b>					
105101	105 X 1.0 X 16MM	A46T-BF41	CUTTING	400	2.00
105121	105 X 1.2 X 16MM	A46T-BF41	CUTTING	400	2.40
100251	100 X 2.5 X16MM	A36S-BF41	CUTTING	200	2.00
125301	125 X 3.0 X 22MM	A36S-BF41	CUTTING	200	5.00
180251	180 X 2.5 X 22.23MM	A30S5BF-T41	CUTTING	100	5.00
355261	355 X 2.6 X 25.4MM	A30S5BF-T41 (1 NET)	CUTTING	25	12.50
355281	355 X 2.8 X 25.4MM	A36Q-BF41 (1 NET)	CUTTING	25	12.50
355301	355 X 3.0 X 25.4MM	A30R5BF-T41 (2 NET)	CUTTING	25	12.50
400301	400 X 3.0 X 25.4MM	A30R5BF-T41 (1 NET)	CUTTING	25	16.00
400301	400 X 3.0 X 25.4MM	A30R5BF-T41 (2 NET)	CUTTING	25	16.00
100401	100 X 4.0 X 16MM	A24S-BF41	GRINDING & CUTTING	100	2.20
100651	100 X 6.5 X 16MM	A24S-BF27	GRINDING	100	2.80
125681	125 x 6.8 x 22mm	A30S-BF27	GRINDING	100	5.00
180681	180 X 6.8 X 22.23MM	A24S-BF27	GRINDING	50	7.60
100601	100 x 6.0 x 16mm	A24P-BF27 (80M/S)	GRINDING	100	2.80
100601	100 x 6.0 x 16mm	A24P-BF27 (70M/S)	GRINDING	100	2.80
180601	180 X 6.0 X 22MM	A24P-BF27 (80M/S)	GRINDING	50	7.60
180601	180 X 6.0 X 22MM	A24P-BF27 (70M/S)	GRINDING	50	7.60

<b>INOX</b>					
105102	105 X 1.0 X 16MM	WA46T5BF-T41	CUTTING	400	2.00
105122	105 X 1.2 X 16MM	WA46T-BF41	CUTTING	400	2.50
100252	100 X 2.5 X 16MM	WA36P5BF-T41	CUTTING	200	2.50
125302	125 x 3.0 x 22mm	WA36P-BF41	CUTTING	200	5.50
180252	180 X 2.5 X 22.23MM	WA30P5BF-T41	CUTTING	100	5.60
355302	355 X 3.0 X 25.4MM	WA30P5BF-T41	CUTTING	25	13.00
400302	400 X 3.0 X 25.4MM	WA30P5BF-T41	CUTTING	25	16.00
100402	100 4.0 X 16MM	WA46T5BF-T41	GRINDING & CUTTING	100	2.50
100652	100 X 6.5 X 16MM	WA24P-BF27	GRINDING	100	3.00
125682	125 x 6.8 x 22mm	WA24N-BF27	Grinding	100	6.00
180682	180 X 6.8 X 22.23MM	WA24N5BF-T27	GRINDING	50	8.00

\*\*\* ASIA Type



A24P BF-T27 (80m/s)	softer and 2.5 nets, 1.5 safety factor test
A24P BF-T27 (72m/s)	softer and 2 nets, 1.5 safety factor test
A24Q BF-T27 (80m/s)	softer and 2.5 nets, 1.5 safety factor test
A24Q BF-T27 (70m/s)	softer and 2 nets, 1.5 safety factor test

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

# ***MIG Torch & Parts***





**MB 15 MIG TORCH LIST**

**COMPLETE TORCH 3/4/5 M**

DESCRIPTION			PRODUCT CODE	PRICE (RM)
COMPLETE TORCH 3M	MB15AK	SET	A5222110004	150.00
COMPLETE TORCH 4M	MB15AK	SET	A5222110005	170.00
COMPLETE TORCH 5M	MB15AK	SET	A5222110006	190.00


**NOZZLE (CONICAL)**

DESCRIPTION			PRODUCT CODE	PRICE (RM)
MB15 NOZZLE 12MM	MB15AK	PC	A5222110009	4.00
MB15 NOZZLE 12MM C/W RING	MB15AK	PC	A5222110017	5.00
MB15 NOZZLE 12MM GRADE A	MB15AK	PC	A5222110010	5.00
MB15 NOZZLE 12MM COPPER (CHROME)	MB15AK	PC	A5222110012	5.00


**CONTACT TIP (E-Cu)**

DESCRIPTION			PRODUCT CODE	PRICE (RM)
CONTACT TIP M6*25*0.8MM	M6*25*0.8	PC	A5222110001	1.00
CONTACT TIP M6*25*1.0MM	M6*25*1.0	PC	A5222110002	1.00
CONTACT TIP M6*25*1.2MM	M6*25*1.2	PC	A5222110003	1.00


**CONTACT TIP HOLDER**

DESCRIPTION				
MB15 TIP ADAPTER	MB15AK	PC	A5222110008	4.00


**SWAN NECK**

DESCRIPTION			PRODUCT CODE	PRICE (RM)
MB15 SWAN NECK	MB15AK	PC	A5222110007	20.00

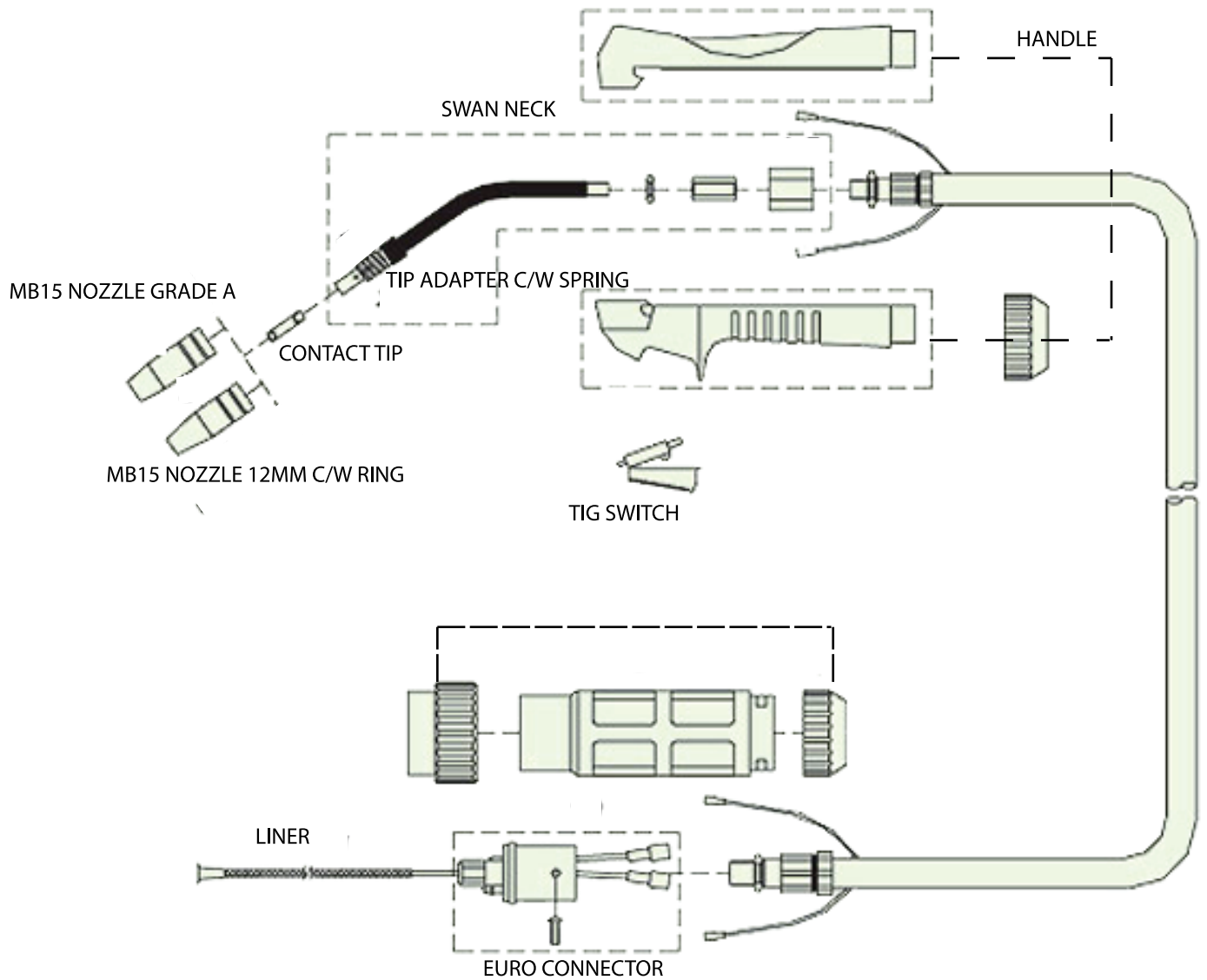

**STEEL LINE**

DESCRIPTION			PRODUCT CODE	PRICE (RM)
LINER EURO FITTING 3 M		PC	A5222000001	15.00
LINER EURO FITTING 4 M		PC	A5222000002	18.00
LINER EURO FITTING 5 M		PC	A5222000003	20.00
TEFLON LINER EURO FITTING YELLOW	4.5M	PC	A5222000004	45.00
TEFLON LINER EURO FITTING BLACK	4.5M	PC	A5222000005	95.00



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

**MB 15 MIG TORCH DIAGRAM**



**MB 24 MIG TORCH LIST**

**COMPLETE TORCH 3/4/5 M**

DESCRIPTION			PRODUCT CODE	PRICE (RM)
COMPLETE TORCH 3M	MB24 KD	SET	A5222220005	250.00
COMPLETE TORCH 4M	MB24 KD	SET	A5222220006	290.00
COMPLETE TORCH 5M	MB24 KD	SET	A5222220007	320.00


**NOZZLE (CONICAL)**

DESCRIPTION			PRODUCT CODE	PRICE (RM)
MB24 NOZZLE 12.5MM	MB24 KD	PC	A5222220011	8.00


**CONTACT TIP (E-Cu)**

DESCRIPTION			PRODUCT CODE	PRICE (RM)
CONTACT TIP M6*28*0.8MM	M6*28*0.8	PC	A5222220001	2.00
CONTACT TIP M6*28*1.0MM	M6*28*1.0	PC	A5222220002	2.00
CONTACT TIP M6*28*1.2MM	M6*28*1.2	PC	A5222220003	2.00


**CONTACT TIP HOLDER**

DESCRIPTION			PRODUCT CODE	PRICE (RM)
MB24 TIP ADAPTER	MB24 KD	PC	A5222220013	4.00


**SWAN NECK**

DESCRIPTION			PRODUCT CODE	PRICE (RM)
MB24 SWAN NECK	MB24 KD	PC	A5222220012	45.00

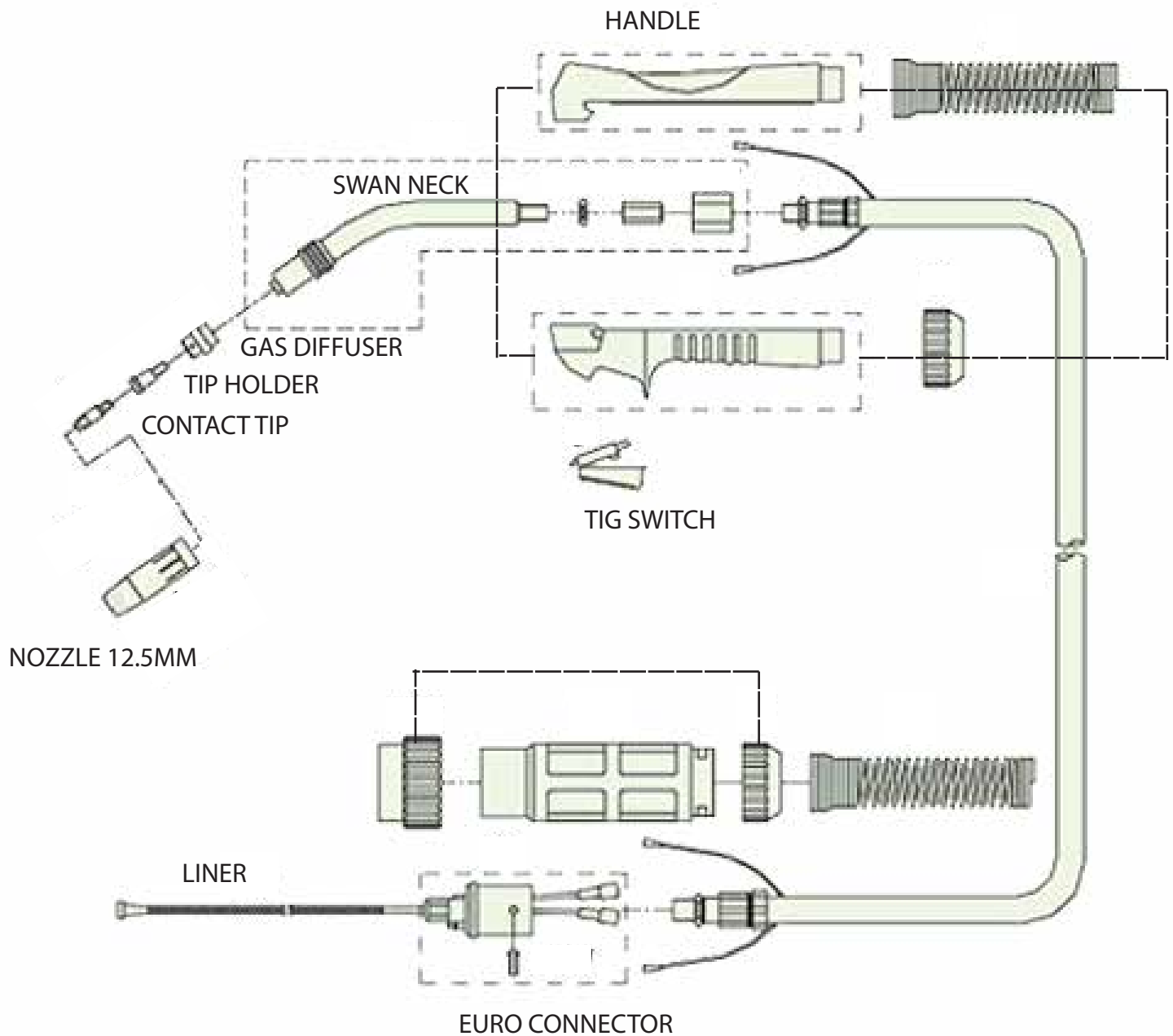

**DIFFUSER**

DESCRIPTION			PRODUCT CODE	PRICE (RM)
GAS DIFFUSER CERAMIC	MB24 KD	PC	A5222220008	2.50
GAS DISFFUSER 'DMC'	MB24 KD	PC	A5222220009	2.50
GAS DISFFUSER SILICON RUBBER	MB24 KD	PC	A5222220010	5.00


**STEEL LINE**

DESCRIPTION			PRODUCT CODE	PRICE (RM)
LINER EURO FITTING 3 M		PC	A5222000001	15.00
LINER EURO FITTING 4 M		PC	A5222000002	18.00
LINER EURO FITTING 5 M		PC	A5222000003	20.00
TEFLON LINER EURO FITTING YELLOW		PC	A5222000004	45.00
TEFLON LINER EURO FITTING BLACK		PC	A5222000005	95.00

**MB 24 MIG TORCH DIAGRAM**





**MB 36 MIG TORCH LIST**

**COMPLETE TORCH 3/4/5 M**

DESCRIPTION			PRODUCT CODE	PRICE (RM)
COMPLETE TORCH 3M	MB36 KD	SET	A5222330003	350.00
COMPLETE TORCH 4M	MB36 KD	SET	A5222330004	380.00
COMPLETE TORCH 5M	MB36 KD	SET	A5222330005	420.00


**NOZZLE (CONICAL)**

DESCRIPTION			PRODUCT CODE	PRICE (RM)
MB36 NOZZLE	MB36 KD	PC	A5222330007	15.00


**CONTACT TIP (E-Cu)**

DESCRIPTION			PRODUCT CODE	PRICE (RM)
CONTACT TIP M8*30*1.0	M8*30*1.0	PC	A5222330001	3.50
CONTACT TIP M8*30*1.2	M8*30*1.2	PC	A5222330002	3.50


**TIP HOLDER (M8)**

DESCRIPTION			PRODUCT CODE	PRICE (RM)
MB36 TIP ADAPTER (M8)	MB36 KD	PC	A5222330009	4.50


**TIP HOLDER (M6)**

DESCRIPTION			PRODUCT CODE	PRICE (RM)
MB36 TIP ADAPTER (M6)	MB36 KD	PC	A5222330008	4.50


**SWAN NECK**

DESCRIPTION			PRODUCT CODE	PRICE (RM)
MB36 SWAN NECK	MB36 KD	PC	A5222330006	60.00


**DIFFUSER (CERAMIC)**

DESCRIPTION			PRODUCT CODE	PRICE (RM)
CERAMIC DIFFUSER	MB36 KD	PC	A5222330010	2.50

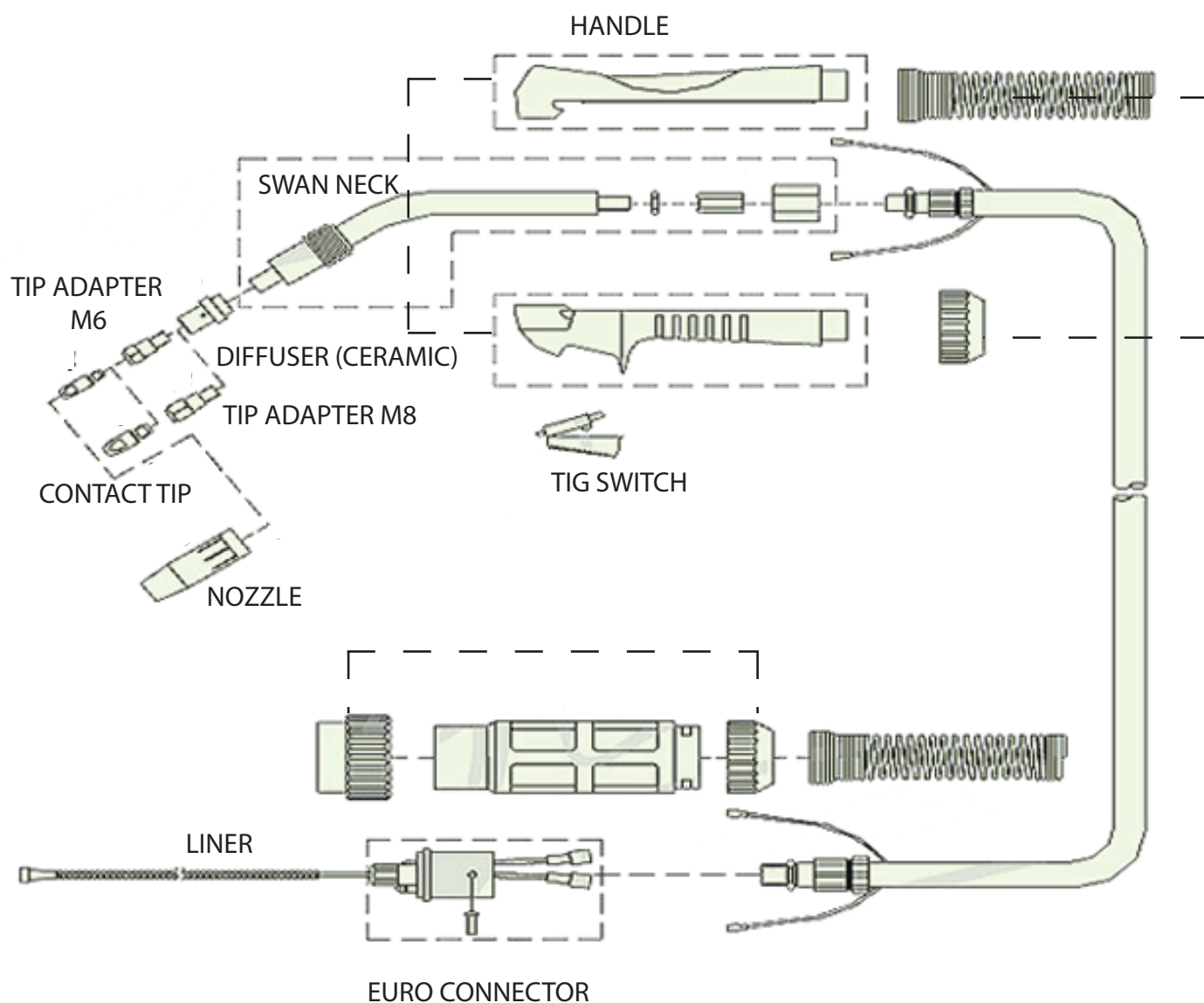

**STEEL LINE**

DESCRIPTION			PRODUCT CODE	PRICE (RM)
LINER EURO FITTING 3 M		PC	A5222000001	15.00
LINER EURO FITTING 4 M		PC	A5222000002	18.00
LINER EURO FITTING 5 M		PC	A5222000003	20.00
TEFLON LINER EURO FITTING 4.5 M	YELLOW	PC	A5222000004	45.00
TEFLON LINER EURO FITTING 4.5 M	BLACK	PC	A5222000005	95.00



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

**MB 36 MIG TORCH DIAGRAM**



**PANA TYPE 350A MIG LIST**
**COMPLETE TORCH 3/4/5 M**

DESCRIPTION			PRODUCT CODE	PRICE (RM)
COMPLETE TORCH 3M	350A	SET	A5222440004	350.00
COMPLETE TORCH 4M	350A	SET	A5222440005	380.00
COMPLETE TORCH 5M	350A	SET	A5222440006	420.00


**NOZZLE 16MM**

DESCRIPTION			PRODUCT CODE	PRICE (RM)
NOZZLE *16MM	350A	PC	A5222440011	16.00


**NOZZLE 12MM**

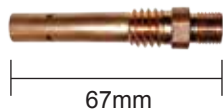
DESCRIPTION			PRODUCT CODE	PRICE (RM)
NOZZLE *12MM	350A	PC	A5222440012	16.00


**CONTACT TIP (E-Cu)**

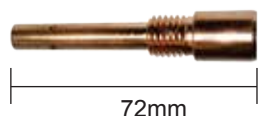
DESCRIPTION			PRODUCT CODE	PRICE (RM)
M6*45*0.8/1.0/1.2/1.4/1.6	M6*45*0.8/1.0/1.2/1.4/1.6	PC	A5222000005/6/7/8/9	3.00
M6*45*1.2/1.6 CUCRZR	M6*45*0.8/1.0/1.2/1.4/1.6	PC	A5222000011/12	4.00
M6*42*1.0/1.2	M6*42*1.0/1.2	PC	A5222000014/15	3.00


**DIFFUSER/ORIFICE (CERAMIC)**

DESCRIPTION			PRODUCT CODE	PRICE (RM)
DIFFUSER /ORIFICE	350A	PC	A5222440010	4.00


**CONTACT TIP HOLDER (MALE)**

DESCRIPTION			PRODUCT CODE	PRICE (RM)
TIP ADAPTER MALE	350A	PC	A5222440012	16.00


**CONTACT TIP HOLDER (FEMALE)**

DESCRIPTION			PRODUCT CODE	PRICE (RM)
TIP ADAPTER FEMALE	350A	PC	A5222440013	16.00


**SWAN NECK**

DESCRIPTION			PRODUCT CODE	PRICE (RM)
SWAN NECK	350A	PC	A5222440007	75.00


**INSULATOR**

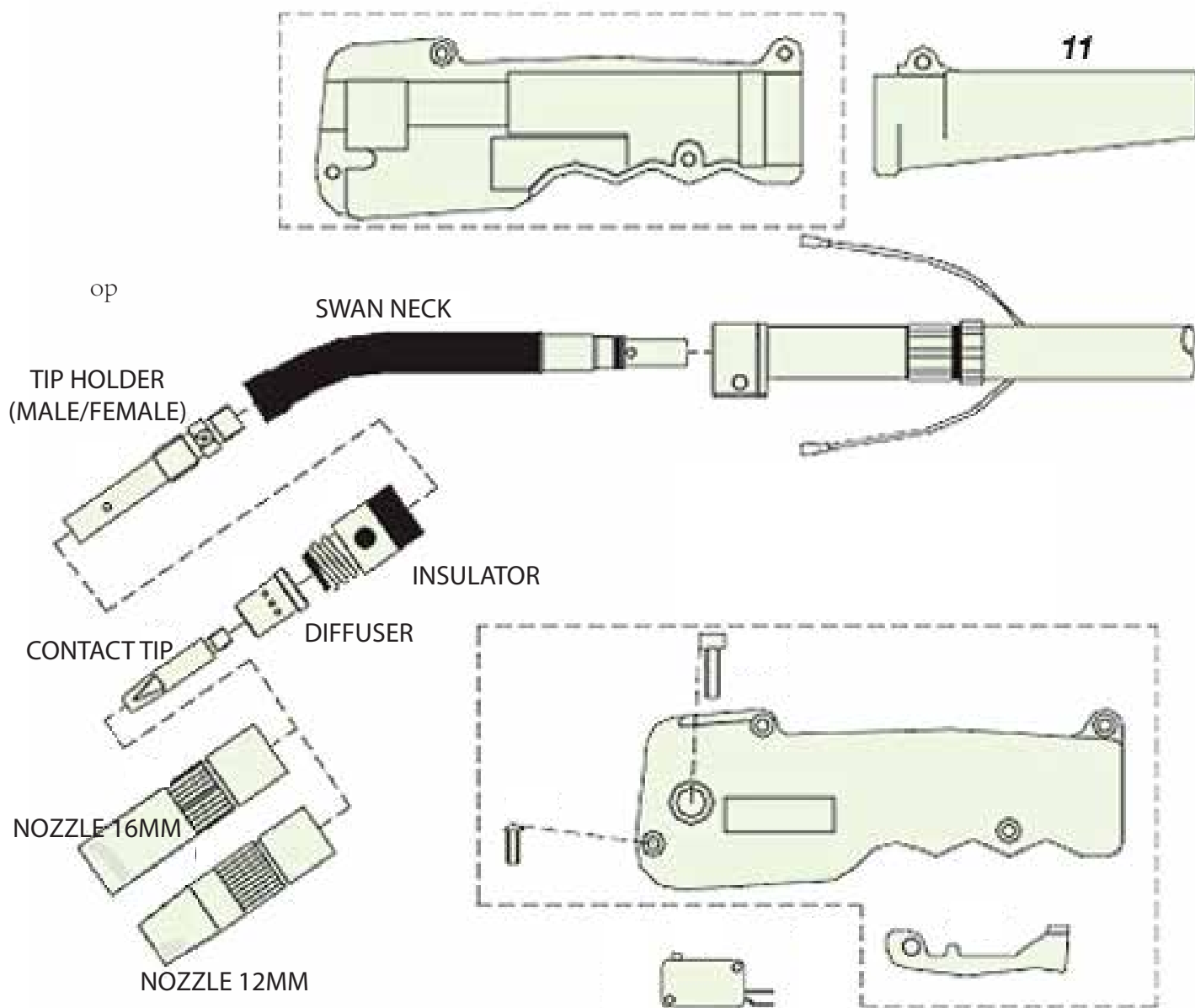
DESCRIPTION			PRODUCT CODE	PRICE (RM)
INSULATOR 350A	350A	PC	A5222440014	12.00


**STEEL LINE**

DESCRIPTION			PRODUCT CODE	PRICE (RM)
LINER EURO FITTING 4 M		PC	A5222550004	30.00
LINER EURO FITTING 5 M		PC	A5222550005	30.00
LINER JAPAN FITTING 3 M		PC	A5222440001	30.00
LINER JAPAN FITTING 4 M		PC	A5222000002	30.00
LINER JAPAN FITTING 5 M		PC	A5222000003	30.00
TEFLON LINER EURO FITTING 4.5 M	YELLOW	PC	A5222000004	45.00
TEFLON LINER EURO FITTING 4.5 M	BLACK	PC	A5222000005	95.00

**PANA TYPE 350A MIG DIAGRAM**

Available in Euro & Japan Fitting



EURO FITTING



JAPAN FITTING

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



**PANA TYPE 500A MIG LIST**
**COMPLETE TORCH 3/4/5 M**

DESCRIPTION			PRODUCT CODE	PRICE (RM)
COMPLETE TORCH 3M	500A	SET	A5222550006	580.00
COMPLETE TORCH 4M	500A	SET	A5222550007	600.00
COMPLETE TORCH 5M	500A	SET	A5222550008	650.00

**NOZZLE 19MM**

DESCRIPTION			PRODUCT CODE	PRICE (RM)
NOZZLE 19MM	500A	PC	A5222550014	20.00

**CONTACT TIP (E-Cu)**

DESCRIPTION			PRODUCT CODE	PRICE (RM)
M6*45*0.8/1.0/1.2/1.4/1.6	M6*45*0.8/1.0/1.2/1.4/1.6	PC	A5222550008/9/10/11/12	3.00
M6*45*1.2/1.6 CUCRZR	M6*45*1.2/1.6	PC	A5222000013/14	4.00

**DIFFUSER/ORIFICE (CERAMIC)**

DESCRIPTION			PRODUCT CODE	PRICE (RM)
DIFFUSER /ORIFICE	500A	PC	A5222550015	5.00

**TIP ADAPTER (MALE)**

DESCRIPTION			PRODUCT CODE	PRICE (RM)
TIP ADAPTER MALE	500A	PC	A5222550009	18.00

**TIP ADAPTER (FEMALE)**

DESCRIPTION			PRODUCT CODE	PRICE (RM)
TIP ADAPTER FEMALE	500A	PC	A5222550010	18.00

**SWAN NECK**

DESCRIPTION			PRODUCT CODE	PRICE (RM)
SWAN NECK	500A	PC	A5222550000	95.00

**INSULATOR**

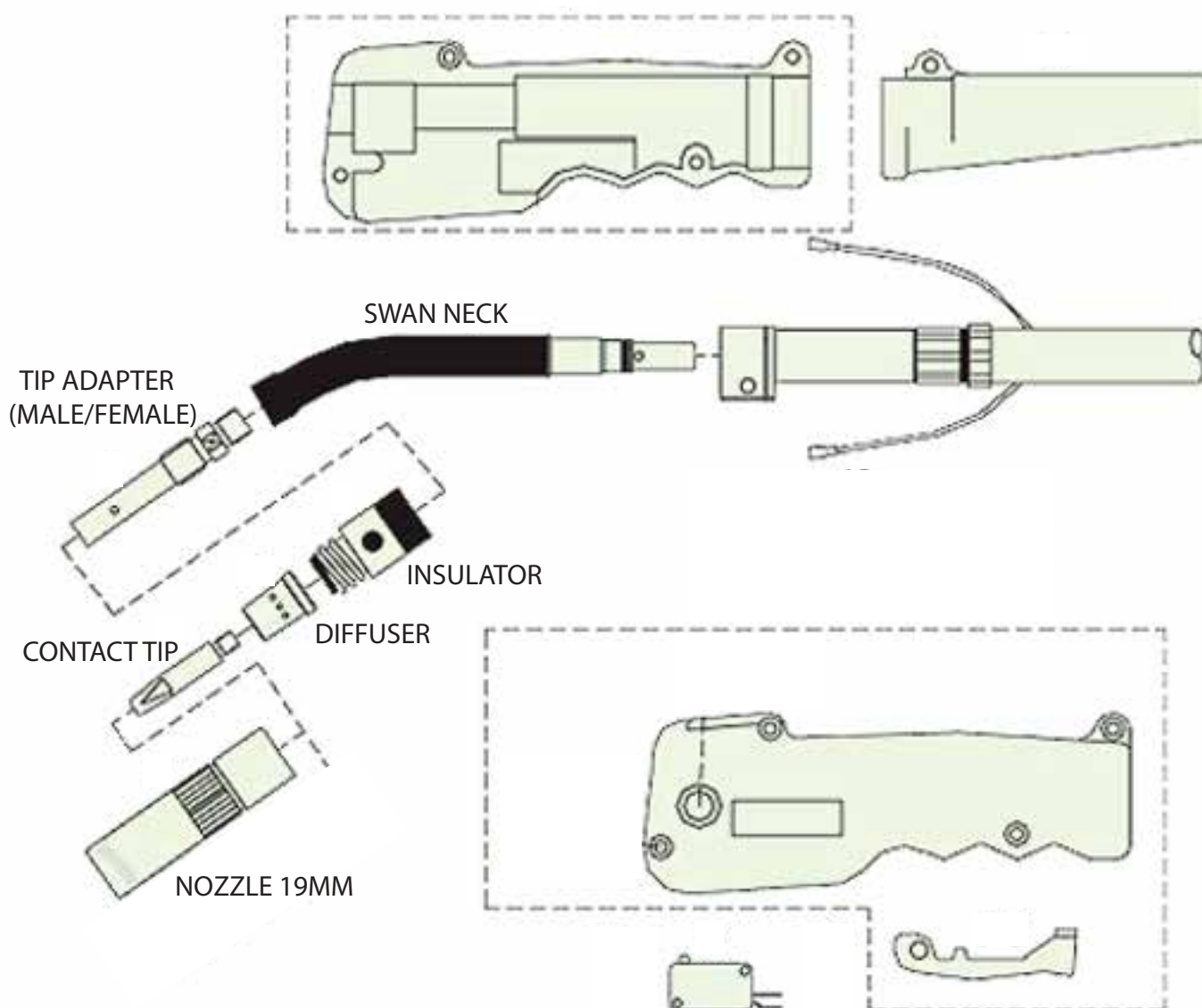
DESCRIPTION			PRODUCT CODE	PRICE (RM)
INSULATOR 500A	500A	PC	A5222550005	15.00

**STEEL LINE**

DESCRIPTION			PRODUCT CODE	PRICE (RM)
LINER EURO FITTING 4 M		PC	A5222550004	30.00
LINER EURO FITTING 5 M		PC	A5222550005	30.00
LINER JAPAN FITTING 3 M		PC	A5222440001	30.00
LINER JAPAN FITTING 4 M		PC	A5222440002	30.00
LINER JAPAN FITTING 5 M		PC	A5222440003	30.00
TEFLON LINER EURO FITTING 4.5 M	YELLOW	PC	A5222000004	45.00
TEFLON LINER EURO FITTING 4.5 M	BLACK	PC	A5222000005	95.00

**PANA TYPE 500A MIG DIAGRAM**

Available in Euro & Japan Fitting



**EURO FITTING**



**JAPAN FITTING**

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

**EURO CONNECTOR & Mig Red Handle**


DESCRIPTION	PRODUCT CODE	PACKING	LIST PRICE (RM)
Euro Connector For Torch End	A5222000015		50.00



DESCRIPTION	PRODUCT CODE	PACKING	LIST PRICE (RM)
Euro Connector For Machine	A5222000016		130.00



DESCRIPTION	PRODUCT CODE	PACKING	LIST PRICE (RM)
Euro Connector For Pana Fitting	A5222000017		150.00



DESCRIPTION	PRODUCT CODE	PACKING	LIST PRICE (RM)
Mig Red Handle	A5222000007		50.00



DESCRIPTION	PRODUCT CODE	PACKING	LIST PRICE (RM)
Mig Trigger Switch "Red"	5222000006		10.00

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



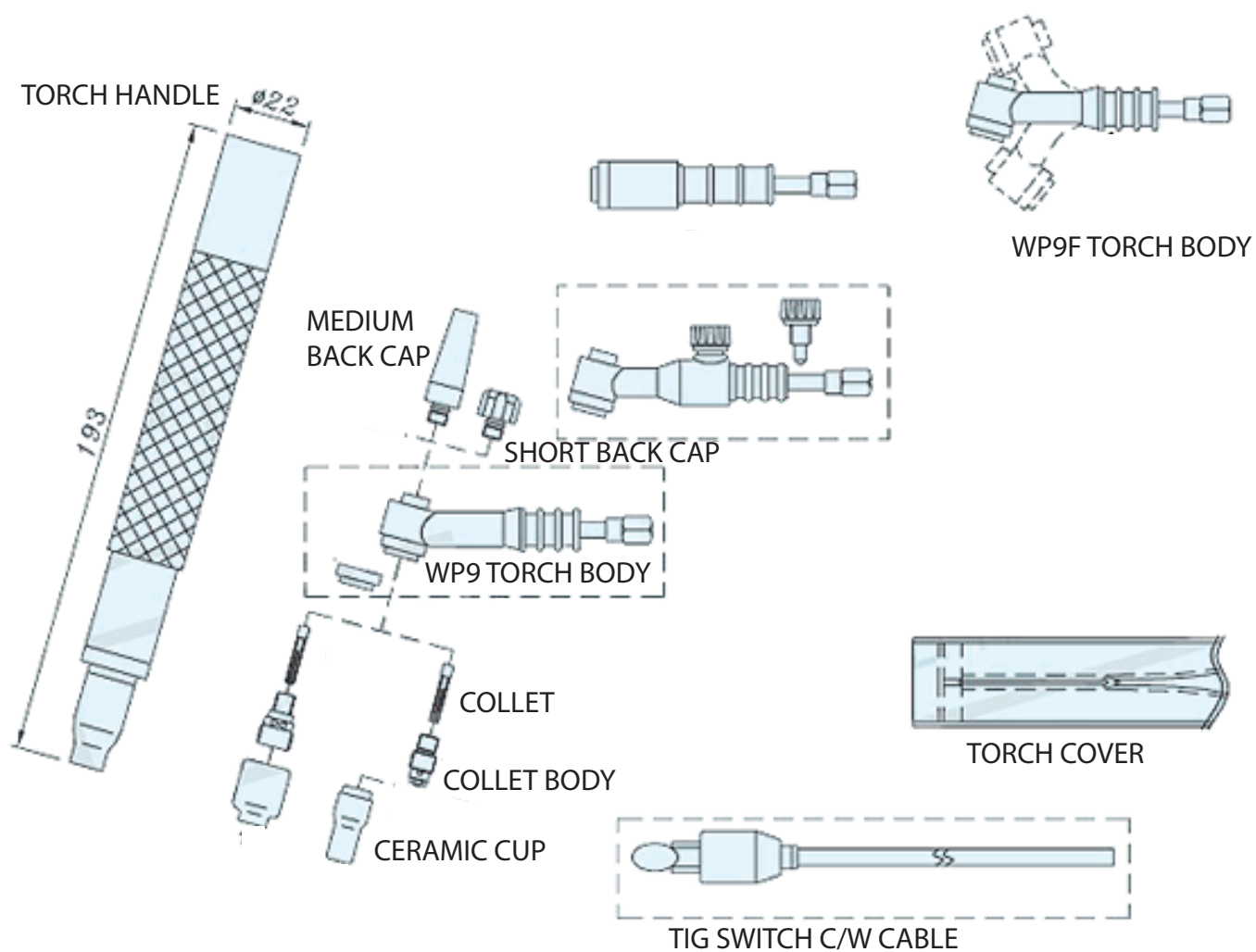
NO:	DESCRIPTION	PART NUMBER	LIST PRICE (RM)
1	WP9 Collet 1.6MM	13N22	2.00
	WP9 Collet 2.4MM	13N23	2.00
2	WP9 Collet Body 1.6MM	12N27	4.00
	WP9 Collet Body 2.4MM	13N28	4.00
3	WP9 Ceramic Cup #4	13N08	2.00
	WP9 Ceramic Cup #5	13N09	2.00
	WP9 Ceramic Cup #6	13N10	2.00
	WP9 Ceramic Cup #7	13N11	2.00
	WP9 Ceramic Cup #8	13N12	2.00
4	WP9 Short Back Cap	41V33	4.00
5	WP9 Medium Back Cap	41V35	6.00
6	WP9 Torch Body c/w Handle		50.00
7	WP9P Torch Body c/w Handle		60.00
8	WP9V Torch Body c/w Handle		50.00
9	WP9F Torch Body c/w Handle		60.00
10	WP9F-2-25 Tig Torch Complete		280.00
11	WP9-2-25 Tig Torch Complete		260.00
12	Micro/Tig Switch		10.00



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



**WP9 Series 125Amps Air Cooled TIG Torches Diagram**



**WP17 Series 150 Amps Air Cooled TIG Torches**

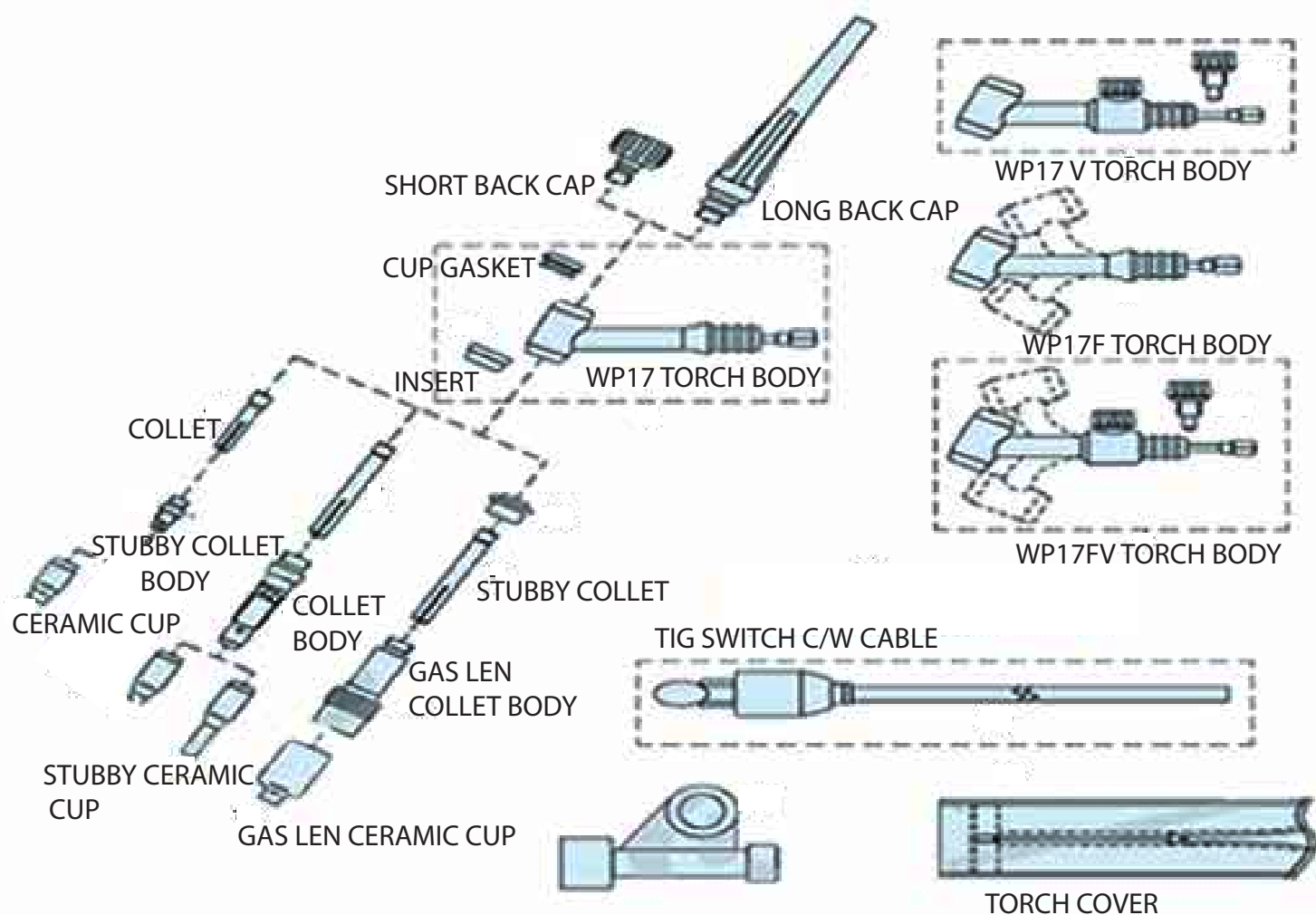


NO:	DESCRIPTION	PART NUMBER	LIST PRICE (RM)
1	WP17 Torch Body C/W Handle		50.00
2	WP17V Torch Body C/W Handle		40.00
	WP17F Torch Body C/W Handle		50.00
	WP17FV Torch Body C/W Handle		60.00
3	WP17V Valve Stem VS-2		10.00
4	WP17 Short Back Cap	57Y04	4.00
5	WP17 Long Back Cap	57Y02	5.00
5.1	WP17 Medium Back Cap	57Y03	5.00
6.1	WP 17 CUP GASKET 18CG	57Y02	10.00
6.2	WP17 Insert 18-7	57Y03	10.00
7	WP17 Ceramic Cup #4 #5 #6 #7 #8 #10	10N50/ 49/ 48/ 47/ 46/ 45	2.00
7.1	Long Ceramic Cup #5 #6	10N49L/ 48L	12.00
8	WP17 Collet Body 1.0/1.6/2.4/3.2MM	10N30/ 31/ 32/ 28	4.00
9	WP17 Collet 1.0/1.6/2.4/3.2MM	10N22/ 23/ 24/ 25	2.00
10	Gas Lens Collet Body 1.6/2.4/3.2MM	45V25/ 26/ 27	12.00
11	Gas Lens Ceramic Cup #5 #6 #7 #8	54N17/ 16/ 15/ 14	6.00
11.1	Long Gas Lens Ceramic Cup #6 #7 #8	54N16L/ 15L/ 14L	16.00
12	Stubby Ceramic Cup	13N Series	2.00
13	Stubby Collet Body	17CB20	4.00
14	Stubby Collet 1.6/ 2.4MM	10N23S/ 24S	2.00
15	Micro/ Tig Switch		10.00

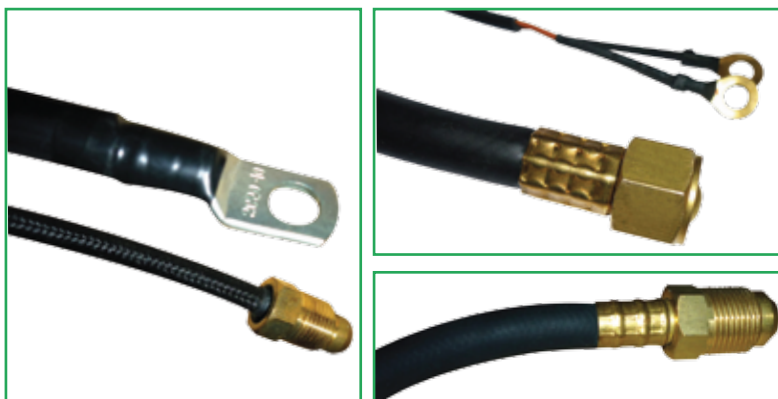
DESCRIPTION	LIST PRICE (RM)
WP17-25-2 Tig Torch Complete	226.00
WP17-25-R Tig Torch Complete	220.00
WP17V-25-2 Tig Torch Complete	220.00
WP17V-25-R Tig Torch Complete	220.00

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

**WP17 Series 150 Amps Air Cooled TIG Torches Diagram**



**WP26 Series 200 Amps Air Cooled TIG Torches**



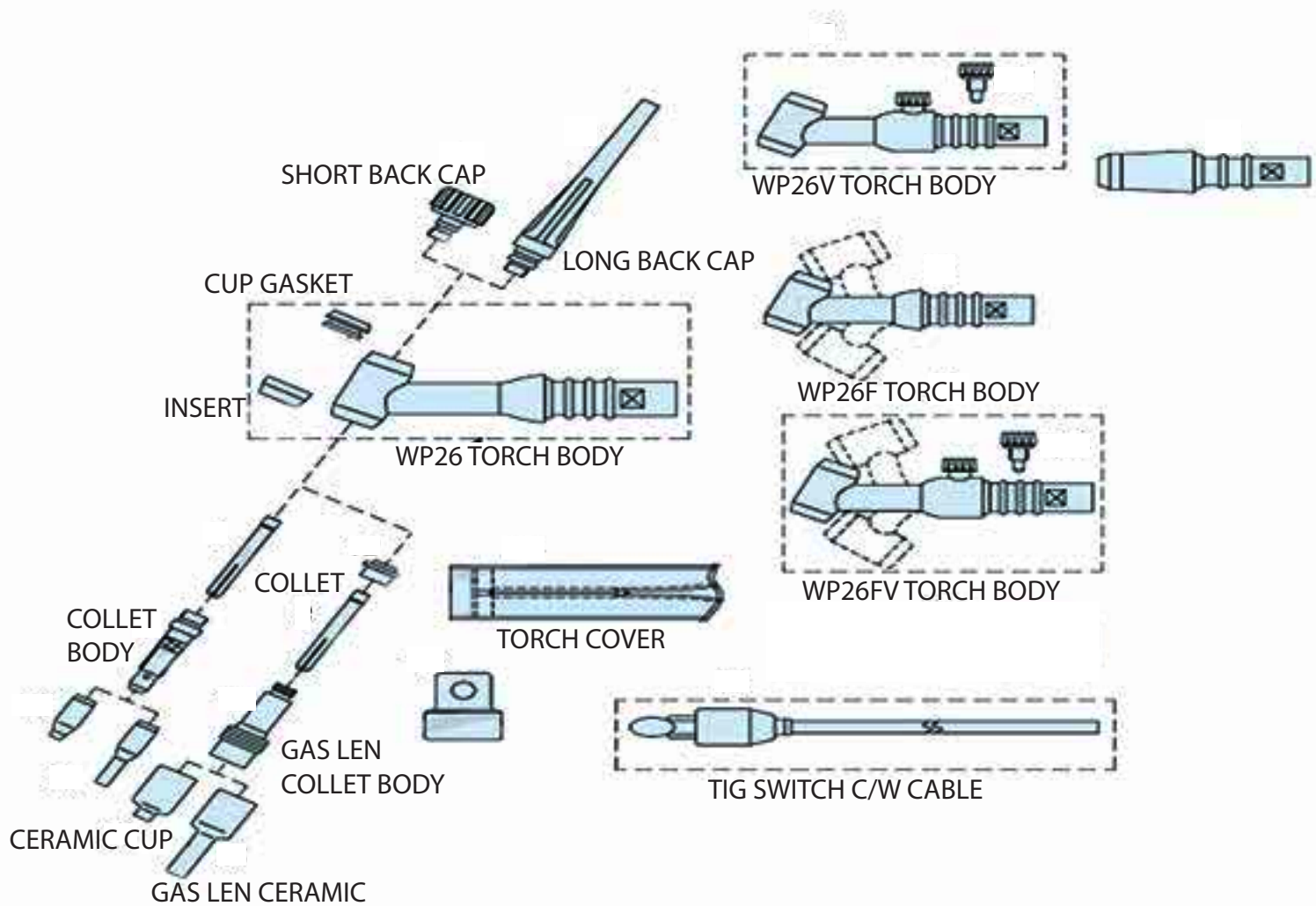
NO:	DESCRIPTION	PART NUMBER	LIST PRICE (RM)
1	WP26 Torch Body C/W Handle		45.00
2	WP26V Torch Body C/W Handle		45.00
	WP26F Torch Body C/W Handle		55.00
	WP26FV Torch Body C/W Handle		55.00
	WP26V Valve Stem	VS-1	10.00
3	WP26 Short Back Cap	57Y04	4.00
4	WP26 Long Back Cap	57Y02	5.00
5	WP 26P Straight Torch Body		
6	WP26 Ceramic Cup #4 #5 #6 #7 #8 #10	10N50/49/48/47/46/45	2.00
6.1	Long Ceramic Cup #5 #6	10N49L/48L	12.00
7	WP26 Collet Body 1.0/1.6/2.4/3.2MM	10N30/31/32/28	4.00
8	WP26 Collet 1.0/1.6/2.4/3.2MM	10N22/23/24/25	2.00
9	Gas Lens Collet Body 1.6/2.4/3.2MM	45V25/26/27	12.00
10	Gas Lens Ceramic Cup #5 #6 #7 #8	54N17/16/15/14	6.00
10.1	Long Gas Lens Ceramic Cup #6 #7 #8	54N16L/15L/14L	16.00
11	Stubby Ceramic Cup	13N Series	2.00
12	Stubby Collet Body	17CB20	4.00
13	Stubby Collet 1.6/2.4MM	10N23S	2.00
14	Micro/Tig Switch		10.00

DESCRIPTION	LIST PRICE (RM)
WP26V-25-2 Tig Torch	300.00
WP26-25-2 Tig Torch	300.00
WP26-25-R Tig Torch	300.00

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



**WP26 Series 200 Amps Air Cooled TIG Torches Diagram**



**WP18 Series 350 Amps Water Cooled TIG Torches**

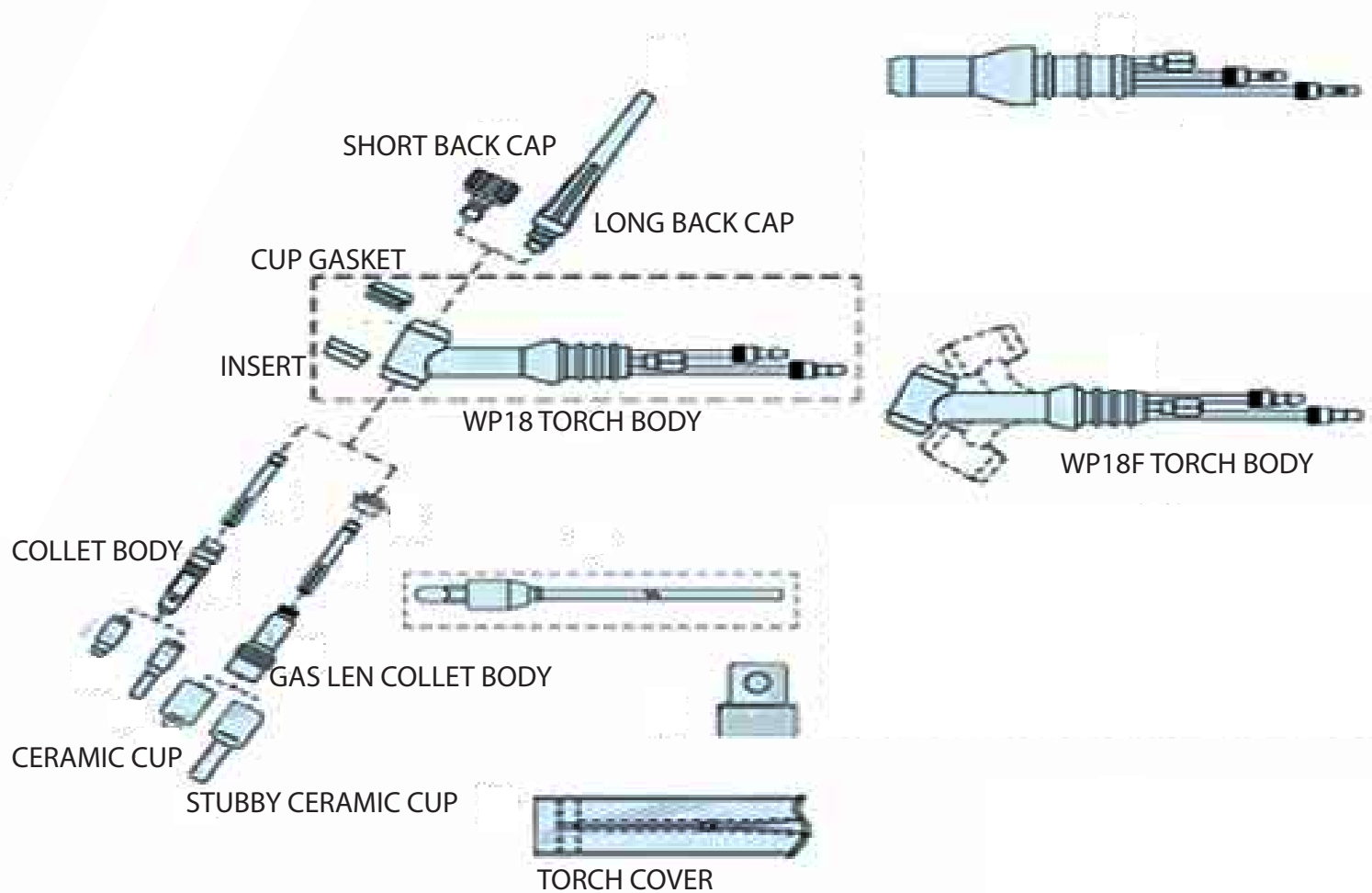


NO:	DESCRIPTION	PART NUMBER	LIST PRICE (RM)
1	WP18 Torch Body C/W Handle		55.00
2	WP18F Torch Body C/W Handle		60.00
3	WP18 Short Back Cap	57Y04	4.00
4	WP18 Long Back Cap	57Y02	5.00
5.1	WP18 CUP GASKET	18CG	10.00
5.2	WP18 Insert	18-7	10.00
6	WP18 Ceramic Cup #4 #5 #6 #7 #8 #10	10N50/49/48/47/46/45	2.00
6.1	Long Ceramic Cup #5 #6	10N49L/48L	12.00
7	WP18 Collet Body 1.0/1.6/2.4/3.2MM	10N30/31/32/28	4.00
8	WP18 Collet 1.0/1.6/2.4/3.2MM	10N22/23/24/25	2.00
9	Gas Lens Collet Body 1.6/2.4/3.2MM	45V25/26/27	12.00
10	Gas Lens Ceramic Cup #5 #6 #7 #8	54N17/16/15/14	6.00
10.1	Long Gas Lens Ceramic Cup #6 #7 #8	54N16L/15L/14L	16.00
11	Stubby Ceramic Cup	13N Series	2.00
12	Stubby Collet Body	17CB20	4.00
13	Stubby Collet 1.6/2.4MM	10N23S	2.00
14	Micro/Tig Switch		10.00

DESCRIPTION	LIST PRICE (RM)
WP18-25-R Tig Torch	380.00
WP18F-25-R Tig Torch	380.00



**WP18 Series 350 Amps Water Cooled TIG Torches Diagram**





**WP17-2-25**  
A5233110001



**WP17-R-25**  
A5233110002 (MALE)  
A5233110011 (FEMALE)



**WP18-R-25**  
A5233220004



**WP26-2-25**  
A5233330001



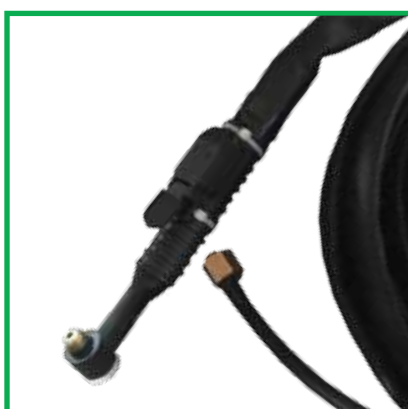
**WP26-R-25**  
A5233330006



**WP26V-2-25**  
A5233330005



**STD ACC**  
A5233000039



**WP9-2-25**  
A5233440017



**WP9F-2-25**  
A5233440016

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

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



## TUNGSTEN

### 2% Thoriated Red

#### Description :

2% Thoriated Tungsten contains a nominal 2 wt-% of thorium oxide ( $\text{ThO}_2$ ) 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 a 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 ( $\text{LaO}_3$ ). 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, nickel 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 aluminium and magnesium alloys (AC).

### 2% Ceriated Grey

#### Description :

2% Ceriated Tungsten contains a nominal 2wt-% of cerium oxide ( $\text{CeO}_2$ ). 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.



DESCRIPTION	LIST PRICE (RM)
2% Tungsten 1.0mm	3.00
2% Tungsten 1.6mm	3.00
2% Tungsten 2.4mm	6.00
2% Tungsten 3.2mm	12.00
2% Tungsten 4.0mm	30.00
Gold Tungsten 1.6mm	4.00
Gold Tungsten 2.4mm	7.00
Pure Tungsten 1.6mm	4.00
Pure Tungsten 2.4mm	7.00
Pure Tungsten 3.2mm	12.00
Grey Tungsten 1.6mm	3.00
Grey Tungsten 2.4mm	6.00
Grey Tungsten 3.2mm	12.00
Blue Tungsten 2.4mm	8.00

**TIG REPAIRING CATEGORIES**
**WP26-2 DUMP  
IRON**

**PRICE LIST**

PRODUCT CODE	DESCRIPTION	PRICE (RM)
A5233000055	WP26-2 CURRENT NIPPLE AO-27700	10.00


**PRICE LIST**

PRODUCT CODE	DESCRIPTION	PRICE (RM)
A5233000054	WP26-2 CABLE CONNECTOR FRONT AO-27600	10.00


**PRICE LIST**

PRODUCT CODE	DESCRIPTION	PRICE (RM)
A5233000052	GAS NUT FOR TIG HOSE AO-24300	10.00



AO-24300/AG-12700

**PRICE LIST**

PRODUCT CODE	DESCRIPTION	PRICE (RM)
A5233000060	ARGON GAS ADAPTER	25.00


**PRICE LIST**

PRODUCT CODE	DESCRIPTION	PRICE (RM)
A5233000067	WP17 CURRENT NIPPLE 57Y10 (Single Line)	18.00


**PRICE LIST**

PRODUCT CODE	DESCRIPTION	PRICE (RM)
A5233000059	BRAIDED ARGON GAS HOSE C/W FITTING	50.00


**PRICE LIST**

PRODUCT CODE	DESCRIPTION	PRICE (RM)
A5233000064	BRAIDED ARGON GAS HOSE 100M/ROLL	500.00


**PRICE LIST**

PRODUCT CODE	DESCRIPTION	PRICE (RM)
A5233000050	TORCH COVER JEANS	35.00

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

**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"



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

**PT 31 PLASMA**



**PRICE LIST**

PRODUCT CODE	DESCRIPTION	PRICE (RM)
A5244330019	PLASMA COMPLETE SET	250.00



**PRICE LIST**

PRODUCT CODE	DESCRIPTION	PRICE (RM)
A5244330005	PLASMA TORCH BODY	65.00



**PRICE LIST**

PRODUCT CODE	DESCRIPTION	PRICE (RM)
A5244330003	PLASMA SHIELD CAP	5.00



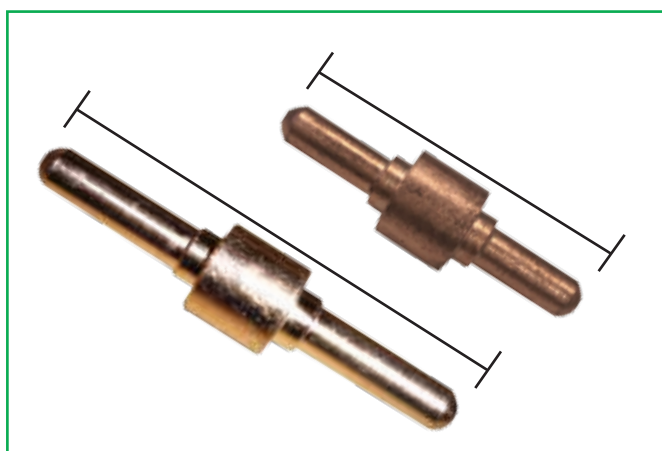
**PRICE LIST**

PRODUCT CODE	DESCRIPTION	PRICE (RM)
A5244330004	PLASMA SWIRL RING	3.50



**PRICE LIST**

PRODUCT CODE	DESCRIPTION	PRICE (RM)
A5244330002	PLASMA NOZZLE EX	5.00
A5244330022	PLASMA NOZZLE	5.00



**PRICE LIST**

PRODUCT CODE	DESCRIPTION	PRICE (RM)
A5244330001	PLASMA ELECTRODE EX	5.00
A5244330021	PLASMA ELECTRODE	5.00

**P 50 PLASMA**



**PRICE LIST**

PRODUCT CODE	DESCRIPTION	PRICE (RM)
A5244110006	PLASMA COMPLETE SET	420.00



**PRICE LIST**

PRODUCT CODE	DESCRIPTION	PRICE (RM)
A5244110001	PLASMA TORCH BODY	100.00



**PRICE LIST**

PRODUCT CODE	DESCRIPTION	PRICE (RM)
A5244110004	PLASMA SHIELD CAP	7.00



**PRICE LIST**

PRODUCT CODE	DESCRIPTION	PRICE (RM)
A5244110005	PLASMA SWIRL RING	5.00



**PRICE LIST**

PRODUCT CODE	DESCRIPTION	PRICE (RM)
A5244110003	PLASMA NOZZLE	7.00



**PRICE LIST**

PRODUCT CODE	DESCRIPTION	PRICE (RM)
A5244110002	PLASMA ELECTRODE	7.00



**P 80 PLASMA**



**PRICE LIST**

PRODUCT CODE	DESCRIPTION	PRICE (RM)
A5244220002	PLASMA COMPLETE SET (8M)	600.00



**PRICE LIST**

PRODUCT CODE	DESCRIPTION	PRICE (RM)
A5244220008	TORCH BODY BLACK BENT	200.00



**PRICE LIST**

PRODUCT CODE	DESCRIPTION	PRICE (RM)
A5244220009	TORCH BODY STRAIGHT	300.00



**PRICE LIST**

PRODUCT CODE	DESCRIPTION	PRICE (RM)
A5244220006	PLASMA SHIELD CAP	10.00



**PRICE LIST**

PRODUCT CODE	DESCRIPTION	PRICE (RM)
A5244220007	Plasma Roller Guide	30.00



**PRICE LIST**

PRODUCT CODE	DESCRIPTION	PRICE (RM)
A5244220003	PLASMA ELECTRODE	10.00



**PRICE LIST**

PRODUCT CODE	DESCRIPTION	PRICE (RM)
A5244220005	PLASMA NOZZLE 1.5MM	10.00
A5244220004	PLASMA NOZZLE 1.3MM	10.00

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

**SP60 PLASMA**



**PRICE LIST**

PRODUCT CODE	DESCRIPTION	PRICE (RM)
A5244330009	PLASMA TORCH BODY	



**PRICE LIST**

PRODUCT CODE	DESCRIPTION	PRICE (RM)
A5244330008	PLASMA SHIELD CAP	



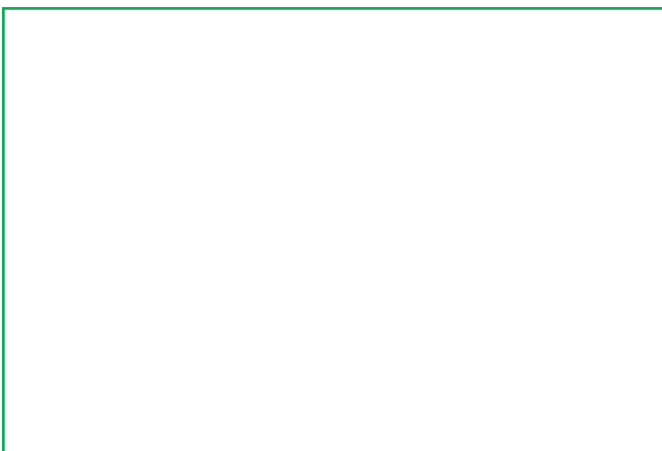
**PRICE LIST**

PRODUCT CODE	DESCRIPTION	PRICE (RM)
A5244330007	PLASMA NOZZLE	



**PRICE LIST**

PRODUCT CODE	DESCRIPTION	PRICE (RM)
A5244330006	PLASMA ELECTRODE	



**PRICE LIST**

PRODUCT CODE	DESCRIPTION	PRICE (RM)
SP60	COMPLETE TORCH WITH PILOT ARC	

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

**SG 51 PLASMA**

**PRICE LIST**

PRODUCT CODE	DESCRIPTION	PRICE (RM)
A5244330019	PLASMA SHIELD CAP CERAMIC	10.00
A5244330020	PLASMA SHIELD CAP BLACK	20.00


**PRICE LIST**

PRODUCT CODE	DESCRIPTION	PRICE (RM)
A5244330017	PLASMA NOZZLE	10.00


**PRICE LIST**

PRODUCT CODE	DESCRIPTION	PRICE (RM)
A5244330016	PLASMA ELECTRODE	10.00

**SG 55 PLASMA / AG60**

**PRICE LIST**

PRODUCT CODE	DESCRIPTION	PRICE (RM)
A5244550003	PLASMA SHIELD CAP	8.00


**PRICE LIST**

PRODUCT CODE	DESCRIPTION	PRICE (RM)
A5244550001	PLASMA NOZZLE TIP-1.0MM	10.00


**PRICE LIST**

PRODUCT CODE	DESCRIPTION	PRICE (RM)
A5244550002	PLASMA ELECTRODE	10.00

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## 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.



PRODUCT CODE	PRICE (RM)
A5255000001	12.00

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



## 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.

#### PHYSICAL PROPERTIES

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).

PRODUCT CODE	PRICE (RM)
A5255000009	60.00

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





## ANTI-SPATTER NOZZEL & SHIELD

### 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.



## CAUTION

## 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 30cm from surface to be protected. Spray a thin uniform coating. Do not over apply solution as excessive 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 or equivalent steel compatible degreaser.

## CAUTION

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

## PRICE LIST

PRODUCT CODE	DESCRIPTION	PRICE (RM)
A5255000010	ANTI-SPATTER NOZZEL & SHIELD	125.00

**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



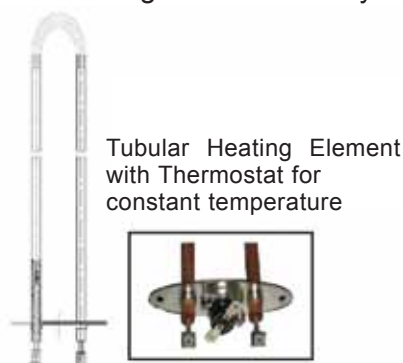
PRODUCT CODE	DESCRIPTION	LIST PRICE
E200S	FLOOR TYPE ELECTRODE OVEN (E200S)	5,200.00
Capacity (Rod Lgth.450mm)	210 kgs (estimate)	
Temperature Range (Average Stabilized)	30° C ~ 400° C 86° F ~ 752° F	
Input Voltage AC- 50/60Hz	1ph, 190 ~ 240 V 2700 W	
External Dimension HxDxW	965 x 635 x 610mm 38"x 25"x 24"	
Internal Dimension HxDxW	560 x 560 x 510mm 22" x 22" x 20"	
Body Insulation (Ceramic wool)	50mm / 2"	
Net Weight	65 kgs / 143 lbs	

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

**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	180.00
A5277000002 P10AC	PORTABLE TYPE ELECTRODE OVEN P 10A	230.00
A5277000003 P05DC	PORTABLE TYPE ELECTRODE OVEN P 05D	180.00
A5277000004 P10DC	PORTABLE TYPE ELECTRODE OVEN P 10D	230.00

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"	25 mm / 1"	25 mm / 1"	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

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

**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.



PRODUCT CODE	DESCRIPTION	LIST PRICE
BM 151H	BENCH TYPE OVEN (BM 151H)	2800.00
Capacity (Rod Lgth.450mm)	155 kgs (estimate)	
Temperature Range (Average Stabilized)	50° C ~ 300° C (Analog) (122° F ~ 572° F)	
Input Voltage (Heating Element)	1ph,AC 190 ~ 240 V -50/60hz(1800 W)	
External Dimension	610 x 735 x 570mm (24"x 29"x 22.5")	
Internal Dimension dia. x deep	455 x 520mm (18"x 20.5")	
Body Insulation(Rock wool)	50mm / 2"	
Net Weight	41 Kgs (90 lbs)	

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



MODEL : ACE WELD 5KG AC/DC ELECTRODE DRYER  
AC/DC TYPE  
AC230V-50HZ  
DC60V-110V  
450MM LENGTH ELECTRODE

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

#### STANDARD ACCESSORIES



DC CABLE ADAPTOR



AC CABLE ADAPTOR

DESCRIPTION	PRODUCT CODE	PACKING	LIST PRICE (RM)
ACE WELD 5KG AC/DC ELECTRODE DRYER AC/DC TYPE	A5277000009	1 UNT	100.00
ACE WELD 10KG AC/DC ELECTRODE DRYER AC/DC TYPE	A5277000010	1 UNT	120.00



# LY600A

## Filter function analysis

1. LCD
2. Sensor
3. Solar Battery
4. Welding/Grinding



Filter Model	LY600A	LY600B	LY600H
Filter Size	110mm x 90mm x 9mm		
Active Viewing Area	92.5mm x 42.5mm	100mm x 50mm	98mm x 43mm
Light Shade	DIN4		
Dark Shade	DIN9 ~ DIN13		
Way to shift Dark State	Outer Control, Stepless Shift		
Switching Time	≤ 3 / 10000S		
Sensitivity Adjustment	Stapless Control		
Delay Time	0.1S ~ 0.8S		
Power Supply	Lithium Battery & Solar Supply		
Rated Capacity of Lithium Battery	600mAH	420mAH	600mAH
Replaceable Lithium Battery	YES		
Operating Temperature	-20°C ~ +65°C		
Sensors to Weld Arc	2		
Protect Grade against UVB	DIN16		
Grind	YES		
Low Battery	YES		
Test	YES		

## PRICE LIST

PRODUCT CODE	DESCRIPTION	PRICE (RM)
A8200701001	SOLAR HELMET BLUE EAGLE	200.00
A8200701002	SOLAR HELMET RED EAGLE	200.00
A8200701003	SOLAR HELMET SILVER EAGLE	200.00
A8200701004	SOLAR HELMET SILVER	200.00

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

**AUWELD EYE SAFE MODEL**
**Eye-Safe 18**


DESCRIPTION	PRODUCT CODE	PRICE (RM)
Auweld Eye Safe 18, Clear Temple with yellow rubber Tip, UV385 Clear HC	A4810182112	7.20



DESCRIPTION	PRODUCT CODE	PRICE (RM)
Auweld Eye Safe 18, Black temple with yellow rubber tip & UV385 Smoke HC	A4810182222	7.20



DESCRIPTION	PRODUCT CODE	PRICE (RM)
Auweld Eye Safe 18, Black temple with yellow rubber tip & UV385 I/O Mirror HC	A4810182242	9.20

**Eye -Safe 38**


DESCRIPTION	PRODUCT CODE	PRICE (RM)
Auweld Eye Safe 38, Black Temple, Nose (Black), Lens (Clear-HC), UV385	A4810382212	12.20



DESCRIPTION	PRODUCT CODE	PRICE (RM)
Auweld Eye Safe 38, Black Temple, Nose (Black), Lens (Smoke-HC), UV385	A4810382222	12.20



DESCRIPTION	PRODUCT CODE	PRICE (RM)
Auweld Eye Safe 38, Black Temple, Nose (Black), Lens (I/O mirror-HC), UV385	A4810382242	14.60



DESCRIPTION	PRODUCT CODE	PRICE (RM)
Auweld Eye Safe 58, Translucent Gray Temple, Noses (Clear), UV385 Smoke-HC	A4810582922	18.00



DESCRIPTION	PRODUCT CODE	PRICE (RM)
Auweld Eye Safe 58, Translucent Gray Temple, With I/O Mirror, UV385 HC Lens	A4810582942	21.50



DESCRIPTION	PRODUCT CODE	PRICE (RM)
Auweld Eye Safe 8W, No. 11	A4810083051	12.00

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



**Golden Full Protective Hood**  
Size: High 39cm  
Size: Perimeter 50cm  
**Unit Price: RM 90.00**



**Leather Welding Apron**

Size: L Width 67cm  
Length 94cm  
XL Width 70cm  
Length 107cm

**Unit Price: RM 120.00**



**Full Leather Sleeves**  
Size: Long 40cm  
**Unit Price: RM 90.00**



**Leather Sleeveless Welding Apron**

Size: L Width 58cm - 68cm  
Length 90cm - 94cm

**Unit Price: RM 90.00**



**Leather Leggings Spats**  
Size: Long 30cm  
**Unit Price: RM 90.00**



**Leather Welding Jacket**

**Unit Price: RM 260.00**

Size: Shoulder Circumference			Length	Sleeve	Height
L	50cm	113cm	76cm	63cm	170cm below
XL	52cm	118cm	78cm	65cm	170-175cm

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

## SAFETY SHOES



### Model FS333

Upper : Cow Leather  
Lining : Mesh  
Insole : Hi-poly  
Outsole : PU/PU  
ESD Standard  
Steel Under Sore  
Electrostatic Discharge

User Price : RM86.00/ pair



### Model FS666

Upper : Cow Leather  
Lining : Mesh  
Insole : Hi-poly  
Outsole : PU/PU  
ESD Standard  
Steel Under Sore  
Electrostatic Discharge

User Price : RM92.00/ pair



### Model H9000

Upper : Cow Leather  
Lining : Mesh  
Insole : Hi-poly  
Outsole : Rubber with Full Stitching  
ESD Standard  
Steel Under Sore  
Electrostatic Discharge

User Price : RM130.00/ pair





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 carbon 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 removal rates, resistance to breakage, heat and oxidation, uniform diameter and clean slag free grooves



Gouging Torch

### Gouging Carbon DC, Pointed

For general purpose grooving, cutting, welding inspection and removing over-welded parts

PRODUCT CODE	DESCRIPTION	PRICE (RM)
A5226074012	4.0mm x 305mm	0.80
A5226075012	5.0mm x 305mm	0.80
A5226076412	6.4mm x 305mm	0.95
A5226078012	8.0mm x 305mm	1.15
A5226079512	9.5mm x 305mm	1.30
A5226071112	11.0mm x 305mm	1.45
A5226071312	13.0mm x 305mm	1.65
A5226040001	K4 Gouging Torch	400.00
A5226040002	K3 Gouging Torch	350.00

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DESCRIPTION	SIZE
BLUE-ARC 3R/AWS A5. A. E6013	2.6mm x 300mm, 3.2mm x 350mm, 4.0mm x 400mm 5.0mm x 400mm
BLUEMIG S-6/AWS A5.18./ER70 S-6/GMAW	0.8mm/1.0mm/1.2mm/1.6mm x 15kg
AW 308LSi/AWS A5.9/ER 308LSi/GMAW	0.8mm/1.0mm/1.2mm x 12.5kg
AW 308L/AWS A5.4/E 308L-16/SMAW	2.6mm/3.2mm/4.0mm x 20kg
AW 308LSi/AWS A5.9/ER 308LSi/GTAW	1.2mm/1.6mm/2.4mm/3.2mm x 5kg
AW 309L/AWS A5.9/ER 309L/GTAW	1.2mm/1.6mm/2.4mm/3.2mm x 5kg
AW 316LSi/AWS A5.9/ER 316LSi/GTAW	1.2mm/1.6mm/2.4mm/3.2mm x 5kg



PRODUCT	PRICE (RM)
Argon Gas (Ar)	300.00



PRODUCT	PRICE (RM)
Oxygen Gas (O2)	300.00



PRODUCT	PRICE (RM)
Carbon Dioxide (CO2)	300.00



PRODUCT	PRICE (RM)
Nitrogen Gas (N2)	300.00

### 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



PRODUCT	PRICE (RM)
Acetylene Gas (DA)	450.00

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# WELDING EQUIPMENT







Output



Input



## Classic ARC 160/3.2

### Dependable, Professional, Reliable and Rugged

The Classic ARC 160mini delivers up to 160 amps DC for stick welding. Fit for vocational education, industrial production, maintenance, repair, farm and shop environments

- **Outstanding ARC Stability with low spatter**
- **Auto Protection against over-voltage and over-current**
- **Auto-adaptive Arc Force** – Minimizes electrodes sticking in the puddle without increased spatter or compromising arc stability.
- **Automatic Hot Start** – Boosts the current during startup to make striking an arc easier
- **Wide Range for Input Voltage:** 1P: 220/230  $\pm 15\%$  or 1P: 110/220  $\pm 15\%$
- **Super Portable and Energy Saving**
- **Portable with Adjustable Shoulder Strap** – The light weight of the machines (6kg) allow for easy transportation wherever you go

#### Processes

- Stick

#### Light Industrial

#### Key Options

- Case
- Hammer
- Helmet
- Shoulder strap

#### Base Unit Includes

- 1 PCS Inverter Power Source
- 200A stick electrode holder, 3m cable with Euro plug
- 3m Work Cable and 300A Clamp with Euro plug
- 220V, 3m input cord without plug

Product Model	Input voltage/Phase/Frequency	Output current/Voltage/Duty cycle	Amps Input at Rated Output	Output range/OCV	Dimension	Weight	Price
ARC 160/3.2	220V/1P/50-60Hz	140A/25.6V/25% $@40^{\circ}\text{C}$ 90A/23.6V/100% $@40^{\circ}\text{C}$	28A@140A	45-140A/65V	400x153x291(mm)	6kg	500.00



Output



Input



## Classic ARC 200T & 200

### Excellent, Professional, Reliable and Rugged

Introducing our popular ARC 200T and 200 for stick welding, both machines are exceptional choices for welding on mild steel, low alloy and stainless steels as well as cast iron and hardfacing for maintenance, repair, light fabrication, and hobby projects.

- **Outstanding ARC Stability with low spatter**
- **Auto Protection against over-voltage and over-current**
- **Auto-adaptive Arc Force** – Minimizes electrodes base metal short circuiting without increasing spatter or compromising arc stability.
- **Automatic Hot Start** – Boosts the current during startup to make striking an arc easier
- **Wide Range for Input Voltage:** 220/230  $\pm 15\%$
- **Super Portable and Energy Saving**
- **Portable with Adjustable Shoulder Strap** – The light weight of the machines (8kg) allow for easy transportation wherever you go

#### Processes

- Stick

#### Light Industrial

#### Key Options

- Case
- Hammer
- Helmet

#### Base Unit Includes

- 1 PCS Inverter Power Source
- 200A stick electrode holder, 3m Cable with Euro plug
- 3m Work Cable and 300A Clamp with Euro plug
- 220V, 3m input cord without plug

Product Model	Input voltage/Phase/Frequency	Output current/Voltage/Duty cycle	Amps Input at Rated Output	Output range/OCV	Dimension	Weight	Price
ARC200T	220V/1P/50-60Hz	160A/26.5V/30% $@25^{\circ}\text{C}$ 130A/25.2V/100% $@25^{\circ}\text{C}$	30.8A@160A	30-160A/60V	395x155x301(mm)	7.5kg	600.00
ARC 200	220V/1P/50-60Hz	190A/27.6V/60% $@25^{\circ}\text{C}$ 155A/26.2V/100% $@25^{\circ}\text{C}$	38.4A@190A	30-190A/60V	395x155x301(mm)	8.0kg	750.00

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



Output



Input



## Industrial ARC 250S(220V) & ARC 250(415V)

### Basic Industrial Stick Welding – Affordable, Simple and Rugged

The ARC 250S delivers up to 250 amps DC for stick welding. Fit for vocational education, industrial production, maintenance, repair, farm and shop environments.

- **Outstanding AWS E6013 and AWS E7018 Performance** – Uses up to 7/32 in.(5.6mm) diameter electrodes
- **Digital Meter** – For preset and display of welding current
- **Arc Force and Hot Start** – Adjustable, makes striking the arc easier
- **Energy Saving** – More efficient as compared to the traditional machines

#### Processes

- Stick

#### Industrial

#### Key Options

- Helmet

#### Base Unit Includes

- 1 PCS Inverter Power Source
- 200A stick electrode holder, 3m cable with Euro plug
- 3m Work Cable and 300A Clamp with Euro plug
- 220V/415V, 3m Input cord without plug

Product Model	Input voltage/Phase/Frequency	Output current/Voltage/Duty cycle	Amps Input at Rated Output	Output range/OCV	Dimension	Weight	Price
ARC 250S (220V)	415V/3P/50-60Hz	250A/30V/60%@25°C 195A/28V/100%@25°C	13A@250A	20-250A/59V	505x203x375(mm)	17.5kg	1700.00
ARC 250 (415V)	415V/3P/50-60Hz	250A/30V/60%@25°C 195A/28V/100%@25°C	13A@250A	20-250A/59V	505x203x375(mm)	17.5kg	1550.00



Output



Input



#### Processes

- Stick
- Gouging

#### Heavy Industrial

## Rugged ARC 400IJ2 & 500IJ

### Reliable and Rugged.

### The Professional Choice for Heavy Duty Industrial Welding

Considered star products in the heavy industry, choose the ARC 500IJ for your heavy-duty stick welding needs. These machines consistently produce smooth, quality arcs, regardless of whether you use cellulosic, low hydrogen, stainless steel or hardfacing electrodes.

- **Easy to Operate** – Calibrated current control knob makes procedure setting simple and easy
- **Advanced IGBT Module Technology** – Tri-proof air tube design and high duty cycle for better reliability in harsh environments
- **Digital Meter** – For preset and display of welding current
- **Dust-free Cooling System** – Enables higher duty cycles
- **Arc Force and Hot Start** – Adjustable, makes striking the arc easier
- **VRD Function** – Makes it safe for welders
- **Arc Gouge** – Arc 400IJ2 uses up to 5/16 in. (7.9 mm) diameter carbon electrode and ARC 500IJ uses up to 3/8 in. (9.5 mm) diameter carbon electrode
- **Remote Control Function** – Enlarges your welding area

#### Key Options

- Helmet
- MMA/ARC Remote Control Box
- Arc gouging torch

#### Base Unit Includes

- 1 PCS Inverter Power Source

- **Case**  
For storage of welding power source and accessories
- **MMA/ARC Remove Control Box**  
Remote hand amperage control. Includes cord and plug
- **Hammer**  
To clean up the slag of welded seam
- **Helmet**  
The latest technology in stylish headgears for maximum protection
- **Arc Gouging Torch**  
Arc Gouging Torches can groove, bevel, cut, gouge, pierce and flush away all kinds of metals

Product Model	Input voltage/Phase/Frequency	Output current/Voltage/Duty cycle	Amps Input at Rated Output	Output range/OCV	Dimension	Weight	Price
ARC 500IJ	415V/3P/50-60Hz	500A/40V/60%@40°C 387A/35.5V/100%@40°C	35.6A@500A	40-500A/80V/15V(VRD)	630x300x640(mm)	40kg	4800.00





Output



Input



### Heavy Industrial MMA 315G, 400G & 500G

#### Dependable, Economical, Excellent, Basic Industrial Stick Welding

This series welding machine with high cost performance. At the same price models, whether appearance or performance, that is another machine is unmatched. They can work in most circumstances which you can imagine, such as generator power supply working environment.

- **IGBT Technology** – the core adopts advanced IGBT inverter device.
- **Wide Range for Input Voltage:** 380±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 striking the arc.
- **VRD function** – it safe for welders.
- **Remote control function (optional)** – enlarge your welding Area, easy to operate.
- **Energy Saving** – more efficient compared with the traditional SCR machine.

#### Processes

- Stick
- Gouging (MMA500G)

#### Heavy Industrial

#### Key Options

- Helmet
- MMA/ARC Remote control box

#### Base Unit Includes

- 1 PCS Inverter Power Source
- 500A stick electrode holder, 3m cable with Euro plug
- 3m Work Cable and 500A Clamp with Euro plug

Product Model	Input voltage/Phase/Frequency	Output current/Voltage/Duty cycle	Amps Input at Rated Output	Output range/OCV	Dimension	Weight	Price
MMA 315G	415V/3P/50-60Hz	315A/31.2V/25% <sup>@40°C</sup> 230A/29.2V/100% <sup>@40°C</sup>	18A@315A	40-315A/65V/15(VRD)	426x212x357(mm)	15kg	
MMA 400G	415V3P/50-60Hz	400A/36V/40% <sup>@40°C</sup> 315A/32.6V/100% <sup>@40°C</sup>	25.3A@400A	40-400A/68V/15V(VRD)	485x234x425(mm)	22kg	
MMA 500G	415V/3P/50-60Hz	500A/39.2V/40% <sup>@40°C</sup> 304A/32.2V/100% <sup>@40°C</sup>	25.2A@500A	40-500A/68V/15V(VRD)	515x262x468(mm)	26kg	



Output



Input



### Subarc MZ 630CV & 1000CV

#### Industrial DC Multi-Process Welders

Rugged construction, simple controls and a 100% duty cycle output rating make these machines a sound investment for heavy duty shop applications,

- **Adopt Advanced IGBT Module Technology** – of the core inverter device.
- **Large, Conveniently located controls** – Make it easy to change between CC (Stick Arc gouging), CC and CV Submerged Arc modes.
- **CC Arc force Control Knowb with built-in “Hot Start”.**
- **Remote and other switches are located at welding cart's front panel** – for easy to operate.
- **±15% input line voltage** – compensation for maintaining weld consistency.
- **Full range output voltage control** – for easy operation and precise control.
- **Standard digital ammeter and voltmeter.**
- **Auto-Protection against Over-Voltage, Over-Current and Over-Heated.**
- **Energy Saving** – Compared with the traditional SAW machine more efficient.

#### Processes

- Stick
- Submerged Arc
- Gouging

#### Heavy Industrial

#### Key Options

- Hammer
- Arc Gouging Torch
- Track

#### Base Unit Includes

- 1 PCS Inverter Power Source
- 6m work cable and 600A clamp with copper connector 2 PCS.
- 10m, Connection cable 2 PCS.
- Welding Carriage (fillet type or flat type).
- 1 PCS 14 Pins 10m control cable.
- 1 PCS 1m track.

Product Model	Input voltage/Phase/Frequency	Output current/Voltage/Duty cycle	Amps Input at Rated Output	Output range/OCV	Dimension	Weight	Price
MZ 630CV	415V/3P/50-60Hz	630A/44V/60% <sup>@40°C</sup> 500A/40V/100% <sup>@40°C</sup>	488A@630A	60-630A/72V/78.2V	670x337x617(mm)	54kg	
MZ 1000CV	415V/3P/50-60Hz	1000A/44V/60% <sup>@40°C</sup> 774A/44V/100% <sup>@40°C</sup>	77.4A@1000A	100-1000A/80V/83.8V	760x380x820(mm)	65kg	

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## ARC 250CT

### Dependable, Professional, Reliable and Rugged

- With plastic corner, sloping front panel;
- Current adjustable, built-in hot start, self adaptation of arc force;
- Overheat, over current protection function;
- Anti stick, VRD function.



#### TECHNICAL CHARACTERISTICS

Model	ARC 250CT
Input voltage (V)	240V±15%
Frequency (Hz)	50/60
Rated input current (A)	27.0A
Output current range (A)	30-200
Rated out voltage range (V)	21.2-28.0
Duty cycle 40°C(%)	20(200A) 60(165A) 100(150A)
Open circuit voltage (A)	60
Power factor	≥0.70
Efficiency (%)	≥0.85
Insulation class	F
Crust protection grade	IP21S
Weight(kg)	6.2
Outline dimension(mm)	402×160×300

Product Model	Input voltage/Phase/Frequency	Amps Input at Rated Output	Output range/OCV	Dimension	Weight	Price
ARC 250CT	AC240V±15%/50-60Hz	21.2-28.0V	30-200AMP	402X160X300(mm)	6.2kg	800.00

## ARC 200CT

### Excellent, Professional, Reliable and Rugged

- With plastic corner, sloping front panel;
- Current adjustable, built-in hot start, self adaptation of arc force;
- Overheat, over current protection function;
- Anti stick, VRD function.



#### TECHNICAL CHARACTERISTICS

Model	ARC 200CT
Input voltage	240V±15%
Frequency	50/60
Rated input current	23.0
Output current range (A)	30-170
Rated out voltage range	21.2-26.8
Duty cycle 40°C(%)	20(170A) 60(140A) 100(120A)
Open circuit voltage	65
Power factor	≥0.70
Efficiency	≥0.85
Insulation class	F
Crust protection grade	IP21S
Weight(kg)	6.2
Outline dimension (mm)	402×160×300

Product Model	Input voltage/Phase/Frequency	Amps Input at Rated Output	Output range/OCV	Dimension	Weight	Price
ARC200CT	AC240V±15%/1P/50-60Hz	23.0A	30-160A/60V	402X160X300(mm)	6.2kg	700.00

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## Precise DC TIG 200A & 200S

### Portable, Professional, Rugged and Affordable

The Precise DC TIG 200A promises high standards of quality welding. With a weight of only 9kg, it boasts mobility, allowing you to weld just about anywhere.

- **Advanced Inverter Technology** – Delivers superior TIG performance
- **Non-contact Start DC TIG operation** – allows you to strike the arc easily with high frequency, and makes it easier to establish an arc under a variety of conditions
- **Automatic Hot Start** – Boosts the current during startup to make striking an arc easier
- **Integral Gas and Power Connector** – For simple torch connections and quick changes between TIG and Stick welding
- **Wide Range of Input Voltage:** 220V  $\pm$ 15%
- **Energy Saving** – More efficient as compared to traditional TIG machines

#### Processes

- AC TIG
- Stick

#### Light Industrial

#### Key Options

- Tungsten Electrode
- Welding Cart

#### Base Unit Includes

- 1 PCS Inverter Power Source
- 8m TIG 26 Torch and Cable assembly
- 200A Stick Electrode Holder, 3m Cable with Euro plug
- 3m Work Cable and 300A Clamp with Euro plug
- 220V, 3m Input Cord without plug



Output



Input



Product Model	Input voltage/Phase/Frequency	Output current/Voltage/Duty cycle	Amps Input at Rated Output	Output range/OCV	Dimension	Weight	Price
TIG 200S	220V/1P/50-60Hz	200A/18V/60%@25°C 155A/16.2V/100%@25°C	26A@200A	10-200A/40V	400x153x291(mm)	9kg	1250.00
TIG 200A	220V/1P/50-60Hz	TIG: 200A/18V/60%@25°C 155A/16.2V/100%@25°C MMA: 165A/26.6V/60%@25°C 127A/25V/100%@25°C	26A@200A(TIG) 32A@165A(MMA)	10-200A/40V(TIG) 40-165A/40V(MMA)	400x153x291(mm)	9kg	1400.00

## Pulse TIG 200PAC/DC

### Premium Welding Solution – Multi-Process and Precision

These AC/DC TIG and Stick welders deliver classic smooth DC and stable AC square wave welding outputs, outstanding stick welding and TIG performance. Pulse 200PAC/DC is a full-function model.

- **Advanced Inverter Technology** – Delivers superior TIG performance
- **Non-contact Start DC TIG operation** – allows you to strike the arc easily with high frequency, and makes it easier to establish an arc under a variety of conditions
- **Adjustables: Pulse Width, Pulse Frequency, AC Balance, Upslope and Down slope Function** – Boosts the current during startup to make striking an arc easier
- **Automatic Hot Start** – Boosts the current during startup to make striking an arc easier
- **2T/4T and Repeat Function** – Selectable on the front panel
- **Remote Control Function** – Remotely control current levels with foot control
- **Auto-Protection** – Against over-voltage, over-current and over-heating
- **Energy Saving** – More efficient as compared to traditional TIG machines

#### Processes

- DC/AC TIG
- Stick
- Pulsed

#### Light Industrial (TIG 200 PAC/DC)

#### Key Options

- Tungsten Electrode
- Welding Cart
- TIG Remote Control Box (TIG 200PAC/DC)

#### Base Unit Includes

- 1 PCS Inverter Power Source
- 8m TIG 26 Torch and Cable assembly
- 200A Stick Electrode Holder, 3m Cable with Euro plug
- 3m work cable and 300A Clamp with Euro plug
- 220V, 3m input cord without plug



Output



Input



Product Model	Input voltage/Phase/Frequency	Output current/Voltage/Duty cycle	Amps Input at Rated Output	Output range/OCV	Dimension	Weight	Price
TIG 200PAC/DC	220V/1P/50-60Hz	TIG: 200A/18V/60%@25°C 155A/16.2V/100%@25°C MMA: 165A/26.6V/60%@25°C 127A/25V/100%@25°C	26A@200A(TIG) 40A@165A(MMA)	10-200A/56V(TIG) 40-165A/56V(MMA)	498x328x302(mm)	20kg	3300.00

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## Pulse TIG 315BPAC/DC

### Industrial AC/DC Multi-Process Welders – Excellent, Precision, Industrial AC/DC Multi-Process Welders

The Pulse TIG 315BPAC/DC and 400PAC/DC are both technologically advanced ruggedly constructed and tested for use in almost any production or fabrication environment, including tough shipbuilding applications

- **Advanced Inverter Technology** – Delivers superior TIG performance
- **Non-contact Start DC TIG operation** – allows you to strike the arc easily at high frequencies, and makes it easier to establish an arc under a variety of conditions
- **Premium TIG Performance**
- **Adjustable AC Frequency** – Focus the arc cone for precise control
- **Expanded AC Balance** – Minimizes tungsten erosion and etching surrounding the weld
- **Adjustables: Pulse Width, Upslope and Down slope Function**
- **Automatic Hot Start** – Boosts the current during startup to make striking an arc easier
- **2T/4T and Repeat Function** – Selectable on the front panel
- **Remote Control Function** – Remotely control current levels with a foot control
- **Auto-Protection** – Against over-voltage, over-current and over-heating
- **Efficient Electrical Conversion** – The inverter platform consumes 20% less power as compared to conventional TIG welders, translating to lower energy cost.

#### Processes

- DC/AC TIG
- Pulsed
- Stick

Industrial (TIG 315BPAC/DC)  
Heavy Industrial (TIG 400PAC/DC)

#### Key Options

- Tungsten Electrode
- TIG Remote Control Box
- SL1500 Water Cooler

#### Base Unit Includes

- 1 PCS Inverter Power Source
- 8m TIG 18 Torch and Cable assembly
- 500A Stick Electrode Holder, 3m Cable with Euro plug
- 3m Work Cable and 500A Clamp with Euro plug
- 3P 415V, 3m input cord without plug

#### TIG Welding Torches

- TIG9
- TIG20
- TIG18
- TIG17
- TIG26

#### Output



#### Input



Product Model	Input voltage/Phase/Frequency	Output current/Voltage/Duty cycle	Amps Input at Rated Output	Output range/OCV	Dimension	Weight	Price
TIG 315BPAC/DC	415V/3P/50-60Hz	TIG: 315A/22.6V/60%@25°C 245A/19.8V/100%@25°C MMA: 250A/30V/60%@25°C 195A/27.8V/100%@25°C	12.5A@315A(TIG) 18A@250A(MMA)	10-315A/56V(TIG) 30-250A/56V(MMA)	616x326x620(mm)	39kg	5500.00

## Water Cooler WRC-300A

### WRC-300A



Item Code #	A52L0000020
Main Voltage	230V 50/60Hz
Phase	1 Phase
Cooling Capacity	1.6KW (1L/Min)
Motor	260W
Max Pressure	0.3MPA/60Hz
Operation	-20°C ~ 60°C
Weight	14kg
Dimensions (mm)	450 x 250 x 355
Remarks	2R CU 24cm x 29cm

Price
1500.00

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## Bardiche CUT 100IJ & 160I

### Revolutionary Technology in Plasma Cutting

Highly competitive products, the Bardiche CUT 100IJ & 160I plasma cutting machines are equipped with Advanced IGBT Module technology, Tri-proof air tube design for high duty cycles for optimum standards of reliability in harsh environments.

- **Adopts Advanced IGBT Module Technology of the core inverter device**
- **Non-contact Start System** – Smooth Arc-Striking with HF Control
- **Rapid Arc Restrike** – Quality narrow cutting and excellent travel speed
- **Competitive Cutting Thickness** – Recommended thickness (Carbon Steel): 30mm (CUT 100IJ), 40mm (CUT 160I)
- **Cool Operation, Long Consumable Life** – High performance cutting accessories with competitive pricing
- **Engine Drive Compatible** – Wide range for voltage input for selection of suitable engine drives for remote locations
- **Energy Saving** – More efficient as compared to traditional cutting machines

### Processes

- Plasma Cutting

### Heavy Industrial

### Key Options

- Helmet

### Base Unit Includes

- 1 PCS Inverter Power Source
- 8m P80 Cutting Torch and Cable assembly (CUT 100IJ)
- 6m A141 Cutting Torch and Cable assembly (CUT 160I)
- 3m Work Cable and 300A Clamp with Euro plug
- Air Filter Kit



Output



Input



Product Model	Input voltage/Phase/Frequency	Output current/Voltage/Duty cycle	Amps Input at Rated Output	Output range/OCV	Dimension	Weight	Price
CUT 100IJ	415V/3P/50-60Hz	100A/120V/60%@40°C 77A/111V/100%@40°C	21.1A@100A	20-100A/268V	550x280x545(mm)	36kg	7000.00
CUT 160I	415V/3P/50-60Hz	160A/144V/60%@40°C	41A@160A	20-160A/320V	670x337x617(mm)	60kg	11000.00



## Bardiche CUT 40

### Revolutionary Technology in Plasma Cutting

The Bardiche CUT 40 plasma cutting systems are highly portable and can be easily transported to any jobsite. Connect your machine to the air compressor, grab the torch and start cutting!

- **Contact Start System** – Smooth Arc-Striking with HF Control
- **Rapid Arc Restrike** – Quality narrow cutting and excellent travel speed
- **Competitive Cutting Thickness** – Recommended thickness (Carbon Steel): 10mm(CUT 40).
- **Cool Operation, Long Consumable Life** – High performance cutting accessories with competitive pricing
- **Engine Drive Compatible** – Wide range for voltage input for selection of suitable engine drives for remote locations
- **Energy Saving** – More efficient as compared to traditional cutting machines

#### Processes

- Plasma Cutting

#### Light Industrial (CUT 40)

#### Base Unit Includes

- 1 PCS Inverter Power Source
- 8m PT 31 Cutting Torch and Cable assembly (CUT 40)
- 3m Work Cable and 300A Clamp with Euro plug
- Air Filter Kit
- 240V, 3m input cord without plug

#### Output



#### Input



#### Key Options

- Helmet
- Welding Cart

Product Model	Input voltage/Phase/Frequency	Output current/Voltage/Duty cycle	Amps Input at Rated Output	Output range/OCV	Dimension	Weight	Price
CUT 40	240V/1P/50-60Hz	40A/96V/60%@25°C 30A/92V/100%@25°C	28.2A@40A	20-40A/230V	400x153x291(mm)	9kg	1650.00



## Bardiche CUT 60G & 80G

### Revolutionary Technology in Plasma Cutting

The Bardiche CUT 60G & 80G plasma cutting systems are portable enough for easy transportation to any jobsite. Durable and rugged, these machines are suitable for use on up one inch material in production environments.

- **IGBT Technology** – The core adopts advanced IGBT inverter device
- **Non-contact Start System** – Smooth Arc-Striking with HF Control
- **Rapid Arc Restrike** – Quality narrow cutting and excellent travel speed
- **Competitive Cutting Thickness** – Recommended thickness (Carbon Steel): 15mm (CUT 60G), 25mm (CUT 80G)
- **Cool Operation, Long Consumable Life** – High performance cutting accessories with competitive pricing
- **Engine Drive Compatible** – Wide range for voltage input for selection of suitable engine drives for remote locations
- **Energy Saving** – More efficient as compared to traditional cutting machines

#### Processes

- Plasma Cutting

#### Industrial

#### Key Options

- Helmet
- Welding Cart

#### Base Unit Includes

- 1 PCS Inverter Power Source
- 8m P80 Cutting Torch and Cable assembly
- 3m Work Cable and 300A Clamp with Euro plug
- 3P 415V, 3m input cord without plug (CUT 80G)
- Air Filter Kit



Product Model	Input voltage/Phase/Frequency	Output current/Voltage/Duty cycle	Amps Input at Rated Output	Output range/OCV	Dimension	Weight	Price
CUT 60G	415V/3P/50-60Hz	60A/104V/60%@40°C 46A/98.4V/100%@40°C	11A@60A	20-60A/290V	485x234x425(mm)	19kg	3800.00
CUT 80G	415V/3P/50-60Hz	80A/112V/60%@40°C 63A/105V/100%@40°C	15.8A@80A	20-80A/268V	515x262x468(mm)	25kg	5300.00

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

### Multi-process MIG 175GD

#### Three-in-One Welder – Smaller, Portable, Professional and Rugged



The new MIG 175GD is second in the line of integrated, portable 3-in-1 welding systems. It delivers high output, high duty cycle MIG, Stick and TIG welding processes for light industrial welding applications. It is also priced lower as compared to an MIG –only unit!

- **IGBT technology** – The core adopts the advanced IGBT inverter device
- **Built-in Micro Chip** – Software can be upgraded for constant improvement of welding performance and synergic control parameter adjustment
- **LED Display** – Displays default current
- **Suitable for Cellulosic Electrodes** – Built-in expertise program.
- **Intelligent Fan Control** – Significantly reduces noise and dust accumulation inside the machine
- **Auto Adaptive Arc Force** – Minimizes electrodes base metal short circuiting without increasing spatter or compromising arc stability.
- **Lift TIG Start** – Provides TIG start without the need for high frequencies

#### Processes

- MIG
- DC Lift TIG
- Stick

#### Light Industrial

#### Key Options

- Welding Cart
- Helmet
- CO<sub>2</sub> Regulator
- Welding Wire

#### Base Unit Includes

- 1 PCS Inverter Power Source
- 3m MIG-15 Gun and Cable assembly
- TIG – 17V 4m Torch
- 200A Stick Electrode Holder, 3m Cable with Euro plug
- 3m Work Cable and 300A Clamp with Euro plug
- 220V, 3m Input Cord without plug

#### Output



#### Input

Product Model	Input voltage/Phase/Frequency	Output current/Voltage/Duty cycle	Amps Input at Rated Output	Output range/OCV	Dimension	Weight	Price
MIG 175 GD	240V/1P/50-60Hz	MIG: 175A/22.7V/35% <sup>@40°C</sup> 103A/19.2V/100% <sup>@40°C</sup> MMA: 175A/27V/25% <sup>@40°C</sup> 87.5A/23.5V/100% <sup>@40°C</sup> TIG: 175A/17V/35% <sup>@40°C</sup> 103A/14.1V/100% <sup>@40°C</sup>	28A@175A	50-175A/56V(MIG) 10-175A/56V(MMA) 10-175A/56V(TIG)	410x210x340(mm)	12.8kg	2,000.00

### Multi-process MIG 180GDM

#### Three-in-One Welder – Smaller, Portable, Professional and Rugged



- Full Digital and Advanced IGBT inverter technology.
- Multi-process: MIG & MMA & LIFT TIG .
- CO<sub>2</sub> and Mixed gas select under MIG process;
- Synergic, LED display ,easy to operate.
- VRD system for your safety.
- Inductance and Arc length can be fine adjusted .
- 2T/4T under MIG process .
- Fan as needed, reduces noise and dust inside the machine.
- Cellulose electrode friendly .
- 5kg wire applicative.
- Optional : Polarity conversion, shoulder strap and Spool adaptor (For 0.9kg wire)

#### TECHNICAL CHARACTERISTICS

Product Model	MIG180GDM
Input voltage/Phase/Frequency	240V/1P/50-60HZ
Output current/Voltage/Duty cycle	MMA:160A/26.4V/25% <sup>40°C</sup> MIG:180A/23V/30% <sup>40°C</sup> LIFT TIG:180A/17.2/30% <sup>40°C</sup>
Amps Input at Rated Output	32A@180A(MIG)
Output range/OCV	MMA:10-160A/60V(VRD16V) MIG:50-180A/60V LIFT TIG:10-180A/60
Dimension	386×170×300(mm)
Weight	8kg

#### Price

2,000.00

#### Output



#### Input



## Power MIG 200GW

### The Professional Choice – Economical, Efficient and Excellent

The Power MIG 200G offers top welding performance to both auto body and sheet metal fabrication industries. It boasts the following features:

- **IGBT Technology** – The core adopts the advanced IGBT inverter device
- **Infinite Voltage Control** – For optimized starting performance
- **Inductance Control** – For arc stability and spatter control
- **Digital Meters** – Voltage and Amperage; Preview and Hold capability
- **Quick Change Polarity** – Simple quick change polarity (no tools required) from the front of the power source
- **Thermal Overload Protection** – Helps to prevent machine damage
- **Energy Saving** – More efficient than the traditional machines

#### Processes

- MIG
- Stick

#### Light Industrial

#### Key Options

- Welding Cart
- CO2 Regulator
- Helmet
- Plastic Wire Cover Kit

#### Base Unit Includes

- 1 PCS Inverter Power Source
- 3m MIG-15 Gun and Cable assembly
- 200A Stick Electrode Holder, 3m Cable with Euro plug
- 3m Work Cable and 300A Clamp with Euro plug
- 240V, 3m Input Cord without plug

#### Plastic Wire Cover Kit

- Plastic enclosure for 15-20kg wire packages

Output	Input
CV CC	DC
1 PHASE	3 PHASE
50 Hz	60 Hz

Product Model	Input voltage/Phase/Frequency	Output current/Voltage/Duty cycle	Amps Input at Rated Output	Output range/OCV	Dimension	Weight	Price
MIG 200GW	240V/1P/50-60Hz	MIG: 200A/24V/60%@25°C 155A/21.7V/100%@25°C MMA: 160A/28V/60%@25°C 124A/24.9V/100%@25°C	37.5A@200A(MIG) 32.5A@160A(MMA)	40-200A/50V(MIG) 30-160A/50V(MMA)	465x242x464(mm)	21kg	2100.00



## Power MIG 300GS

### Integrated and Efficient. Your Premium Welding Solution

Power MIG 300GS provides more choices for both professionals and factories. Choose MIG 300GS for factory projects, repair, sheet metal, auto body work. The MIG 300GS can also be changed to 230 volts for farm, shop and light fabrication.

- **IGBT Technology** – The core adopts the advanced IGBT inverter device
- **Infinite Voltage Control** – For optimized starting performance
- **Inductance Control** – For arc stability and spatter control
- **Digital Meters** – Voltage and Amperage; Preview and Hold capability
- **Trigger Control** – 4T (Latch) eliminates operator fatigue
- **Quick Change Polarity** – Simple quick change polarity (no tools required) from the front of the power source
- **Thermal Overload Protection** – Helps to prevent machine damage

#### Processes

- MIG
- Stick

#### Industrial

#### Key Options

- CO<sub>2</sub> Regulator
- Helmet

#### Base Unit Includes

- 1 PCS Inverter Power Source
- 3m MIG-24 Gun and Cable assembly
- 300A Stick Electrode Holder, 3m Cable with Euro plug
- 3m Work Cable and 300A Clamp with Euro plug

Output	Input
CV CC	DC
1/3 PHASE	3 PHASE
50 Hz	60 Hz

Product Model	Input voltage/Phase/Frequency	Output current/Voltage/Duty cycle	Amps Input at Rated Output	Output range/OCV	Dimension	Weight	Price
MIG 300GS	220V/3P/50-60Hz 220V/1P/50-60Hz	3P:MIG:300A/29V/35%@40°C 250A/26.5V/100%@40°C MMA: 300A/32V/35%@40°C 250A/30V/100%@40°C 1P:MIG:250A/26.5V/35%@40°C 200A/24V/100%@40°C MMA: 250A/30V/35%@40°C 200A/28V/100%@40°C	29.1A@300A(3P) 47.2A@250A(1P)	60-300A/56V(3P) 40-250A/56V(1P)	995x460x950(mm)	60kg	3600.00

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



Output



Input



### Power MIG 250GS

Internal, Excellent, Affordable, Portable, Professional

- Advanced IGBT inverter technology.
- Welding process: MIG & MMA.
- 2T/4T function.
- Arc Trait Inductance! adjustable.
- Wire feed speed & welding voltage are displayed by LED.
- Welding spool built-in the machine.
- Output polarity converts for solid and flux wire.
- Torch bracket good for the welding lay up.
- Gas cylinder trolley good for movably.

#### Key Options

- Auto-Darkening Welding Helmet

#### Base Unit Includes

- 1 pcs inverter power source
- MIG torch, 3.0m cable with Euro connector
- Stick electrode holder, 3.0m cable with Euro plug
- Earth clamp, 3.0m cable with Euro plug
- Gas hose, 3.0m with hose clamp.



Output



Input



### Synergic MIG 350GD

Designed Smart, Excellent, Simple and Rugged.

Choose MIG 300GD or MIG 350GD can let you easily enjoy the fun of welding, it can do a lot of work, as long as you can think of.

- **IGBT Technology** – the core adopts advanced IGBT inverter device.
- **Built-in Micro Chip** – can be upgraded software, constantly improve the machine welding performance, as well as synergic control parameter adjustment.
- **Infinite Voltage Control** – with optimized starting performance.
- **Inductance Control** – with optimized starting performance.
- **Digital Meter** – Voltage and Amperage, Preview and Hold capability.
- **Trigger Control** – 4T (Latch) eliminates operator fatigue
- **Quick Change Polarity** – Simple quick change polarity (no tools required) from the front of the power source.
- **Thermal overload protection** – helps prevent machine damage.
- **Easy to move!** – The gas cylinders with the power supply is convenient move.

#### Processes

- MIG
- Stick

#### Heavy Industrial

#### Key Options

- Hammer
- CO<sub>2</sub> Regulator

#### Base Unit Includes

- 1 PCS Inverter Power Source
- 3m MIG-24 gun and cable assembly.
- 300A stick electrode holder, 3m cable with Euro plug.
- 3m work cable and 300A clamp with Euro plug.
- 3P 380V, 3m input cord without plug.

Product Model	Input voltage/Phase/Frequency	Output current/Voltage/Duty cycle	Amps Input at Rated Output	Output range/OCV	Dimension	Weight	Price
MIG 350GD	415V/3P/50-60Hz	MIG: 350A/34V/35% @ 40°C 250A/26.5V/100% @ 40°C MMA: 350A/34V/35% @ 40°C 250A/30V/100% @ 40°C	19.4A @ 350A (MIG) 13A @ 250A (MMA)	50-350A/56V (MIG) / 61V 60-350A/56V (MMA) / 61V	995x460x950 (mm)	60kg	

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## Rugged MIG 350IJ & 500I

### Industrial DC MIG Welder - Powerful, Reliable and Rugged

Exceptional and reliable wire welding performance sets the Riland Rugged MIG series welders apart. Suitable for fabrication and production in transportation, heavy equipment, structural steel, railroad and furniture, tackle MIG and flux-cored Wire welding with ease using our Rugged MIG Welders.

- **Advanced IGBT Module Technology** – Tri-proof air tube design and high duty cycle for better reliability in harsh environments
- **Infinite Voltage Control** – For optimized starting performance
- **Inductance Control** – For arc stability and spatter control
- **Digital Meters** – Voltage and Amperage; Preview and Hold capability
- **Wire Size and Type Selection** – Aids quick and easy matching of welding parameters
- **Dust-free Cooling System** – Enables higher duty cycles
- **Trigger Control** – 4T (Latch) eliminates operator fatigue
- **Thermal Overload Protection** – Helps to prevent machine damage g an arc easier



#### Output



#### Input



#### Processes

- MIG
- Flux-Cored
- Stick
- Gouging (MIG 500I)

#### Heavy Industrial

#### Key Options

- CO<sub>2</sub> Regulator
- Helmet
- Euro type wire feeder

#### Euro Type Wire Feeder

- This type wire feeder equipment can adapt 2 roller or 4 roller column DC motors, or 4 roller print motor wire feeders. Compatible with Euro type connectors.

#### Base Unit Includes

- 1 PCS Inverter Power Source
- 3m QTB-350A Gun and Cable assembly (MIG 350IJ)
- 4m Work Cable and 500A Clamp with Euro plug (MIG 350IJ)
- 500A Stick Electrode Holder, 4m Cable with Euro plug (MIG 500I)
- 3m QTB-500A Gun and Cable assembly (MIG 500I)
- 4m Work Cable and 600A Clamp with Euro plug (MIG 500I)
- 1 set Japan type wire feeder

Product Model	Input voltage/Phase/Frequency	Output current/Voltage/Duty cycle	Amps Input at Rated Output	Output range/OCV	Dimension	Weight	Price
MIG 350IJ	380V/3P/50-60Hz	MIG: 350A/31.5V/60%@40°C 270A/27.5V/100%@40°C MMA: 350A/34V/60%@40°C 270A/30.8V/100%@40°C	21.1A@350A(MIG) 22.8A@350A(MMA)	50-350A/56V(MIG) 50-350A/56V(MMA)	550x280x545(mm)	36kg	6300.00
MIG 500I	380V/3P/50-60Hz	MIG: 500A/39V/60%@40°C 387A/33.3V/100%@40°C MMA: 500A/40V/60%@40°C 387A/35.3V/100%@40°C	37.5A@500A(MIG) 38.4A@500A(MMA)	50-500A/60V(MIG) 50-500A/60V(MMA)	670x320x640(mm)	42kg	7200.00

### CO<sub>2</sub> Regulator

- The CO<sub>2</sub> Regulator allows you to maintain ideal CO<sub>2</sub> levels for optimum growth. Can select either type AC36V or AC220V.

No.	Part Number	Description	Pack
1	14-150100-01-00	GH-257/220V (25L), G5/8	1
2	14-150100-02-00	GH-257/36V (25L), G5/8	1
3	14-150100-04-00	GH-258/36V (25L)150W, G5/8	1
4	14-150100-05-00	GH-258/220V (25L)150W, G5/8	1



## B® Paintstik®

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 marker 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  
Tire repair and retreading  
Lumber/timber  
Construction

### Surface Uses

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

Details 144 Case		Details 48 Case		B-3/8 144 Case		B-1" 144 Case	
Mark Size	11/16" (17mm)	Mark Size	11/16" (17mm)	Mark Size	3/8" (9.5mm)	Mark Size 1" (25.4mm)	
80220	White*	80810	White*	80420	White*	80260	White*
80221	Yellow	80811	Yellow	80421	Yellow		
80222	Red	80812	Red				
80223	Black	80813	Black				
80224	Orange	80814	Orange				
80225	Blue	80815	Blue				
80226	Green						
80227	Pink						
80228	Purple						
80229	Brown						
80230	Gray						
80231	Gold						
80232	Aluminum						
80281	Fluorescent Yellow						



## Valve Action® 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

### Surface Uses

Stainless steel  
Alloy and superalloy metals



## PRO-LINE® HP

PRO-LINE HP is a liquid paint marker developed for superior marking performance on oily and greasy surfaces. The high performance paint penetrates through oils and greases to dry quickly and leave a bold, permanent mark that is wear-, weather-, and fade-resistant.

### Features & Benefits

- Unique paint formula resists spreading and dries quickly through oily surfaces to leave precise, permanent marks
- Xylene-free paint reduces user health risks and eliminates California Proposition 65, EPA HAPS and SARA concerns in the U.S.A.
- Durable metal barrel and nib reduces breakage for longer marking life
- Easy-to-grip clip-cap allows for convenient pocket storage
- Marking range: -50°F to 150°F (-46°C to 66°C)

### Industry Uses

Metal fabrication  
Automotive and other transportation  
Industrial manufacturing  
Steel mills and warehouses  
Oil and gas  
Construction  
Aviation and aerospace

### Surface Uses

Steel and iron  
Aluminum  
Pipes and tubes  
Plastics  
Rubber/Tires

### Details 48 Case

Mark Size	1/8" (3mm)		
96960	White*	96967	Silver*
96961	Yellow*	96970	Light Green
96962	Red*	96971	Light Blue*
96963	Black*	96972	Gold
96964	Orange	96973	Pink*
96965	Blue*	96974	Purple
96966	Green	96975	Brown*



## Quik Stik®

Quik Stik is a smooth-marking solid paint crayon that dries quickly to leave a bold, permanent mark on most surfaces. The durable plastic twist-up holder prevents breakage. Keep hands, clothing, and toolboxes clean with the industry's largest twist-up solid paint marker.

### Features & Benefits

- Fast-drying, vibrant paint marks dry in 5 to 7 minutes
- 20% more paint than other brands, more cost efficient
- Marks on virtually any surface: wet, smooth, rough, or hot
- Airtight, self-storing cap keeps the marker clean and fresh between uses
- Weather- and UV-resistant paint for long-lasting mark
- Solid paint marker protracts and retracts by turning twist-up knob
- Marking range: 0°F to 392°F (-16°C to 200°C)

### Industry Uses

Metal fabrication  
Automotive aftermarket  
Construction  
Welding  
Industrial process piping  
Shipping supply

### Surface Uses

Pipes and tubes  
Glass, ceramic  
Steel and iron  
Lumber/timber  
Concrete, stone  
Rubber and tire  
Plastic

### Details 72 Case

Mark Size	11/16" (17mm)
61049	Red
61050	Black
61051	White
61053	Yellow
61069	Green
61070	Blue
61071	Orange
61073	Purple

### Details 24 Case

Mark Size	11/16" (17mm)
61117	Yellow
61118	Red
61119	Black
61120	White



## Features & Benefits

[illegible]

## DESCRIPTION AND APPLICATIONS

The corrosion resistance of stainless steel depends on their 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. Cleans,



### CAUTION

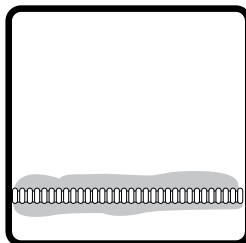
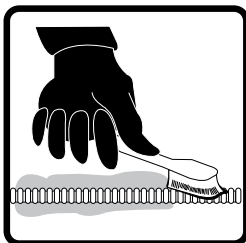
- **BLUEMETALS PICKLING PASTE** is highly blended acid. Direct contact causes burns of eye, skin and cloth. It is harmful if swallowed or inhaled. Wear safety goggles, rubber gloves and wash after handling.
- Use with adequate vent. And avoid breathing vapor Do not take internally.
- First aid if contact;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

### STORAGE

- Keep out of reach 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.
2. Stir **BLUEMETALS PICKLING PASTE** with wooden rod before use.
3. 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.)

### PRICE LIST

PRODUCT CODE	DESCRIPTION	PRICE 1KG/BTL
B5890000102	BLUE METALS PICKLING GEL	50.00



### WELDBRITE

#### THE PROFESSIONALS CHOICE FOR STAINLESS STEEL SURFACE TREATMENT

Callington Haven Pty Ltd is an Australian owned and operated company that has served the global markets for over 30 years, exporting to 37 countries. Our stainless steel surface treatment products are used in countries worldwide and provide a high standard of quality and reliability.



A thick adhesion gel

Effectively removes free iron

Is a strong ASTMA380 compliant formulation

Provides fast acting, one step descaling

Completely water soluble

Supplied with application brush

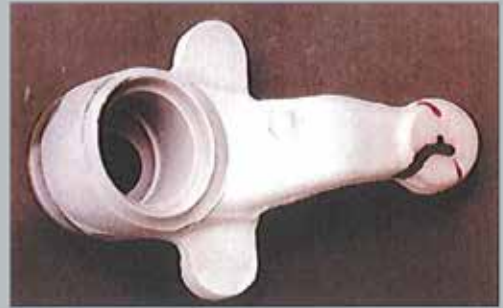
### PRICE LIST

PRODUCT CODE	DESCRIPTION	PRICE
A5255000002	Pickling Gel	105.00


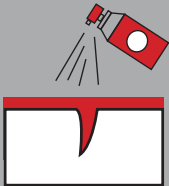

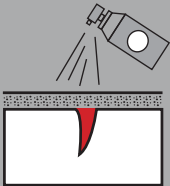
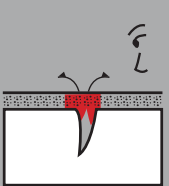


### TASETO COLOR CHECK

DESCRIPTION	LIST PRICE (RM)
COLOR CHECK – REMOVER / CLEANER (BLUE) NO.2	25.00
COLOR CHECK – DEVELOPER (WHITE) NO.3	30.00
COLOR CHECK – PENETRANT (RED) NO. 1	32.00



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 JIKI Check B-200 (Aerosol type)

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

1. Easy to detect very fine flaw.
2. Dispersion oil has less smell, and the flash point (more than 80°C).
3. 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).

**Unit Price: RM 28.00 / bottle**

### TASETO Contrast Paint (for magnetic particle inspection)

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

#### FEATURE

1. Provide high contrast on the specimen surface for visible magnetic particle indications, to make the indications easy to see.
2. Very quick drying.
3. Easy to remove by acetone, or wire brush after use.
4. Non-Chlorinate and Non-CFC.

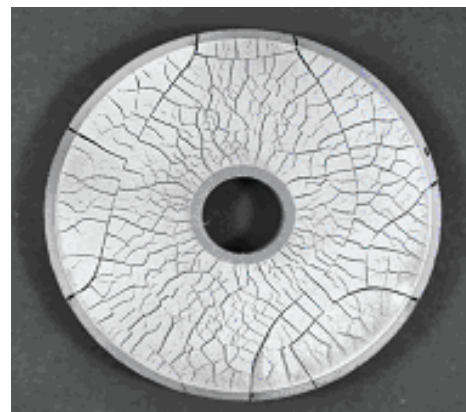
#### TYPICAL PROPERTIES

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.

#### PACKING UNIT

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

**Unit Price: RM 30.00 / bottle**

## CASTARC 50N (JIS Z3252 DFCFe)



Diameter	Standard Package	Standard Length	Standard Pallet	List Price	Net Price
2.6mm	2.5kg	300mm	1000kg	<b>RM 40.00</b>	
3.2mm	2.5kg	350mm	1000kg	<b>RM 35.00</b>	
4.0mm	2.5kg	350mm	1000kg	<b>RM 35.00</b>	

### Description and Applications :

- ◆ 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 100N (AWS A5.15 ENi-CI)



Diameter	Standard Package	Standard Length	Standard Pallet	List Price	Net Price
2.6mm	1kg/2.5kg	300mm	1000kg	<b>RM 215.00</b>	
3.2mm	1kg/2.5kg	350mm	1000kg	<b>RM 200.00</b>	
4.0mm	1kg/2.5kg	350mm	1000kg	<b>RM 200.00</b>	

### Characteristics :

- ◆ Electrode with graphite-basic coating to weld on DC - and AC. Weld deposit consists of pure Ni. Recommended for cold welding and repairing of grey cast iron, repairing of cracks. Homogeneous and easy to machine deposit. Good bonding and flow of weld metal.

## CASTARC 150N (AWS A5.15 ENiFe-CI)



Diameter	Standard Package	Standard Length	Standard Pallet	List Price	Net Price
2.6mm	2.5kg	300mm	1000kg	<b>RM 130.00</b>	
3.2mm	2.5kg	350mm	1000kg	<b>RM 120.00</b>	
4.0mm	2.5kg	350mm	1000kg	<b>RM 120.00</b>	

### Characteristics :

- ◆ Graphite basic coated electrode with a Fe-Ni alloy deposit for joining and repairing nodular cast iron. Deposit is homogeneous and highly resistant against cracks. Particularly recommended for dissimilar welding of cast iron to steels and cast iron construction. Good bonding and flow of the weld metal.





## HARDFACING 350R (JIS Z3251 DF2A-350R) 30HRC

Diameter	Standard Package	Standard Length	Standard Pallet	List Price	Net Price
3.2mm	5kg/20kg	400mm	1000kg	<b>RM 9.00</b>	
4.0mm	5kg/20kg	400mm	1000kg	<b>RM 8.80</b>	
5.0mm	5kg/20kg	400mm	1000kg	<b>RM 8.80</b>	

### Applications :

- ◆ Machining properties and resistant abrasion accompanied by impact used for repairs of welding crane wheels, buckets, bulldozer blades and shovel tooth.



## HARDFACING 700R (JIS Z3251 DF2B-600R) 58HRC

Diameter	Standard Package	Standard Length	Standard Pallet	List Price	Net Price
3.2mm	5kg/20kg	400mm	1000kg	<b>RM 15.50</b>	
4.0mm	5kg/20kg	400mm	1000kg	<b>RM 15.00</b>	
5.0mm	5kg/20kg	400mm	1000kg	<b>RM 15.00</b>	

### Applications :

- ◆ Weld metal deposits martensite structure with characteristics of high hardness and great slag removal. Used for the welding of pump impeller and agitator propeller.



## HARDFACING Mn-Ni (Rebuilding 11%-14% Mn Steel)

Diameter	Standard Package	Standard Length	Standard Pallet	List Price	Net Price
3.2mm	5kg/20kg	350mm	1000kg	<b>RM 25.00</b>	
4.0mm	5kg/20kg	400mm	1000kg	<b>RM 24.00</b>	
5.0mm	5kg/20kg	400mm	1000kg	<b>RM 24.00</b>	

### Applications :

- ◆ For surfacing and building up manganese steel components such as crusher jaws and hammers.





## HARDFACING ARC 9

(Chrome Carbide) 45HRC

Diameter	Standard Package	Standard Length	Standard Pallet	List Price	Net Price
3.2mm	5kg/20kg	350mm	1000kg	<b>RM 27.50</b>	
4.0mm	5kg/20kg	400mm	1000kg	<b>RM 27.00</b>	
5.0mm	5kg/20kg	400mm	1000kg	<b>RM 27.00</b>	

### Applications :

- ◆ Weld deposit resistant surface to withstand heavy impact and gouging abrasion.



## HARDFACING ARC 33

(Chrome Carbide) 60HRC

Diameter	Standard Package	Standard Length	Standard Pallet	List Price	Net Price
3.2mm	5kg/20kg	350mm	1000kg	<b>RM 40.50</b>	
4.0mm	5kg/20kg	400mm	1000kg	<b>RM 40.00</b>	
5.0mm	5kg/20kg	400mm	1000kg	<b>RM 40.00</b>	

### Applications :

- ◆ Weld deposit is ideal for all types of abrasion under high impact loading.



## HARDFACING ARC 43

(Chrome Carbide) 65HRC

Diameter	Standard Package	Standard Length	Standard Pallet	List Price	Net Price
3.2mm	5kg/20kg	350mm	1000kg	<b>RM 58.50</b>	
4.0mm	5kg/20kg	400mm	1000kg	<b>RM 58.00</b>	
5.0mm	5kg/20kg	400mm	1000kg	<b>RM 58.00</b>	

### Applications :

- ◆ Weld deposit resistance to extreme abrasion and capable of withstanding heavier impact levels than standard chromium carbide grades.



## HARDFACING TC

(Rebuilding High Speed Steel)

Diameter	Standard Package	Standard Length	Standard Pallet	List Price	Net Price
2.6mm	5kg/20kg	300mm	1000kg	<b>RM 76.50</b>	
3.2mm	5kg/20kg	350mm	1000kg	<b>RM 73.00</b>	
4.0mm	5kg/20kg	400mm	1000kg	<b>RM 73.00</b>	

**Applications :**

- ◆ Ideal for surfacing and repairing high speed tool steels.



## HARDFACING Co 6

(Stellite 6)

Diameter	Standard Package	Standard Length	Standard Pallet	List Price	Net Price
2.6mm	5kg/20kg	300mm	1000kg	<b>RM 430.00</b>	
3.2mm	5kg/20kg	350mm	1000kg	<b>RM 415.00</b>	
4.0mm	5kg/20kg	400mm	1000kg	<b>RM 415.00</b>	

**Applications :**

- ◆ The weld deposit is highly resistant for metal to metal wear and to corrosion up to 800°C.

## POWERWELD C & G (CUTTING & GOUGING)

Diameter	Standard Package	Standard Length	Standard Pallet	List Price	Net Price
3.2mm	4kg/16kg	350mm	1000kg	<b>RM 24.00</b>	
4.2mm	4kg/16kg	350mm	1000kg	<b>RM 24.00</b>	

### Applications :

- ◆ POWERWELD C & G electrodes are specially designed for powerfully effective cutting and gouging 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.



## POWERWELD AL5 (For Welding Aluminium)

Diameter	Standard Package	Standard Length	Standard Pallet	List Price	Net Price
2.6mm	1kg/6kg	350mm	1000kg	<b>RM 230.00</b>	
3.2mm	1kg/6kg	350mm	1000kg	<b>RM 215.00</b>	
4.0mm	1kg/6kg	350mm	1000kg	<b>RM 215.00</b>	

### Applications :

- ◆ Aluminium electrode with 5% Si for welding and repairing aluminium or aluminium alloy pieces (AlSi, AlCuSiMn, AlSiMg, AlZnMg). For joints between aluminium and aluminium-alloys, for cast aluminium alloys. Can also used as a torch brazing alloy.



## POWERWELD Cu 100

(AWS A5.6 ECu)

(For Welding Pure Copper)



Diameter	Standard Package	Standard Length	Standard Pallet	List Price	Net Price
2.6mm	5kg/20kg	350mm	1000kg	<b>RM 210.00</b>	
3.2mm	5kg/20kg	350mm	1000kg	<b>RM 200.00</b>	
4.0mm	5kg/20kg	350mm	1000kg	<b>RM 200.00</b>	

### Applications :

- ◆ Joining of electrical Copper electrodes used in Furnaces, for joining Copper to Steel bars in Electrically heated drive ways.

## POWERWELD Cu 112

(AWS A5.6 ECuSn-A)

(For Welding Bronze & Brass)



Diameter	Standard Package	Standard Length	Standard Pallet	List Price	Net Price
2.6mm	5kg/20kg	350mm	1000kg	<b>RM 190.00</b>	
3.2mm	5kg/20kg	350mm	1000kg	<b>RM 180.00</b>	
4.0mm	5kg/20kg	350mm	1000kg	<b>RM 180.00</b>	

### Characteristics :

- ◆ Recommended for repairing wrought bronze (CuSn), for surfacing on brass, steels and cast iron.

### Applications :

- ◆ Construction of equipment for the Chemical industry and Petrochemical industry, Naval constructions and installations for sea water desalination, Repair works.

## POWERWELD Cu 114

(AWS A5.6 ECuAl-A2)

(For Welding Aluminium Bronze)



Diameter	Standard Package	Standard Length	Standard Pallet	List Price	Net Price
2.6mm	5kg/20kg	350mm	1000kg	<b>RM 190.00</b>	
3.2mm	5kg/20kg	350mm	1000kg	<b>RM 180.00</b>	
4.0mm	5kg/20kg	350mm	1000kg	<b>RM 180.00</b>	

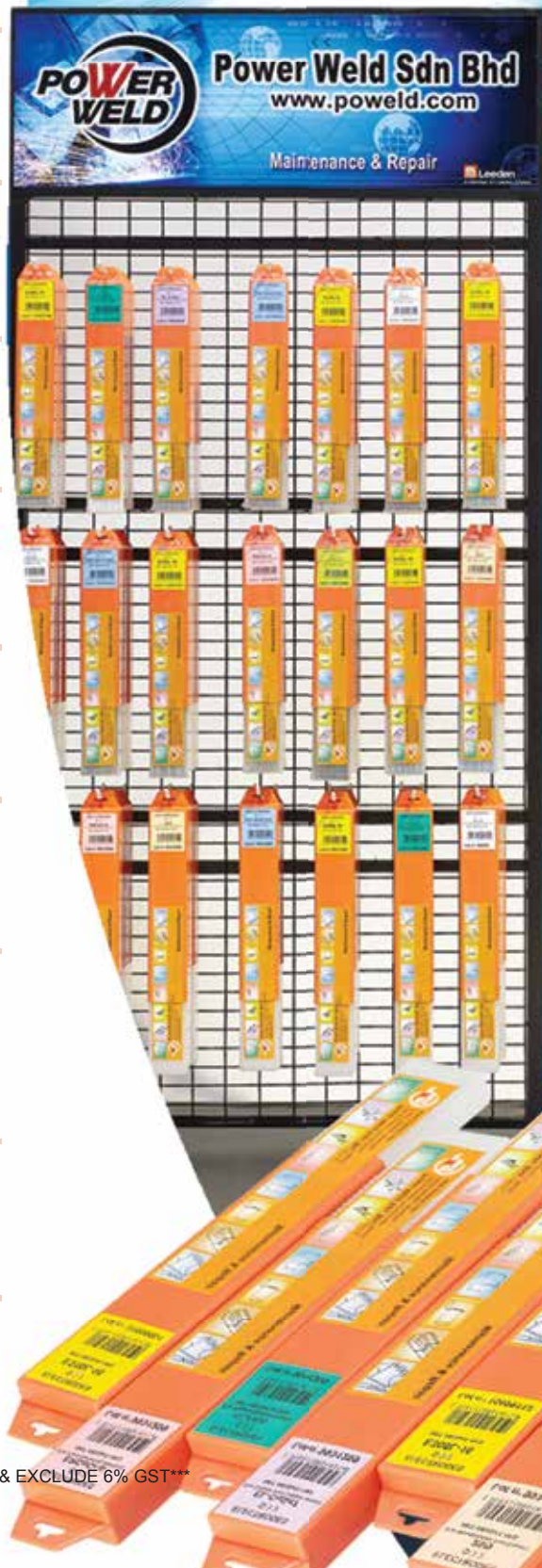
### Applications :

- ◆ Ship Building, Sea water applications, Desalination plants, Chemical industry, Pumps parts which are attacked by sea water (Propellers, Bearings.....).



PRODUCT DESCRIPTION	SIZE	PACKING (1kg)	CODE	PRICE (RM)
<b>308L</b>	2.0MM	1KG	P1103080820	
FOR STAINLESS	2.6MM	1KG	P1103080826	
STEEL	3.2MM	1KG	P1103080832	
	4.0MM	1KG	P1103080840	
<b>316L</b>	2.6MM	1KG	P1103160826	
FOR STAINLESS	3.2MM	1KG	P1103160832	
STEEL	4.0MM	1KG	P1103160840	
<b>309L</b>	2.6MM	1KG	P1103090826	
FOR STAINLESS	3.2MM	1KG	P1103090832	
STEEL	4.0MM	1KG	P1103090840	
<b>310L</b>	2.6MM	1KG	P1103090826	
FOR HIGH	3.2MM	1KG	P1103090832	
TEMPERATURE	4.0MM	1KG	P1103090840	
<b>29/9</b>	2.6MM	1KG	P1103120826	
FOR MAINTENANCE	3.2MM	1KG	P1103120832	
AND REPAIR	4.0MM	1KG	P1103120840	
<b>ENiFe-CI</b>	2.6MM	1KG	P1101500826	
FERRO NICKEL	3.2MM	1KG	P1101500832	
REPAIRING CAST IRON	4.0MM	1KG	P1101500840	
<b>ENi-CI</b>	2.6MM	1KG	P1101000826	
PURE NICKEL FOR	3.2MM	1KG	P1101000832	
REPAIRING CAST IRON	4.0MM	1KG	P1101000840	
<b>EL-AISi5</b>	2.6MM	0.5KG	P1107430826	
FOR REPAIRING	3.2MM	0.5KG	P1107430832	
ALUMINIUM	4.0MM	0.5KG	P1107430840	
<b>EL-CuSn7</b>	2.6MM	1KG	P1106200826	
FOR REPAIRING	3.2MM	1KG	P1106200832	
COPPER AND				
COPPER ALLOY				
<b>ERCoCr-A</b>	2.6MM	1KG	P1110060826	
FOR HARDSURFACING	3.2MM	1KG	P1110060832	
STELLITE 6 (TIG ROD)	4.0MM	1KG	P1110060840	
<b>HIGH SPEED STEEL</b>	2.6MM	1KG	P1170150826	
FOR HARDSURFACING	3.2MM	1KG	P1170150832	
60-65HRC	4.0MM	1KG	P1170150840	

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# 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

Input Voltage	415V 2ph 50HZ
NO-load Voltage	70A
Rated Output Current	315A
Output Current Range	70-315A
Duty Cycle	35% 315A / 100%185A
Rated Input Capacity	21KVA
Cooling mode	Air-cooling
Weight	72KG
Insulation	H
Protection Class	IP21S



## 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.

### Specifications

Input Voltage	415V 2ph 50HZ
NO-load Voltage	72A
Rated Output Current	400A
Output Current Range	85-400A
Duty Cycle	35% 400A / 100%236A
Rated Input Capacity	32.5KVA
Cooling mode	Wind-cooling
Weight	78KG
Insulation	IP21S
Protection Class	H



## 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 50HZ
NO-load Voltage	70A
Rated Output Current	500A
Output Current Range	105-500A
Duty Cycle	35% 500A / 100%295A
Rated Input Capacity	42KVA
Cooling mode	Wind-cooling
Weight	96KG
Insulation	IP21S
Protection Class	H



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# TUBUROD 33

## OUTSTANDING FEATURES

- ❖ Ultimate single layer hardness
- ❖ Seamless steel tube construction for better arc characteristics
- ❖ No flux dropping in the weld pool during welding
- ❖ Complete electrode deposition without electrode overheating
- ❖ Good control of weld pool during welding
- ❖ Slagless deposit with high metal recovery
- ❖ Minimal fumes, gases. Easy strike and restrike

## DESCRIPTION AND APPLICATIONS

A tubular product, with Chromium carbides and complex carbide rich deposits resist grinding abrasion along with erosion. The buildup can be done with ease with these alloys. Highly recommended for parts subjected to grinding abrasion combined with moderate heat and erosion. Complete electrode deposition is possible without the electrode getting red hot and leading to wastages. The productivity can be the best with these electrodes. Low temperature welding with good current density due to tubular design. Its applications include hydraulic turbine parts, hotcutting tools, chemical and high pressure steam valves, kernel crushing screws for palm oil processing.

TYPICAL WELD METAL CHEMICAL COMPOSITION (%)			
C 3.50-5.50	Si 1.00-2.50	Mn 1.00-2.00	Cr 30-35

TYPICAL ALL WELD METAL MECHANICAL PROPERTIES			
TENSILE STRENGTH	YIELD STRENGTH	ELONGATION	HARDNESS
-	-	-	57-62 HRc

OPERATIONAL AND PACKAGING DATA				
ELECTRODE SIZE (mm)	ELECTRODE LENGTH (mm)	WELDING CURRENT RANGE (amps)	PACKAGING (kg)	
			PKT	CTN
6.0	450	140-160	5	20
8.0	450	150-180	5	20

- Recommended for DC+ or AC

### VSX SERIES - PISTON TYPE STRUCTURE



**VSX-101**

CGA540 Inlet



**VSX-016**

Japanese Handtight Wheel



**VSX-311**

Rotary CGA870 Inlet



**VSX-224**

CGA992 Handtight Wheel



**VSX-226**

CGA992 Handtight Wheel



**VSX-225**

CGA992 Handtight Wheel

	CGA540
	CGA870
	Rotary CGA870
	CGA992 (BS)
	CGA992 (BS) Handtight Wheel
	DIN477
	DIN477 Handtight Wheel
	Japanese
	Japanese Handtight Wheel

### SPECIFICATION

- Material: Pure brass body with chrome coating.
- Output Pressure: 50 psi fixed.
- Flow Rate: 0~15 lpm
- Choose between side and top entry.
- Various types of inlet connection can be selected.
- Accessories: humidifier, cannula & flowmeter connector.

### FEATURES

Output pressure is fixed at 50 psi.

Utilizes crack-resistant flow tube made of polycarbonate and accurate gauge.

Can be used with various types of O2 cylinder, having high quality and low repair rate.

The flow output accuracy is within  $\pm 10\%$  which meets medical standard.

With GMP, ISO 13485 & CE certificates.

### VSW SERIES - DIAPHRAGM TYPE STRUCTURE



**VSW-105**

CGA540 Inlet



**VSW-009**

Japanese Inlet  
360° DISS connection for ventilator use



**VSW-370**

Rotary CGA870 Inlet



**VSW-224**

CGA992 Handtight Wheel Inlet



**VSW-232**

CGA992 Handtight Wheel  
For both top entry & side entry

	CGA540
	CGA870
	Rotary CGA870
	CGA992 (BS)
	CGA992 (BS) Handtight Wheel
	DIN477
	DIN477 Handtight Wheel
	Japanese
	Japanese Handtight Wheel

### SPECIFICATION

- Material: Pure brass body with chrome coating.
- Output Pressure: 30 ~ 80 psi.
- Flow Rate: 0 ~ 15 lpm
- Choose between side and top entry.
- Various types of inlet connection can be selected.
- Accessories: humidifier, cannula & flowmeter connector.

### FEATURES

Output pressure is fixed at 50 psi.

Utilizes crack – resistant flow tube made of polycarbonate and accurate gauge.

Can be used with various types of O<sub>2</sub> cylinder ,providing high quality and low repair rate .

The flow output accuracy is within  $\pm 10\%$  which meets medical standard.

With GMP, ISO 13485 & CE certificates.





### VSC-104

CGA540 Inlet

#### SPECIAL MODEL DESIGNED FOR ANESTHESIA MACHINE USE

- Designed for anesthesia machine use
- Flow rate is unadjustable
- Various types of inlet connection can be selected



### VSC-204

CG992 Inlet Handtight Wheel



### VSC-213

VSC-213 CG992 Inlet Handtight Wheel  
W/Schrader Valve

#### VSC SERIES - CENTRAL TYPE USE

- Without flowmeter, used for central oxygen
- Supply or used with a ventilator
- Output Pressure: 30~80 psi
- Various types of inlet connection can be selected.

	CGA540
	CGA870
	Rotary CGA870
	CGA992 (BS)
	CGA992 (BS) Handtight Wheel
	DIN477
	DIN477 Handtight Wheel
	Japanese
	Japanese Handtight Wheel



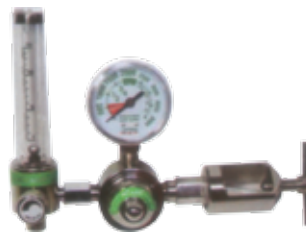
### VSC-304

Rotary CGA870 York



### VSC-302

CGA870 Inlet



### VSC-208

CGA992 Handtight Wheel



### VSC-102

CGA540 Inlet

#### VSC SERIES – TWO GAUGE TYPE

- Material: Pure brass body with chrome coating.
- Output Pressure: 30 ~ 80 psi.
- Output pressure rate depends on the flow coating.
- Flow Rate: 0 ~15 lpm
- Various types of inlet connection can be selected.
- Accessories: humidifier & cannula

## FEATURES

- Circle gauge flowmeter to read the flow value easier.
- Can be used with various types of O<sub>2</sub> cylinder, proving high quality and low repair rate.
- The flow output accuracy is within  $\pm 10\%$  which meets medical standard.
- With GMP, ISO 13485 and CE certificates.

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### MEDICAL GAS CYLINDER



Cylinders		M2	M4	ML6	M9	M6	M22	MD	M60	ME	M90	M122	M150
Service Pressure (psi)		2216	2216	2015	2015	2216	2216	2015	2216	2015	2216	2216	2015
Diameter	in	2.5	3.2	4.38	4.38	3.21	5.25	4.38	7.25	4.38	7.25	8.0	8.00
	mm	63.5	81.5	111.3	111.3	81.5	133.4	111.3	184.2	111.3	184.2	203.2	203.2
Length	in	5.7	8.7	7.8	10.9	11.8	16.3	16.7	22.9	25.4	32.6	36.2	47.0
	mm	145	221	198	277	300	414	424	582	645	828	919	1194
Weight	lbs	0.7	1.7	2.9	3.7	2.3	8.0	5.4	22.3	7.8	30.3	39.5	48.8
	kgs	0.3	0.8	1.3	1.7	1.0	3.6	2.4	10.1	3.5	13.7	17.9	22.1
Oxygen Capacity	cu ft	1.5	4.0	6.0	9.0	6.0	22.0	15.0	60.0	24.0	90.0	122.0	150.0
	liters	42	113	170	255	170	623	425	1699	679	2549	3455	4248

### DURATION OF USE (IN HOUR)

at different regulator flow rates

Durations (Hours) @	M2	M4	ML6	M9	M6	M22	MD	M60	ME	M90	M122	M150
0.5 LPM Continuous Flow	1.42	3.78	5.66	8.50	5.66	20.77	14.16	56.64	22.66	84.96	115.17	141.60
1 LPM Continuous Flow	0.71	1.89	2.83	4.25	2.83	10.38	7.08	28.32	11.33	42.48	57.58	70.80
2 LPM Continuous Flow	0.35	0.94	1.42	2.12	1.42	5.19	3.54	14.16	5.66	21.24	28.79	35.40
3 LPM Continuous Flow	0.24	0.63	0.94	1.42	0.94	3.46	2.36	6.44	3.78	14.16	19.19	23.60
4 LPM Continuous Flow	0.18	0.47	0.71	1.06	0.71	2.60	1.77	7.08	2.83	10.62	14.40	17.70
5 LPM Continuous Flow	0.14	0.38	0.57	0.85	0.57	2.08	1.42	5.66	2.27	8.50	11.52	14.16
6 LPM Continuous Flow	0.12	0.31	0.47	0.71	0.47	1.73	1.18	4.72	1.89	7.08	9.60	11.80
8 LPM Continuous Flow	0.09	0.24	0.35	0.53	0.35	1.30	0.89	3.54	1.42	5.31	7.20	8.85
10 LPM Continuous Flow	0.07	0.19	0.28	0.42	0.28	1.04	0.71	2.83	1.13	4.25	5.76	7.08
15 LPM Continuous Flow	0.05	0.13	0.19	0.28	0.19	0.69	0.47	1.89	0.76	2.83	3.84	4.72
20 LPM Continuous Flow	0.04	0.09	0.14	0.21	0.14	0.52	0.35	1.42	0.57	2.12	2.88	3.54
25 LPM Continuous Flow	0.03	0.08	0.11	0.17	0.11	0.42	0.28	1.13	0.45	1.70	2.30	2.83
30 LPM Continuous Flow	0.02	0.06	0.09	0.14	0.09	0.35	0.24	0.94	0.38	1.42	1.92	2.36


**FD Series**

- ✓ New Appearance
- ✓ Full Drawn Cylinder
- ✓ Self Locking Hose Belt
- ✓ Better Leak Proof
- ✓ Upgraded Fire Rating
- ✓ Standardise Marking & Label


**FIRE EXTINGUISHER**

PRODUCT DESCRIPTION	TYPE	PRODUCT CODE	PRICE (RM)
1KG ABC POWDER SPT F/EXT C/W P.BRKT	POWDER	EC-1	
2KG ABC POWDER SPT F/EXT C/W P.BRKT	POWDER	EC-2	
3KG ABC POWDER SPT F/EXT C/W STD ACC.	POWDER	EC-3	
4KG ABC POWDER SPT F/EXT C/W STD ACC.	POWDER	EC-4	
6KG ABC POWDER SPT F/EXT C/W STD ACC.	POWDER	EC-6	
9KG ABC POWDER SPT F/EXT C/W STD ACC.	POWDER	EC-9	
2KG CO2 SPT F/EXT C/W STD ACC	CO2	ECO-5	
5KG CO2 SPT F/EXT C/W STD ACC	CO2	ECO-11HH	
FIRE BLANKET 1.2MX1.2M RED SLIM PACK EVERSAFE, COATED DWG9DB-07-FBA4-0001	BLANKET		
BATOPERATED SMOKE ALARM – PHOTOELECTRIC EVERSAFE :MTS-166/5Y	ALARM		

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**GAVINTOO Flap Disz Abrasives Price List**


Product No	Description	Grits	Shape	Pack Size	List Price (RM)
Metal	Metal-flap Disc (A)				
6117100040	100 x 16 (4" x 5/8) 80m/s Max.rpm 15,300/min	G40	T27	10/200	4.00
6117100060	100 x 16 (4" x 5/8) 80m/s Max.rpm 15,300/min	G60	T27	10/200	4.00
6117100080	100 x 16 (4" x 5/8) 80m/s Max.rpm 15,300/min	G80	T27	10/200	4.00
6117100120	100 x 16 (4" x 5/8) 80m/s Max.rpm 15,300/min	G120	T29	10/200	4.00



INOX	Stainless Steel-Flap Disc (ZA)				
6127100040	100 x 16 (4" x 5/8) 80m/s Max.rpm 15,300/min	G40	T27	10/200	8.00
6127100060	100 x 16 (4" x 5/8) 80m/s Max.rpm 15,300/min	G60	T27	10/200	7.50
6127100080	100 x 16 (4" x 5/8) 80m/s Max.rpm 15,300/min	G80	T27	10/200	7.50
6127100120	100 x 16 (4" x 5/8) 80m/s Max.rpm 15,300/min	G120	T29	10/200	7.50


**GAVINTOO Flexible Disz Abrasives Price List**

Product No	Description	Grits	Shape	Pack Size	List Price (RM)
Metal	Flexible Grinding Wheel AC80 SBF				
6017100080	100 x 2.5 x 16		T27	50/400	3.00



INOX	Flexible Grinding Wheel AC80 SBF				
6017100080	100 x 2.5 x 16		T27	50/400	3.50





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





**Model: ASW07**

**ABLE EYE TO EYE WEBBING SLING**



Webbing Width (mm)	Colour coded according to EN 1492-1	Working Load Limit with 1 webbing sling					Working Load Limit with 2 webbing sling			
		Straight lift	Choked lift	$\beta$			Straight lift up to 45°	Choked lift up to 45°	Straight lift 45°-60°	Choked lift 45°-60°
				0°-7°	7°-45°	45°-60°				
		1.0	0.8	2.0	1.4	1.0	1.4	1.12	1.0	0.8
<b>30</b>	<b>WLL1T</b>	1.000	0.800	2.000	1.400	1.000	1.400	1.120	1.000	0.800
<b>60</b>	<b>WLL2T</b>	2.000	1.600	4.000	2.800	2.000	2.800	2.240	2.000	1.600
<b>90</b>	<b>WLL3T</b>	3.000	2.400	6.000	4.200	3.000	4.200	3.360	3.000	2.400
<b>120</b>	<b>WLL4T</b>	4.000	3.200	8.000	5.600	4.000	5.600	4.480	4.000	3.200
<b>150</b>	<b>WLL5T</b>	5.000	4.000	10.000	7.000	5.000	7.000	5.600	5.000	4.000
<b>180</b>	<b>WLL6T</b>	6.000	4.800	12.000	8.400	6.000	8.400	6.720	6.000	4.800
<b>240</b>	<b>WLL8T</b>	8.000	6.400	16.000	11.200	8.000	11.200	8.960	8.000	6.400
<b>300</b>	<b>WLL10T</b>	10.000	8.000	20.000	14.000	10.000	14.000	11.200	10.000	8.000

**ABLE lifting eye types**

	<b>1.flat eye</b>
	<b>2.Reversed eye</b>
	<b>3.Folded eye 1/2 width from 1 side</b>
	<b>4.Folded eye 1/2 width from 2 side</b>
	<b>5.Folded eye 1/3 width</b>

**ABLE physical information chart**

	polyester
Elongation at breaking force	ca.12%
Elongation at WLL	ca.3%
Elongation -resistance in wet condition	100%
Compared wear-resistance	80
Specific weight	1.38

**ABLE chemical resistance information chart**

material	acids	alkalis	ether	aldehydes	alcohols	oils	organic solvents	water and seawater
polyester	ok	no	no	no	ok	ok	ok	ok

**ABLE PRODUCTS**  
WLL 3000kg  
Length 10m  
1/2" ASME B30.9  
Safety Factor 7 to 1  
Webbing Sling

**ABLE PRODUCTS**  
WLL 3000kg  
Length 10m  
1/2" ASME B30.9  
Safety Factor 7 to 1  
Webbing Sling

**ABLE**  
SAFETY LIFTING APPLICATIONS  
Reliability assured.

**ABLE**  
SAFETY LIFTING APPLICATIONS  
Reliability assured.

**ABLE**  
SAFETY LIFTING APPLICATIONS  
www.ableforge.com

**PROOF TEST CERTIFICATE**

**Webbing Sling ASW-07**  
Safety Factor: 7 to 1

This is to certify that the webbing sling have been manufactured and proof tested not less than two times of WLL to EN1492-1

Sling Material: 100% High Tenacity Polyester Fiber  
Serial Number/s: ASW071001 to ASW071003  
Working Load Limit: 30000kg  
Effective Length: 5 meters  
Date of Manufacturing: 24/05/2013

End Fittings: Eye & Eye  
Batch Number: LLA1029033  
Min. Breaking Load: 21000kg  
Quantity: 500 pcs  
Date of Testing: 27/05/2013

Tested and Approved for ABLE Products  
In accordance with Standard EN 1492-1  
Production: 24/05/2013 to 27/05/2013

**TESTING OFFICER**  
Howard Warner



**There is no guess work in safe lifting**

1. Consult sling load chart for configurations not shown on label.
2. Do not use sling if the label is removed or missing.
3. Inspect sling for damage before each use.
4. Inspect sling if there is any sign of a cut, wear, snagging, heat or chemical damage, excessive wear, damaged seams or any other defects.
5. Do not tie knots in sling.
6. Protect sling from sharp edges of load.
7. Do not expose sling to temperatures above 90° Celsius.
8. Do not allow abrasive or other damaging grit to penetrate the fibers.
9. Consult with manufacturers recommendations, before immersing a sling in a chemical solution.
10. Keep away from: 'acids', 'alkalis', or 'phenolic compounds'.

## 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 Molybdenum to differentiate grade 304 (no moly) from 316 (with moly).

## Chemical properties

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



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



Testing 304 (EN 1.4301)



Testing 316 (EN 1.4436)



# - All In One Chemical Solution - Scale Removal & Pickling & Passivation For Stainless Steel



**bizSAFE**  
STAR



ISO 9001:2008 CERT NO.: N647248

CERT NO.: N647248

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





### Description

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

### Austenite Stainless Steel

SS 304, SS 304L, SS 321, SS 316, SS 316L, SS 301, SS 302, SS 309S, SS 310S, SS 347

### Applications

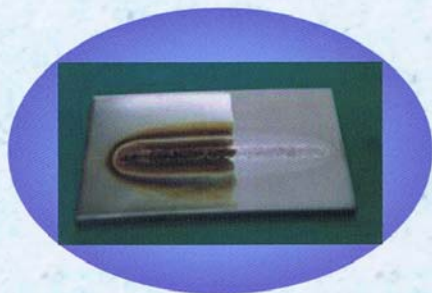
NSC Sus Clean #300E Pickling Paste is used for pickling of welding seams and surface of austenitic stainless steel in any kind of construction, such as: tanks, pipe, etc.

### 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 30minutes.
4. Rinse thoroughly 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 (Stainless Steel)	NSC SUS Clean #300E	Gel Type (Brush Application)	<ul style="list-style-type: none"> <li>❖ Shorter descaling time</li> <li>❖ Less Fume generating</li> <li>❖ Less damage to material</li> </ul>	2kg / 20kg
	NSC SUS Clean #300X	Gel Type (Spray Application)	<ul style="list-style-type: none"> <li>❖ High operability to large area treatment</li> <li>❖ Finishing uniformity obtained</li> </ul>	20kg / 200kg
	NSC SUS Clean #300S	Liquid Type	<ul style="list-style-type: none"> <li>❖ Less fume generation by specialized agent</li> <li>❖ Less corrosion and/or damage to the material surface</li> </ul>	20kg / 200kg





### 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.

### Applications

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.

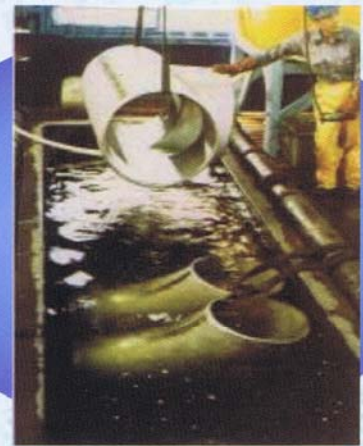
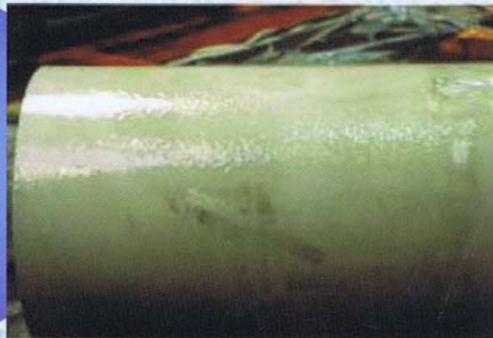
### Austenite Stainless Steel

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 Data Sheet before use.
2. Apply the paste or soak into the tank , allow the treatment approx. 2 hours.
3. Rinse thoroughly 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 (Stainless Steel)	NSC AD Passive E	Gel Type (Brush Application)	❖ Application for Austenite, Ferrite, Martensite metal ❖ Application for ferro-rust removal (Food/Medical/plant)	2kg
	NSC AD Passive S	Liquid Type		20kg / 200kg

**Improved safety when passivating**

## **Avesta FinishOne™ 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™ Passivator 630 eliminates these spots with ease, restoring the surface.

Avesta FinishOne™ 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™ 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 flash 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, classified as non-dangerous goods.



**Avesta FinishOne™ Passivator 630- efficient and environmentally safe.**



**Avesta FinishOne™ Passivator 630- removes free iron (the brown staining seen on the photo).**



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 specifically intended for standard brush pickling of weld seams and smaller surfaces.

### The free-flowing pickling gel

Avesta Classic Pickling Gel 122 is more free-flowing 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 high-alloyed 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 Classic Pickling Gel 122 - for brush pickling of welds and surfaces.



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

# **SOREX**<sup>TM</sup>

***SOREX WELDING CO.,LTD.***





**DESCRIPTION :**

SFH-35G is a gas shielded flux cored wire. The tough, machinable, low carbon martensitic steel deposit is designed for the build-up and surfacing of steel components subject to metal-to-metal wear and compressive loading.

**APPLICATIONS :**

It is used for the re-building or surfacing of steel track rolls, idler wheels, track pads, drive sprockets, pins and other components subjected to abrasion and/or metal-to-metal wear.

**NOTE ON USAGE :**

1. Use DC (+) polarity.
2. Remove the surface of manganese steel base metal if it is work hardened heavily.

**TYPICAL CHEMICAL COMPOSITION OF WELD METAL (wt%) :**

Weld Metal Analysis :

Carbon (C)	0.15
Manganese (Mn)	1.80
Silicon (Si)	0.8
Chromium (Cr)	1.30

**TYPICAL HARDNESS OF WELD METAL :**

Single Layer	32 HRC
2nd Layer	35 HRC
3rd Layer	37 HRC

**SUGGESTED WELDING PARAMETERS**

Diameter (mm)		
Parameters	Ø1.2mm	Ø1.6mm
Voltage (Volt)	25 ~ 36	25 ~ 35
Current (Amp)	260 ~ 300	200 ~ 400
Flow rate (l / min)	15 ~ 25	15 ~ 25

**HARDFACING FLUX CORED WIRES**

**DESCRIPTION :**

SFH-58G is a gas-shielded flux cored wire with great performance of stable arc, low sensitivity of blow-hole and good bead appearance. The weld metal with good resistance to wear can be obtained under wide range of welding parameters.

**APPLICATIONS :**

SFH-58G is suitable for the hardfacing of tippr teeth, bucket lip, bulldozer blade, and the parts of impellers employed for soil abrasion.

**NOTE ON USAGE :**

1. Use DC (+) polarity.
2. Proper preheat and interpass temperatures shall be kept over 300°C.
3. CO<sub>2</sub> as a shielding gas and 15~25 l/min for gas flow
4. Welding parts is required to be clean from dust, oil and rusty

**TYPICAL CHEMICAL COMPOSITION OF WELD METAL (wt%) :**

Weld Metal Analysis :

Carbon (C)	0.51
Manganese (Mn)	1.52
Silicon (Si)	1.12
Chromium (Cr)	9.52

**TYPICAL HARDNESS OF WELD METAL :**

2nd layer	55 HRC
3rd layer	56 HRC
4th layer	58 HRC

**SUGGESTED WELDING PARAMETERS**

Parameters \ Diameter (mm)	Ø1.2mm	Ø1.6mm
Voltage (Volt)	25 ~ 36	25 ~ 35
Current (Amp)	260 ~ 300	200 ~ 400
Stickout (mm)	15 ~ 25	15 ~ 25

## HARDFACING FLUX CORED WIRES

## AWS A5.20 E71T-1

### DESCRIPTION :

SFC-71 is an all position rutile flux cored wire designed to be used with C<sub>2</sub> gas. It can be used on all-position welds with both single and multiple pass welds on mild steel and low alloy steels.

### APPLICATIONS :

It is widely used for shipbuilding, storage vessels, structural fabrication, machinery and piping, etc.

### NOTE ON USAGE :

1. Use DC (+) polarity.
2. Maintain a higher welding speed in order to get enough penetration in the down hand welding position.

### TYPICAL CHEMICAL COMPOSITION OF WELD METAL (wt%) :

Weld Metal Analysis :

Carbon (C)	0.055
Manganese (Mn)	1.25
Silicon (Si)	0.51
Phosphorus (P)	0.015
Sulphur (S)	0.012

### TYPICAL MECHANICAL PROPERTIES OF WELD METAL :

YP N/mm <sup>2</sup>	530
TS N/mm <sup>2</sup>	580
EL%	25

### TYPICAL IMPACT VALUES :

IV-40 C°J	43
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### APPROVALS AND CONFORMANCES :

AWS A5.20, E71T-1/-1J • EN T42 2 PC1 H10  
 ABS, LR, DNV

### SUGGESTED WELDING PARAMETERS

Diameter (mm)		
Parameters	Ø1.2mm	Ø1.6mm
Voltage (Volt)	25 ~ 40	25 ~ 40
Current (Amp)	130 ~ 300	200 ~ 400
W.F.S (cm/min)	460 ~ 1000	350 ~ 850
Stickout (mm)	15 ~ 25	15 ~ 25
Flow rate (1 / min)	15 ~ 25	15 ~ 25

## HARDFACING FLUX CORED WIRES

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

## AWS A5.4 E316L-17

### DESCRIPTION :

SS-316L-17 is a rutile electrode for welding stainless steel types 316, 316L and 318. Molybdenum increases the resistance to pitting corrosion caused by corrosion media such as sulfuric and sulfurous acids. Smooth arc, low spatter level, excellent wetting action and easy to handle all-position-welding.

### APPLICATIONS :

Typical applications include stainless steel piping and vessels in oil and gas industry, refineries and chemical and petro-chemical plants.

### NOTE ON USAGE :

1. Rebake the electrodes at 200°C for 1 hour and keep it at 100°C prior to use.
2. Use stainless steel wire brush for cleaning of slags.
3. Follow the recommended welding parameters to achieve good sound welds.

### TYPICAL CHEMICAL COMPOSITION OF WELD METAL (wt%) :

Weld Metal Analysis :

Carbon (C)	0.03
Chromium (Cr)	19.30
Nickel (Ni)	12.66
Molybdenum (Mo)	2.30
Manganese (Mn)	0.65
Silicon (Si)	0.58
Phosphorus (P)	0.025
Sulphur (S)	0.012

### TYPICAL MECHANICAL PROPERTIES OF WELD METAL :

YP N/mm <sup>2</sup>	410
TS N/mm <sup>2</sup>	550
EL%	40

### APPROVALS AND CONFORMANCES :

AWS A5.4, E316L-17 • EN1600 E 19 12 3 LR

### SIZES AND RECOMMENDED CURRENT RANGE (AC or DC <+>)

Diameter mm	Length mm	Amp	
		F	V & OH
2.0	250	30 - 55	20 - 50
2.6	300	50 - 85	45 - 80
3.2	350	80 - 120	70 - 110
4.0	350	100 - 150	90 - 135
5.0	350	140 - 180	

## HARDFACING FLUX CORED WIRES

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



## AWS A5.4 E308L-17

### DESCRIPTION :

SS-308L-17 is a rutile electrode design for welding type 304L or other 18Cr-8Ni steels with low or medium carbon content. The SS-308L contains low carbon to avert carbide precipitation during welding as well as weld service. Smooth arc, low spatter level, excellent wetting action and easy to handle all-position-welding.

### APPLICATIONS :

Typical applications include stainless steel piping in refineries, oil and gas industries, and chemical plants.

### NOTE ON USAGE :

1. Rebake the electrodes at 200°C for 1 hour and keep it at 100°C prior to use.
2. Use stainless steel wire brush for cleaning of slags.
3. Follow the recommended welding parameters to achieve good sound welds.

### TYPICAL CHEMICAL COMPOSITION OF WELD METAL (wt%) :

Weld Metal Analysis :

Carbon (C)	0.03
Chromium (Cr)	20.05
Nickel (Ni)	9.92
Manganese (Mn)	0.67
Silicon (Si)	0.65
Phosphorus (P)	0.030
Sulphur (S)	0.009

### TYPICAL MECHANICAL PROPERTIES OF WELD METAL :

YP N/mm <sup>2</sup>	440
TS N/mm <sup>2</sup>	580
EL%	41.0

### APPROVALS AND CONFORMANCES :

AWS A5.4, E308-17/E308L-17 • EN1600 E 19 9 LR

### SIZES AND RECOMMENDED CURRENT RANGE (AC or DC <+>)

Diameter mm	Length mm	Amp	
		F	V & OH
1.6	250	20 - 40	
2.0	250	30 - 55	20 - 50
2.6	300	50 - 85	45 - 80
3.2	350	80 - 120	70 - 110
4.0	350	100 - 150	90 - 135
5.0	350	140 - 180	

## HARDFACING FLUX CORED WIRES

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

## AWS A5.4 E309L-17

### DESCRIPTION :

SS-309L-17 is a titania electrode suitable for welding of 22Cr-12%Ni steel, dissimilar-metal joint, and first layer cladding on mild steel.

### APPLICATIONS :

Typical applications include stainless steel piping in refineries and chemical plants. Corrosion resistance overlay on carbon steel, welding of carbon steel of poor weldability.

### NOTE ON USAGE :

1. Rebake the electrodes at 200°C for 1 hour and keep it at 100°C prior to use.
2. Use stainless steel wire brush for cleaning of slags.
3. Follow the recommended welding parameters to achieve good sound welds.
4. Use lower current for dissimilar-metal joint.

### TYPICAL CHEMICAL COMPOSITION OF WELD METAL (wt%) :

Weld Metal Analysis :

Carbon (C)	0.035
Chromium (Cr)	23.65
Nickel (Ni)	12.98
Manganese (Mn)	1.50
Silicon (Si)	0.51
Phosphorus (P)	0.020
Sulphur (S)	0.010

### TYPICAL MECHANICAL PROPERTIES OF WELD METAL :

YP N/mm <sup>2</sup>	420
TS N/mm <sup>2</sup>	570
EL%	39

### APPROVALS AND CONFORMANCES :

AWS A5.4, E309L-17 • EN1600 E 23 12 LR

### SIZES AND RECOMMENDED CURRENT RANGE (AC or DC <+>)

Diameter mm	Length mm	Amp	
		F	V & OH
2.0	250	30 - 55	20 - 50
2.6	300	50 - 85	45 - 80
3.2	350	80 - 120	70 - 110
4.0	350	100 - 150	90 - 135
5.0	350	140 - 180	

## HARDFACING FLUX CORED WIRES

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

**AWS A5.22 E317LT-1/4****DESCRIPTION :**

SFC-317L is a rutile flux cored tubular wire for all positional welding using pure CO<sub>2</sub> or Argon CO<sub>2</sub> mixed shielding gas. It performs with smooth arc transfer, self-releasing slag, low spatter level, fine ripple and good intergranular corrosion resistance.

**APPLICATIONS :**

Suitable for welding 18%Cr-12%Ni-2% Mo stainless steels. Typical applications include corrosion resistance overlay, joining of type 316, 316L, CF-8M, and CF-3M stainless steels pipe and tube in chemical, oil and gas refineries.

**NOTE ON USAGE :**

1. Use DC (+) polarity.
2. Maintain a higher welding speed in order to get enough penetration in the down hand welding position.

**TYPICAL CHEMICAL COMPOSITION OF WELD METAL (wt%) :**

Weld Metal Analysis : (Shielding Gas: 100% CO<sub>2</sub>)

Carbon (C)	0.03
Chromium (Cr)	18.23
Nickel (Ni)	12.60
Molybdenum (Mo)	3.15
Manganese (Mn)	1.35
Silicon (Si)	0.65
Phosphorus (P)	0.025
Sulphur (S)	0.010

**TYPICAL MECHANICAL PROPERTIES OF WELD METAL : (Shielding Gas: 100% CO<sub>2</sub>)**

TS N/mm <sup>2</sup>	580
EL%	41
IV - 0°C J	58

**APPROVALS AND CONFORMANCES :**

AWS A5.22, E317 T1-1/4 • JIS Z3323, YF317LC • EN12073 T 19 13 4 L P C/M3  
ABS

**SIZES AND RECOMMENDED CURRENT RANGE: (Amp.)**

Diameter	1.2	1.6
F, HF	140 - 220	200 - 300
V-UP, OH	120 - 200	-

**HARDFACING FLUX CORED WIRES**

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

## AWS A5.22 E308LT0-1/4

### DESCRIPTION :

SFC-308L is a rutile flux cored tubular wire for all positional welding using pure CO<sub>2</sub> or Argon CO<sub>2</sub> mixed shielding gas. It performs with smooth arc transfer, self-releasing slag, low spatter level, fine ripple and good intergranular corrosion resistance.

### APPLICATIONS :

Suitable for welding 18%Cr- 8%Ni stainless steels. Typical applications include corrosion resistance overlay, joining of common austenitic stainless steel types 301, 302, 304, 304L, stabilised 321, CF-8 and CF-3.

### NOTE ON USAGE :

1. Use DC (+) polarity.
2. Maintain a higher welding speed in order to get enough penetration in the down hand welding position.

### TYPICAL CHEMICAL COMPOSITION OF WELD METAL (wt%) :

Weld Metal Analysis : (Shielding Gas: 100% CO<sub>2</sub>)

Carbon (C)	0.031
Chromium (Cr)	19.91
Nickel (Ni)	10.53
Manganese (Mn)	1.36
Silicon (Si)	0.52
Phosphorus (P)	0.025
Sulphur (S)	0.009

### TYPICAL MECHANICAL PROPERTIES OF WELD METAL : (Shielding Gas: 100% CO<sub>2</sub>)

TS N/mm <sup>2</sup>	540
EL%	44
IV - 196°C J	38

### APPROVALS AND CONFORMANCES :

AWS A5.22, E308LT0-1/4 • JIS Z3323, YF308LC • EN12073 T 19 9 L P C/M3  
 ABS, BV, GL, DNV, LR, CCS, CE

### SIZES AND RECOMMENDED CURRENT RANGE: (Amp.)

Diameter	1.2	1.6
F, HF	140 - 220	200 - 300
V-UP, OH	120 - 200	-

## HARDFACING FLUX CORED WIRES

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



## AWS A5.22 E309LT0-1/4

### DESCRIPTION :

SFC-309L is a rutile flux cored tubular wire for flat and horizontal welding using pure CO<sub>2</sub> or Argon CO<sub>2</sub> mixed shielding gas. It performs with smooth arc transfer, low spatter level, fine ripple, fast freezing slag, easy control of weld pool and hot crack resistance.

### APPLICATIONS :

Suitable for welding dissimilar metals such as ferritic and austenitic stainless steels, as well as for joining ferritic martensitic steels. It is also used for buffer layers of clad steels.

### NOTE ON USAGE :

1. Use DC (+) polarity.
2. Maintain a higher welding speed in order to get enough penetration in the down hand welding position.

### TYPICAL CHEMICAL COMPOSITION OF WELD METAL (wt%) :

Weld Metal Analysis : (Shielding Gas: 100% CO<sub>2</sub>)

Carbon (C)	0.031
Chromium (Cr)	22.63
Nickel (Ni)	12.98
Manganese (Mn)	1.20
Silicon (Si)	0.51
Phosphorus (P)	0.025
Sulphur (S)	0.009

### TYPICAL MECHANICAL PROPERTIES OF WELD METAL : (Shielding Gas: 100% CO<sub>2</sub>)

TS N/mm <sup>2</sup>	550
EL%	39
IV - 60°C J	35

### APPROVALS AND CONFORMANCES :

AWS A5.22, E309LT0-1/4 • JIS Z3323, YF309LC • EN12073 T 23 12 L P C/M3  
 ABS, BV, GL, DNV, LR, CCS, CE

### SIZES AND RECOMMENDED CURRENT RANGE: (Amp.)

Diameter	1.2	1.6
F, HF	140 - 220	200 - 300
V-UP, OH	120 - 200	-

## HARDFACING FLUX CORED WIRES

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## AWS A5.22 E309LMoT-1/4

### DESCRIPTION :

SFC-309MoL is a rutile flux cored tubular wire for all positional welding using pure CO<sub>2</sub> shielding gas. It performs with smooth arc transfer, low spatter level, fine ripple, fast freezing slag, easy control of weld pool, good heat and corrosion resistance.

### APPLICATIONS :

Suitable for welding 22%Cr-12%Ni-2.5% Mo stainless steels and dissimilar metals such as ferritic and austenitic stainless steels, as well as for joining ferritic martensitic steels. It is also used for buffer layers of clad steels.

### NOTE ON USAGE :

1. Use DC (+) polarity.
2. Maintain a higher welding speed in order to get enough penetration in the down hand welding position.

### TYPICAL CHEMICAL COMPOSITION OF WELD METAL (wt%) :

Weld Metal Analysis :

Carbon (C)	0.030
Chromium (Cr)	23.4
Nickel (Ni)	13.60
Molybdenum (Mo)	2.43
Manganese (Mn)	1.26
Silicon (Si)	0.52
Phosphorus (P)	0.025
Sulphur (S)	0.010

### TYPICAL MECHANICAL PROPERTIES OF WELD METAL :

TS N/mm <sup>2</sup>	585
EL%	34

### APPROVALS AND CONFORMANCES :

AWS A5.22, E309LMoT1-1/4 • JIS Z3323, YF309MoLC • EN12073 T 23 12 2 L P C/M3  
 ABS

### SIZES AND RECOMMENDED CURRENT RANGE: (Amp.)

Diameter	1.2	1.6
F, HF	140 - 220	200 - 300
V-UP, OH	120 - 200	-

## HARDFACING FLUX CORED WIRES

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## AWS A5.22 E316LT0-1/4

### DESCRIPTION :

SFC-316L is a rutile flux cored tubular wire for flat and horizontal welding using pure CO<sub>2</sub> or Argon CO<sub>2</sub> mixed shielding gas. It performs with smooth arc transfer, self-releasing slag, low spatter level, fine ripple and good intergranular corrosion resistance.

### APPLICATIONS :

Suitable for welding 18%Cr-12%Ni-2% Mo stainless steels. Typical applications include corrosion resistance overlay, joining of type 316, 316L, CF-8M, and CF-3M stainless steels pipe and tube in chemical, oil and gas refineries.

### NOTE ON USAGE :

1. Use DC (+) polarity.
2. Maintain a higher welding speed in order to get enough penetration in the down hand welding position.

### TYPICAL CHEMICAL COMPOSITION OF WELD METAL (wt%) :

Weld Metal Analysis : (Shielding Gas: 100% CO<sub>2</sub>)

Carbon (C)	0.028
Chromium (Cr)	18.21
Nickel (Ni)	12.55
Molybdenum (Mo)	2.51
Manganese (Mn)	1.10
Silicon (Si)	0.43
Phosphorus (P)	0.025
Sulphur (S)	0.010

### TYPICAL MECHANICAL PROPERTIES OF WELD METAL : (Shielding Gas: 100% CO<sub>2</sub>)

TS N/mm <sup>2</sup>	555
EL%	42
IV - 196°C J	32

### APPROVALS AND CONFORMANCES :

AWS A5.22, E316LT0-1/4 • JIS Z3323, YF316LC • EN12073 T 19 12 3 L P C/M3  
 ABS, BV, GL, DNV, LR, CCS, CE

### SIZES AND RECOMMENDED CURRENT RANGE: (Amp.)

Diameter	1.2	1.6
F, HF	140 - 220	200 - 300
V-UP, OH	120 - 200	-

## HARDFACING FLUX CORED WIRES

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**AWS A5.18 ER70S-G**

**JIS Z3316 YGT50**

**EN ISO 636-A W42 3 W0**

**TIG RODS FOR 490N/mm2 HIGH TENSILE STEEL**



**DESCRIPTION :**

STG-50 is a copper coated manganese-silicone tig rod for welding of mild steel and 490N/mm2 grade steel, commonly used on butt or fillet welding of high pressure piping in shipbuilding, petro chemistry and thermal power plant etc.

**APPLICATIONS :**

It is for all-position tig welding especially on root pass of pipe.

**NOTE ON USAGE :**

1. Use pure Ar as shielding gas and DC <-> polarity.
2. Clean the surface of base metal to prevent contamination.

**WELDING POSITION:**



**TYPICAL CHEMICAL COMPOSITION OF WELD METAL (wt%) :**

Weld Metal Analysis :(Shielding Gas: Ar)	
Carbon (C)	0.07
Manganese (Mn)	1.51
Silicon (Si)	0.78
Phosphorus (P)	0.013
Sulphur (S)	0.006

**TYPICAL MECHANICAL PROPERTIES OF WELD METAL: (Shielding Gas: Ar)**

YP N/mm2	470
TS N/mm2	550
EL%	30

**TYPICAL IMPACT VALUES :**

IV -30°C J	155
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**APPROVALS :**

ABS

**SIZES , LENGTH AND LIST PRICE**

<b>Size (mm)</b>	1.6	2.4	3.2
<b>Length (mm)</b>	1000	1000	1000
<b>List Price (RM)</b>			

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# ***STAINLESS STEELS TIG ROD***



BRAND	APPLICATION AND DESCRIPTION	SIZE	HARDNESS
NTG-M	For joining mild and high tensile steel. Also suitable for buffer layer and weld metal crack repairing. Suitable for base metal Assab 760, S45C, S48C, S50C, etc	0.3 0.4 0.6	Hardness ;~200HB
CM-3M	Build up repairing for <b>SCM carbon steels mould</b> and plastic mould. Also suitable for <b>KP-4, HPM 17, PDS-3, HB, ASSAB 718,</b>	0.2 0.3 0.4 0.5 0.6	Hardness : 28 to 31 HRC
BKH-13M	Build up for various mould such as plastic precision mould, die casting mould, forging mould, hot forging dies etc. Also suitable for <b>PD555, HPM 38, STAVAX etc.</b>	0.2 0.3 0.4 0.5 0.6	Hardness : 48 to 53 HRC
BKD-11M	Build up repairing of SKD 11 tool steel mould. <b>Also suitable for PD613, HPM31, XW-10, XW-41, STD 11.</b>	0.6 0.7	Hardness : 35 to 38 HRC Hardening & 200C Tempering : 58 to 62 HRC
BKD-61M	Hard surfacing for forging moulds or <b>SKD-61 tool steels mould. Also suitable for ASSAB 8407, QRO 90,H 13, DHA1.</b>	0.2 0.3 0.4 0.5 0.6	Hardness: 51 to 55 HRC
NAK-80M	Build up repairing for <b>NAK-50, NAK-80 and Cr Mo tool Steel moulds. Also suitable for HPM 50, KMS1, HP-70 and ASSAB 718 Hi Hard.</b>	0.2 0.3 0.4 0.5 0.6	Hardness : 35 to 40 HRC
AL-4043M	For welding aluminium alloys <b>6061, 6063, 5050, 5154, 3003 and 2024.</b>	0.3	
AL-5356M	For welding aluminium <b>5005, 5050, 5052 and 5086.</b>	0.3	
HE-500M	For welding problem steels, high carbon steels, high alloy steels, tool steels etc. Also suitable for buffering on problem steels.	0.3 0.4	Hardness : 20 to 23 HRC

BEW-M	For welding beryllium copper	0.3 0.6	
NS-316LM	For welding <b>304, 304L, 316L and buffering for hard surfacing</b>	0.3 0.4	
NS-430M	For welding AISI <b>410, 420, 430 and 405.</b>	0.3 0.4	

## NICHIA TIG ROD FOR REPAIRING MOLD AND TOOL



BRAND	APPLICATION AND DESCRIPTION	HARDNESS
NTG-50R	For welding high tensile steels and <b>ASSAB 760, S45C, S48C, S50 C etc.</b> Size available : 0.8 mm/ 1.0mm / 1.2 mm/ 1.6 mm/ 2.4 mm	Hardness ;~200HB
CM-3R	Build up repairing for SCM steels, also applicable <b>ASSAB 718, KP-4, PDS3 etc.</b> Size available : 0.8 mm/ 1.0mm / 1.2 mm/ 1.6mm/ 2.0mm/ 2.4mm	Hardness : 25 to 32 HRC
BK-660R	Hard surfacing for forging mould, shear, knives, tool and dies. Applicable to <b>DF 2, SKD 11, SKS, HMD.</b> Size available : 1.2mm / 1.6mm	Hardness : 55 to 60 HRC
BKH-9R	Build up repairing for <b>High Speed Steel (HSS).</b> Applicable to <b>SKH-9, SKH51.</b> Size available : 1.6mm	Hardness : 60 to 62 HRC
BKH-13R	Hard surfacing for plastic mould, hot forging dies etc. Applicable to <b>STAVAX, HPM38, PD555 etc</b> Size available : 0.8mm/ 1.0mm / 1.2mm/ 1.6mm/ 2.4mm	Hardness : 48 to 53 HRC
NSM-1R	<b>Build up for repairing Maraging Steels such like Maraging 200-500.</b> Applicable to <b>SCM steels for plastic mould, SKT-4, SKD-61, MAS1, YAG, ASSAB 8407, etc.</b> Size available : 1.6mm	Hardness : 32 to 42 HRC (as welded) 480C X 3hr. Air cooling 49-52 HRC
BKD-61R	Hard surfacing for forging mould, dies and casting mould etc. Applicable to <b>SKD61, ASSAB 8407, etc.</b> Size available : 0.8mm/ 1.0mm/ 1.2mm/ 1.6mm/ 2.4mm	Hardness : 51 to 55 HRC

NINAK-R	Build up repairing of <b>NAK-55, NAK-80, 718 Hi Hard and tool steels for plastic repairing.</b> Available size : 0.9 mm/ 1.2 mm / 1.6 mm	Hardness : 44 to 46 HRC
HE-500R	Joining and build up for problem steels, such like high alloy steels, high nickel steels, tool steels, high carbon steels. Available size : 1.2 mm/ 1.6mm / 2.4 mm	Hardness : 21 to 23 HRC
NST-6R (Stellite 6)	Hard surfacing of valve seats, forging dies. Crushers hammer edges, cutting knives etc. For corrosion and high temperature abrasion. AWS A5.21 ERCoCr-A Available size : 2.6mm/3.2mm/4.0mm	Hardness : 40 to 47 HRC
BKD-11R	Build-up repairing of SKD-II tool steel molds. Hard surfacing of piercing form. Forging mold, dies and casting mold, etc.	Hardness: 58 to 62 HRC

## NICHIA TITANIUM TIG ROD

BRAND	APPLICATION AND DESCRIPTION		HARDNESS
NTI-2R	For Titanium class 2. <b>AWS A5.16 ERTi-2 / JIS Z3331 YTB340</b>	1.6 2 2.4	Shielding Gas : Ar Polarity : DC-EN





PRODUCT	<u>STAINLESS STEELS TIG ROD</u> CLASSIFICATION AND APPLICATION	POLARITY	SHIELDING GAS
<b>NS-308LR</b>	For 18%Cr - 8% Ni stainless steel or 304 and 308L base metal. AWS A5.9 ER308L / JIS Z3321 Y308L Size available : 1.2mm/ 1.6mm/ 2.0mm/ 2.4mm/ 3.2mm	DC-EN	Argon
<b>NS-309LR</b>	For joining steel to stainless steel and also suitable for buffering or overlaying for stainless steel weld metal. AWS E5.9 ER309L / JIS Z3321 Y309L Size available : 1.6mm/ 2.0mm/ 2.4mm/ 3.2mm	DC-EN	Argon
<b>NS-310R</b>	For 25%Cr - 20% Ni stainless steel. Weld metal resists scaling up to 1100-1150C. AWS A5.9 ER310 / JIS Z3321 Y310 Size available : 1.6mm/ 2.0mm/ 2.4mm	DC-EN	Argon
<b>NS-309MoLR</b>	For dissimilar-metal joint and underlaying of ferritic steel for overlaying stainless steel weld metal. AWS A5.9 ER309LMo / JIS Z3321 Y309Mo Size available : 1.6mm/ 2.4mm	DC-EN	Argon
<b>NS-312R</b>	For dissimilar joint and buffering for hardfacing build-up. AWS A5.9 ER312 / JIS Z3321 Y312 Size available : 1.2mm/ 1.6mm/ 2.4mm	DC-EN	Argon
<b>NS-316LR</b>	For low carbon 18% Cr -12%Ni-2.5%Mo stainless steel or 316 and 316L base metal. AWS A5.9 ER316L / JIS Z3321 Y316L Size available : 1.2mm/ 1.6mm / 2.0mm/ 2.4mm/ 3.2mm	DC-EN	Argon
<b>NS-317LR</b>	For 18%Cr -12%Ni-3.5Mo stainless steel base metal AWS A5.9 ER317L / JIS Z3321 Y317L Size available : 1.6mm/ 2.4mm	DC-EN	Argon
<b>NS-347R</b>	For 18%Cr -9%Ni-Nb and 18%Cr -12 Ni-Ti stainless steel or suitable for 321 and 347 base metal. AWS A5.9 ER347 / JIS Z3321 Y347 Size available : 1.6mm/ 2.0mm/ 2.4mm	DC-EN	Argon
<b>NS-410R</b>	For 13%Cr stainless steel such as AISI410 and AISI420. AWS A5.9 ER410 / JIS Z3321 Y410 Size available : 1.6mm/ 2.4mm	DC-EN	Argon
<b>NS-630R</b>	For 17%Cr - 4%Ni precipitation hardening stainless steel. AWS A5.9 ER630 Size available : 1.2mm/ 1.6mm/ 2.4mm	DC-EN	Argon

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# ***GOODWELD WELDING CONSUMABLES***



## STAINLESS STEEL SMAW ELECTRODES

Type & Classification	Description & Applications	Weld Metal Composition		Mechanical Properties		Diameter (mm)	Amps (A)	
							Flat	Vertical/Overhead
G308L (AWS A5.4 E308L-16)	Low carbon lime Titanium oxide type covered electrode for low carbon content stainless steel. Good arc stability, easy slag removal and less spatter loss. Good bead appearance, crack resistance and corrosion resistance.	C	0.03	TS (Mpa)	556	2.0	30~50	30~50
	Suitable for welding of low carbon content 18Cr-8Ni stainless steel such as SUS304 and 304L	Si	0.80			2.6	60~85	50~75
G309L (AWS A5.4 E309L-16)	All deposited weld metal contains approximately 23%Cr-13%Ni elements type covered electrode for low carbon content stainless steel. Austenite weld metal contains adequate ferrite numbers to provide low crack sensitivity. Good heat and corrosion resistance.  Welding of SUS 309L stainless steel. Welding of Carbon steel or other high hardening alloy steels to stainless steel (low carbon). Cladding or welding of stainless steel ( low carbon) to carbon steel or low alloy steel.	Mn	0.66	EL (%)	47.7	3.2	85~120	75~105
		Ni	9.80			4.0	115~150	95~130
		Cr	19.3			5.0	140~180	—
		Mo	0.02					
G316L (AWS A5.4 E316L-16)	Lime titanium oxide type covered electrode for 316 low carbon content stainless steel, deposited weld metal contains approximately 18%Cr-12%Ni-2%Mo elements. Austenite structure weld metal, good heat, corrosion and crack resistance, better intergranular corrosion resistance than 316. Weld metal contains Mo element to get good crevice corrosion resistance.  Suitable for welding of severe acid and high heat resistance required SUS316L stainless steel.	C	0.03	TS (Mpa)	570	2.0	40~60	—
		Si	0.72			2.6	60~85	50~75
		Mn	1.20	EL (%)	39	3.2	85~120	75~105
		Ni	13.40			4.0	115~150	95~120
		Cr	23.70			5.0	150~200	—
G316L (AWS A5.4 E316L-16)		C	0.02	TS (Mpa)	560	2.0	40~60	—
		Si	0.71			2.6	60~85	50~75
		Mn	0.63	EL (%)	41.7	3.2	85~120	75~105
		Ni	12.38			4.0	115~150	95~130
		Cr	17.91			5.0	150~200	—
		Mo	2.37					

**GAS SHIELDED TYPE FLUX CORED WIRE**

Type & Classification	Description & Applications	Weld Metal Composition		Mechanical Properties		Diameter (mm)	Polarity	Shielding Gas	Amps (A)	
									Flat	Vertical/Overhead
GMX308L (AWS A5.22 E308LT1-1/4)	<p>Rutile type gas shield flux cored arc welding wire, austenite structure weld metal. Smooth arc, low spatter loss and easy slag removal. Low carbon content in weld metal to get good crack and inter-granular corrosion resistance. Good bead appearance. Easy to get Smooth fillet weld size.</p> <p>Suitable for welding of stainless steels such as SUS301, 302, 304, 304L and 305.</p> <p>** Use general CO2 welding machine with proper feed roller pressure.</p>	C	0.03	TS (Mpa) EL (%)	573 39.3	1.2 1.6	DC+ DC+	CO <sub>2</sub> / Mixed Gas CO <sub>2</sub> / Mixed Gas	150~250 200~300	100~140 —
		Si	0.60							
GMX309L (AWS A5.22 E309LT1-1/4)	<p>Rutile type gas shield flux cored arc welding wire, austenite structure weld metal. Smooth arc, low spatter loss and easy slag removal. Low carbon content in weld metal to get good crack and inter-granular corrosion resistance. Good bead appearance. Easy to get Smooth fillet weld size.</p> <p>Suitable for welding of stainless steels such as SUS301, 302, 304, 304L and 305.</p> <p>** Use general CO2 welding machine with proper feed roller pressure.</p>	Mn	1.59							
		Ni	9.87							
GMX316L (AWS A5.22 E316LT1-1/4)	<p>Rutile type gas shield flux cored arc welding wire, austenite structure weld metal. Smooth arc, low spatter loss and easy slag removal. High welding performance, weld metal contains adequate ferrite to get good crack resistance. Low carbon content in weld metal to get good inter-granular corrosion resistance. Good low temperature impact toughness and corrosion resistance.</p> <p>Suitable for welding of severe acid and high heat resistance required SUS316 stainless steel.</p> <p>**Use general CO2 welding machine with proper feed roller pressure.</p>	Cr	19.18							
		Mo	2.35							



# ***SELECTARC WELDING CONSUMABLES***



## STAINLESS STEEL SMAW ELECTRODES

	Type & Classification	Description & Applications	Weld Metal Composition		Mechanical Properties		Diameter (mm)	Amps (A)
Stainless Steel	25/20 R (AWS A5.4: ~E310-16)	Rutile-basic electrode with a high temperature resistant stainless steel deposit. Resistant to corrosion and oxidation up to 1200°C, good resistance against hot cracks, easy slag removal and nice aspect of the weld beads. Principal applications are construction of steam boilers, chemical installations, gas industry, ovens, and thermal equipments.	C	0.10	YS (MPa)	>400	2.0	45
			Mn	2.00	TS (MPa)	>550	2.5	70
			Si	0.90	EL (%)	>30	3.2	100
			Ni	20.50	CVN (J)	@ 20°C	4.0	135
			Cr	25.50			5.0	180
Brazing	PHOSBRAZ M70 (EN ISO 3677: B Cu 93 P 710-805)	The higher phosphorus ratio, the higher fluidity. This alloy with a great flow has been specially created with a perfect metal degassing, in order to generate a maximum comfort in use. It is recommended for capillary brazing of tubes and connections, water heaters, refrigeration systems. Mainly used by plumbers and heating engineers. It can also be used on cuprous alloys (bronze, brass) with Phosbraz flux. As all CuP, it is self-fluxing on red coppers.	P	7.00	d (Kg/m3)	8000	1.5	
			Cu	93.00	EL (%)	4	2.0	
					R.da (MPa)	45	2.5	
					Colour	White grey	3.0	
Stainless Steel	29/9 (AWS A5.4: ~E312-16)	Rutile-basic electrode with an austenitic-ferritic stainless steel deposit, adapted for welding dissimilar steels (stainless steels with low alloyed steels) and steels difficult to weld as tool steels, Mn steels, spring steels. Metal deposit highly resistant to cracks, suitable for buffer layers before hardfacing and for building up cutting tools. Soft fusion, nice aspect of the beads, self releasing slag.	C	0.10	YS (MPa)	>500	1.6	35
			Mn	0.60	TS (MPa)	700-	2.0	45
			Si	1.00	EL (%)	850	2.5	70
			Ni	9.50		>20	3.2	110
			Cr	29.00			4.0	135
			Mo	0.50			5.0	180
High Temperature Basic Coated Electrode	Selectarc B60 (AWS A5.5: E7018-A1)	Low hydrogen basic coated electrode with Mo for welding creep resisting steels used at temperatures up to 500°C. Good resistance to Hydrogen attacks (chemical installations). Used for piping systems, boilers... Soft fusion, easy slag removal and nice aspect of the metal deposit.	C	<0.10	YS (MPa)	>450	2.5	80
			Si	0.40	TS (MPa)	>550	3.2	115
			Mn	0.80	EL (%)	>22	4.0	150
			Mo	0.50	KV (J)	>100	5.0	190
			P	<0.025	@ +20°C			
			S	<0.025				
	Selectarc TIG Ni82 (AWS A5.14: ERNiCr-3)	Solid rod for gas protected welding of high nickel content alloys. Used in the construction of equipment submitted to oxidizing and corrosive attacks at high temperatures. High resistance at low temperatures on steels of 5% and 9% Ni.	C	0.03	YS (MPa)	430		
			Si	0.20	TS (MPa)	670		
			Mn	3.20	EL (%)	42		
			Cr	20.50	KV (J)			
			Fe	2.0	@ +20°C	200		
			Nb	2.30	@ - 196°C	100		
			Ti	0.30				
			P	<0.01				
			S	<0.01				
			Ni	Base				
	Selectarc TIG Ni625 (AWS A5.14: ERNiCrMo-3)	Solid rod for gas protected welding of high nickel content alloys as well as for special austenitic stainless steels. Used in the construction of equipment submitted to oxidizing and corrosive attacks. Excellent resistance to pitting, crevice and stress corrosion cracking in the presence of chlorides. Highly resistant at low temperatures, therefore also applied to weld 9% Ni steels.	C	0.015	YS (MPa)	520		
			Si	0.10	TS (MPa)	790		
			Mn	0.20	EL (%)	40		
			Cr	21.9	KV (J)			
			Mo	8.90	@ +20°C	160		
			Fe	1.0	@ - 196°C	100		
			Nb	3.50				
			S	<0.01				
			P	<0.02				
			Ni	Base				

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## STAINLESS STEEL SMAW ELECTRODES

	Type & Classification	Description & Applications	Weld Metal Composition		Mechanical Properties		Diameter (mm)	Amps (A)
Stainless Steel	INOX 253MA (EN 1600: E 22 12 B 42)	Basic coated electrode with an austenitic stainless steel deposit resisting to scaling and oxidation up to 950°C. Regular and stable fusion, good slag removal, nice aspect of the bead. Principal applications are on ovens, thermal equipments for heat treatment, chemical installations.	C	0.10	YS (MPa)	380	2.5	70
			Mn	1.50	TS (MPa)	550	3.2	100
			Si	1.00	EL (%)	35	4.0	130
			Ni	11.00				
			Cr	22.00				
			N	0.10				
Basic Coated Inconel Type Electrode	Selectarc Ni182 (AWS A5.11: ENiCrFe-3)	Basic coated electrode with an NiCrFe type nickel base deposit. Used for repairing and joining of Nickel alloys, 5 % Nickel steels, cryogenic stainless steels (down to -196°C), Incoloy 800 and other high temperature steels. For joining dissimilar materials as stainless steels to low alloyed steels, stainless steels to Nickel alloys, for buttering of difficult to weld steels. Deposit insensitive to cracks, very good resistance against acids, salt and alkaline solutions, molten salt. Resistant in oxidizing and carburizing atmospheres ( avoid a sulphurous atmosphere). Main applications : Oven parts, burners, heat treatment equipment, cement works , moulds, tanks, transport and storage of liquid gas. Chemical industries, petrochemical industries, glassworks, civil engineering, repairing and maintenance workshops. Note: "Inconel" and "Incoloy" are registered trade names of Inco Alloys.	C	<0.04	YS (MPa)	>380	2.5	70
			Si	0.40	TS (MPa)	>620	3.2	100
			Mn	6.0	EL (%)	>35	4.0	130
			Cr	16.50	KV (J)			
			Nb	2.0	@ +20°C	>80		
			Fe	6.0	@ - 196°C	>65		
			Mo	0.20				
			Ni	Base				
Nickel Base Electrode NiCrMo (C-276) Type	Selectarc Ni276 (AWS A5.11: ENiCrMo-4)	Basic coated electrode with an alloyed core wire for welding of Nickel-Base alloys ( alloy C-276) and other highly corrosion resistant Ni Cr Mo-alloys as well as special stainless steel types. Stable arc, regular drop transfer, easy to watch weld pool, nice aspect of the weld beads. Very resistant in sulphurous acid environment, highly concentrated with chlorides and also in the presence of oxidising solutions ( Fe Cl, Cu Cl ). Special applications are: Welding of Off-shore components, boilers, containers, piping systems in the chemical and petrochemical industries as well as components of flue gas desulfurizing plants	C	<0.02	YS (MPa)	>450	2.5	50-70
			Si	0.20	TS (MPa)	>720	3.2	70-100
			Mn	0.60	EL (%)	>30	4.0	90-120
			Cr	16.20	KV (J)			
			Mo	16.0	@ +20°C	>70		
			W	4.0				
			Fe	5.0				
			V	0.15				
			Ni	Base				
Stainless Steel	TIG 253MA (EN 12072: G 22 12 H)	Rod for Gas Tungsten Arc Welding with an austenitic stainless steel deposit resisting to scaling and oxidation up to 1100°C. Principal applications are ovens, thermal equipments for heat treatment, chemical installations.	C	0.08	YS (MPa)	450	—	—
			Mn	0.50	TS (MPa)	650		
			Si	1.50	EL (%)	38		
			P	<0.02	CVN (J)			
			S	<0.01	@ 20°C	120		
			Ni	10.00				
			Cr	21.00				
			N	0.15				
Titanium	TIG T40 (AWS A5.16: ERTi-2)	Welding of pure titanium. Main applications in heat exchangers, condensers, evaporators for nuclear plants, oil refinery, aeronautical and chemical industries.	C	<0.05	YS (MPa)	290	—	—
			Fe	<0.20	TS (MPa)	390-		
			N2	<0.02	EL (%)	540		
			H2	<0.008		20		
			O2	<0.10				
			Ti	base				

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

**STAINLESS STEEL SMAW ELECTRODES**

	Type & Classification	Description & Applications	Weld Metal Composition		Mechanical Properties		Diameter (mm)	Amps (A)
	TIG 308H (AWS A5.9: ER308H)	Solid low carbon rod for welding of stainless steels (type 304H, 308H, 321H and 347H). This type is generally reserved for creep-resistant pieces and oxidation resistance of working temperatures between 400°C to 750°C. The TIG process is particularly suited for welding of piping systems, works of fine thickness equal or inferior than 3mm and for penetration passes.	C	0.05	YS (MPa)	380	—	—
			Mn	1.80	TS (MPa)	580		
			Si	0.40	EL (%)	35		
			P	<0.02	CVN (J)	100		
			S	<0.015	@ 20°C			
			Ni	9.70				
			Cr	19.90				
Stainless Steel	TIG 385 (AWS A5.9: ER385)	Very low carbon content solid rod for joining of totally austenitic stainless steels (Uranus B6, 904L ...). Very good resistance to attacks by phosphoric and sulphuric acids. High resistance against pitting and stress corrosion in chloride containing media.	C	0.01	YS (MPa)	350	—	—
			Mn	1.80	TS (MPa)	550		
			Si	0.40	EL (%)	36		
			P	<0.02	CVN (J)	120		
			S	<0.01	@ 20°C	80		
			Ni	25.00	-196°C			
			Cr	20.00				
			Mo	4.50				
			Cu	1.50				
Flux Cored Wire Electrode	FCW-253MA P (EN / ISO12073 : T Z 22 10 N H P M1)	Rutile flux cored wire to weld with shielding gas protection in all positions with an austenitic stainless steel deposit resisting to scaling and oxidation up to 1000°C. Regular and stable fusion, good slag removal, nice aspect of the beads. Principal applications : construction of steam boilers, chemical installations, gas industry, ovens, thermal equipments.	C	0.06	YS (MPa)	530	1.2	120-250
			Si	1.40	TS (MPa)	720		
			Mn	1.0	EL (%)	32		
			Cr	22.0	CVN (J)	50		
			Ni	10.0	@ 20°C			
			N	+				
			Ce	+				
			P	0.02				
			S	0.01				
			Fe	Base				
Copper Alloy	MIG CuAl9 (AWS A5.7: ERCuAl-A2)	Wire electrode for MIG welding of copper-aluminium alloys of similar composition. The deposits are harder than those of MIG CuAl8, and are often used for surfacing of ferritic/perlitic steels. High resistance to wear and metal-metal abrasion. Assemblies and surfacing of aluminium-bronze, of aluminium coated steels, of cast iron used in machining tools industry and in naval construction. Welding of aluminium-bronze piping resistant to seawater corrosion, erosion and cavitation.	Si	<0.10	TS (MPa)	500	—	—
			Ni	0.007	EL (%)	35		
			Fe	1.20				
			Al	9.80				
			Zn	<0.02				
			Pb	<0.02				
			Cu	base				
Aluminium Brazing Rods	TBW ZINAL 4	Seamless tubular wire of Zn Al 98-2 with non corrosive flux. Used to join piping connections of aluminium and aluminium alloys for heat exchangers, air conditioners and condensers and heat diffuser discs. Active temperature is approximately 440°C	Al	2.00	—	—	—	—
			Zn	Bal				









# NITTETSU L-55

AWS A5.1 E7016 Approval : ABS, LR, DNV GL, BV

**WELDREAM®**  
*Rod*

## APPLICATIONS

Welding of 490MPa high tensile steel for ships, structures, bridges and pressure vessels.

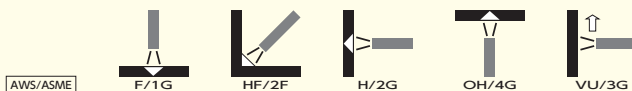
## CHARACTERISTICS

NITTETSU L-55 is a low hydrogen type electrodes for all positions. Weld metal shows excellent crack resistance, mechanical properties and X-ray quality. Vertical and overhead welding is very easy.

## GUIDELINES FOR USAGE

- 1 Electrode should be redried at 300~350° C for 60 minutes before use.
- 2 Backstep method should be applied to prevent blowholes and pits at arc starting and arc length should be kept as short as possible during welding.
- 3 All water, rust and oil in groove should be completely removed to prevent cracks and blowholes.

## WELDING POSITION



## CHEMICAL COMPOSITION OF ALL WELD METAL (%)

Brand Name	C	Si	Mn	P	S	Ni	Cr	Mo	V
NITTETSU L-55	0.07	0.67	1.17	0.015	0.001	0.02	0.03	0.01	0.005
AWS A5.1 E7016	≤0.15	≤0.75	≤1.60	≤0.035	≤0.035	≤0.30	≤0.20	≤0.30	≤0.08

## MECHANICAL PROPERTIES OF ALL WELD METAL

Brand Name	Yield Point, MPa	Tensile Strength, MPa	Elongation, %	Charpy 2V-notch at -30°C, J
NITTETSU L-55	470	576	35	186
AWS A5.1 E7016	≥400	≥490	≥22	≥27

**NITTETSU-308L•R** AWS A5.4 E308L-16  
Approval: ABS

**NITTETSU-309L•R** AWS A5.4 E309L-16

**NITTETSU-316L•R** AWS A5.4 E316L-16  
Approval: ABS

**WELDREAM®**  
*Rod\**

### APPLICATIONS and CHARACTERISTICS

These Electrodes is for all position, especially are good welding workability on horizontal fillet in them.

**NITTETSU-308L•R:** Welding of SUS304L which is low carbon 18%Cr-8%Ni austenitic stainless steel for chemical apparatus, containers and plants. Slag is easy to remove, arc is stable, spatters are few and bead appearance is beautiful.

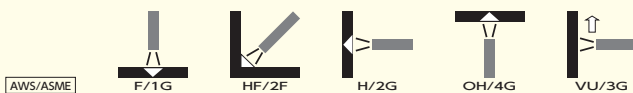
**NITTETSU-309L•R:** Welding of SUS309S which is low carbon 24%Cr-13%Ni austenitic stainless steel for petrochemical, chemical and textile industries. And dissimilar metal such as SUS304 or SUS304L type stainless steel to mild steel or low alloy steel, SUS304 or SUS304L clad steel, and the parts of hardenable steel for which post-heat treatment is impossible. Slag is easy to remove, arc is stable, spatters are few and bead appearance is beautiful.

**NITTETSU-316L•R:** Welding of SUS316L which is low carbon 18%Cr-12%Ni-2%Mo austenitic stainless steel for chemical apparatus, containers and plants. Slag is easy to remove, arc is stable, spatters are few and bead appearance is beautiful.

### GUIDELINES FOR USAGE

- 1 Welding is operated in either AC or DCEP polarity.
- 2 Electrodes should be redried in the conditions in the table below before use.
- 3 Dirt such as oil, grease and dust should be completely removed from groove.
- 4 Preheat is not necessary, interpass temperature should be less than 150°C.
- 5 Excessively wide weaving may cause welding defects. Keep weaving width to less than 2.5 times Electrode diameter.
- 6 Arc length should be kept as short as possible.

### WELDING POSITION



### TYPICAL CHEMICAL COMPOSITION OF WELD METAL ( % )

	C	Si	Mn	Ni	Cr	Mo
NITTETSU-308L•R	0.02	0.67	1.03	9.7	20.0	—
NITTETSU-309L•R	0.03	0.69	0.97	13.2	24.0	—
NITTETSU-316L•R	0.02	0.68	1.67	12.3	19.1	2.27

### TYPICAL MECHANICAL PROPERTIES OF WELD METAL

	Tensile Strength MPa	Elongation %
NITTETSU-308L•R	590	45
NITTETSU-309L•R	558	44
NITTETSU-316L•R	567	45



## NSSW SF-1E

AWS A5.20 E71T-1C/9C H4  
 AWS A5.20M E491T-1C/9C H4  
 AWS A5.36 E71T1/T9-C1A2-CS1 H4  
 AWS A5.36M E491T1/T9-C1A3-CS1 H4  
 AS/NZS ISO 17632-A-T 42 3 P C 1 H5  
 AS/NZS ISO 17632-B-T 49 3 T1-1 C A-U H5



### Features and Superiority of SF-1E

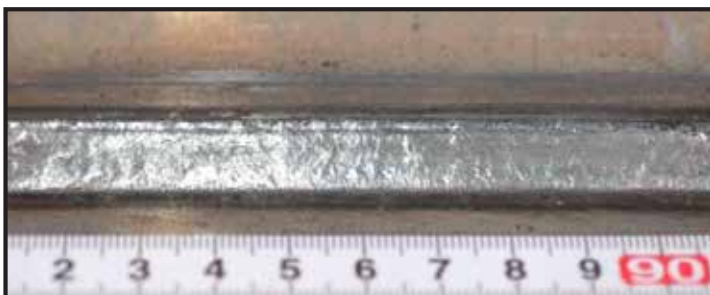
- **Low Spatter and Easy Slag Removal**
- **Excellent Contact-Tip abrasion Resistance**
- **Excellent Hygroscopic Resistance**

### Typical chemical composition of deposited metal (mass %)

Shield Gas	C	Si	Mn	P	S	Ni
100%CO <sub>2</sub>	0.06	0.47	1.17	0.012	0.006	0.29

### Typical mechanical properties of deposited metal and diffusible hydrogen content

Shield Gas	0.2%PS MPa	TS MPa	EL %	Impact value (J)		Diffusible hydrogen content (ml/100g)
				-30°C	-20°C	
100%CO <sub>2</sub>	520	585	29	85	104	3.1



- Horizontal fillet
- 250A-32V-16in/min
- Wire dia: 1.2mm
- CO<sub>2</sub>

### Typical bead appearance and macrostructure

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

# NITTETSU FT-51

AWS A5.1 E6013 Approval : ABS, DNV GL, BV

**WELDREAM®**  
*Rod\**

## APPLICATIONS

Welding of mild steel sheets for ships, rolling stock and structures, and finish welding of heavy structural works.

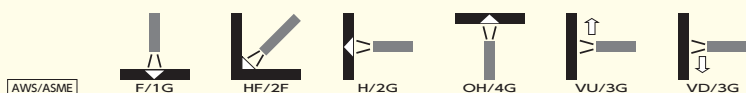
## CHARACTERISTICS

NITTETSU FT-51 is a high rutile type electrode for all positions and assures easy operation even in vertical downward position. Spatters are less and bead appearance is beautiful. Shallow penetration minimizes distortion in the welding of thin plates.

## GUIDELINES FOR USAGE

- ① If coating flux absorbs excessive moisture, arc and slag fluidity become unstable, spatters increase, and undercuts and blowholes are apt to occur. Damp electrodes should be redried at 70~120°C for 60 minutes.
- ② In inclined and vertical downward positions, touch electrode tip lightly to the base metal and deposit a stringer bead with electrode slope 40~80°.

## WELDING POSISION

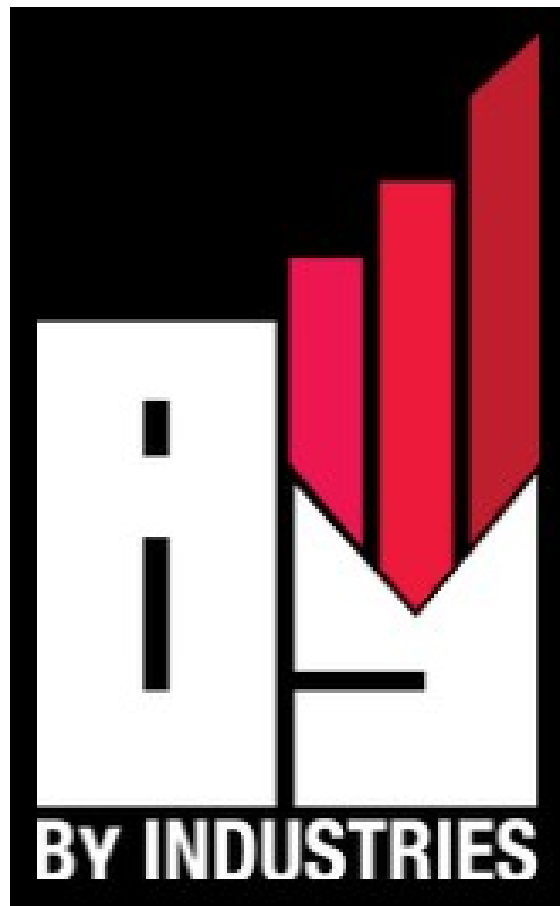


## CHEMICAL COMPOSITION OF ALL WELD METAL (%)

Brand Name	C	Si	Mn	P	S	Ni	Cr	Mo	V
NITTETSU FT-51	0.09	0.37	0.41	0.018	0.004	0.01	0.02	0.01	0.019
AWS A5.1 E6013	≤0.20	≤1.00	≤1.20	—	—	≤0.30	≤0.20	≤0.30	≤0.08

## MECHANICAL PROPERTIES OF ALL WELD METAL (%)

Brand Name	Yield Point, MPa	Tensile Strength, MPa	Elongation, %	Charpy 2V-notch at 0°C, J
NITTETSU FT-51	421	499	23	78
AWS A5.1 E6013	≥330	≥420	≥17	—



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