

YOUR WELDING PARTNER



SHOPPING GUIDE



TOSHWELD[®]
INVERTER WELDING SYSTEM



INTRODUCTION

TOSHWELD group of companies has been specialising in designing and distribution of inverter welding machines.

To satisfy the needs of customer and to meet different welding requirements, we have picked and designed our range of products as:

- ARC Welding Machines
- TIG / ARC Welding Machines
- AC / DC Square Wave (Pulse) Welding Machines
- MIG / MAG Welding Machines
- PLASMA CUTTING Machines
- SAW Welding Machines

To meet our motto "**Satisfying Customers by supplying value to them**", we adopt modernized management ways to make sure that our distribution network provides a timely delivery of products and our service network provides a timely and quality after sales service to customers.



**A Satisfied Customer is our
best brand Ambassador**

SHOPPING GUIDE

Product Range

Working Connection Guide

Features

Parameters

Product Purchase Guide





Inverter Welding System

An Inverter welder is a relatively new and innovative type of welder. Inverter works on high power semiconductors such as the MOSFET (Metal - Oxide Semi - Conductor Field Effect Transistor) & IGBT (Insulated gate bipolar transistor). They build a switched - mode power supply capable of coping with the high loads of arc welding. They generally first rectify the utility AC power to DC, and then they switch (invert) the DC power into a step down transformer to produce the desired welding voltage or current. Inverters are manufactured from sophisticated components and circuits. It drastically reduces the bulk of the step down transformer. The inverter circuitry can also provide features such as power control and overload protection. The high frequency inverter based welding machines are typically very efficient and provide better control of variable functional parameters.

Inverters has host of advantages when compared, inverter welder is small and on a way portable, besides they consume less power, which means that there will be saving in total energy cost (inverter technology saves around 40% - 55% Power) additionally, an inverter welder will better accept the impure power from generator than conventional welder and this can result in faster jobs and better welds, again as inverter output power is electronically regulated you have a wide power adjustment range from nil 100% enabling you to fine tune them to your specific needs. It is here that inverter welder is certainly a milestone in the advancement of welding technology.





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ARC WELDER (IGBT Series)

ARC 200 Nano / ARC 200G / ARC 200L / ARC 250GT

TOSHIELD®
INVERTER WELDING SYSTEM

FEATURES

- Advance IGBT Technology with Easy ARC Starting
- Excellent ARC stability with low spatter
- Over Voltage, Over Current, Over Heat auto protection function
- Reliable with High Efficiency and High Energy Savings



ARC 200 Nano



ARC 200G



ARC 200L



ARC 250GT

Parameter

Parameter	Model	ARC 200 Nano 1Phase IGBT	ARC 200G 1 Phase IGBT	ARC 200L 1&2 Phase IGBT	ARC 250GT 1 Phase IGBT
Input Voltage (V)		AC230V±15%	AC230V±15%	AC230V/415V±15%	AC230V±15%
Input Power Capacity (KVA)		6	6	6	7.4
No-Load Voltage (V)		56	58	58	58
Output Current Range (A)		10-200	10-200	10-200	10-250
Rate Input Current (A)		32.8	43.6	43.6	43.6
Power Factor		0.73	0.73	0.73	0.73
Duty Cycle (%)		60	60	60	60
Insulation Grade		F	F	F	F
Net Weight (KG)		4.5	6	6	8
Dimension (Inch)		12.5 X 5 X 9	15.5 X 6 X 11.5	15.5 X 6 X 11.5	16 X 6 X 12
Plate Thickness (MM)		2.0 - 6.0	2.0 - 6.0	2.0 - 6.0	2.0 - 8.0
Electrode Size (MM)		2.0 - 3.2	2.0 - 3.2	2.0 - 3.2	2.0 - 3.2

Product Purchase Guide

Base Material	Plate Thickness (mm)	Electrode Size (mm)	Applicable Model
Carbon Steel	2.0 - 6.0	2.0 - 3.2	ARC 200 I
	2.0 - 6.0	2.0 - 3.2	ARC 200 G
Stainless Steel	2.0 - 6.0	2.0 - 3.2	ARC 200 L
Low -Alloy Steel	2.0 - 8.0	2.0 - 4.0	ARC 250 GT



ARC WELDER (Mosfet Series)

ARC 200 / ARC 250 ST

TOSH WELD[®]
INVERTER WELDING SYSTEM

FEATURES

- Adapted Powerful Mosfet Technology
- Excellent ARC stability with low spatter
- Over Voltage, Over Current, Over Heat auto protection function
- Reliable with High Efficiency and High Energy Savings



ARC 200



ARC 250ST

Parameter			
Parameter	Model	ARC 200	
		1Phase	Mosfet
Input Voltage (V)		AC230V±15%	
Input Power Capacity (KVA)		6	
No-Load Voltage (V)		58	
Output Current Range (A)		10-200	
Rate Input Current (A)		43.6	
Power Factor		0.73	
Duty Cycle (%)		60	
Insulation Grade		F	
Net Weight (KG)		8	
Dimension (Inch)		15.5 X 6 X 11.5	
Plate Thickness (MM)		2.0 - 6.0	
Electrode Size (MM)		2.0 - 3.2	

Product Purchase Guide			
Base Material	Plate Thickness (mm)	Electrode Size (mm)	Applicable Model
Carbon Steel	2.0 - 6.0	2.0 - 3.2	ARC 200
Stainless Steel	2.0 - 8.0	2.0 - 4.0	ARC 250 ST
Low -Alloy Steel			



ARC WELDER (IGBT Series)

ARC 270 S / ARC 270 L



FEATURES

- Advance IGBT Technology with Easy ARC Starting
- Excellent ARC stability with low spatter
- Over Voltage, Over Current, Over Heat auto protection function
- Reliable with High Efficiency and High Energy Savings
- ARC Force for Anti Sticking



ARC 270 S



ARC 270 L

Parameter			
Parameter	Model	ARC 270 S	
		1Phase	IGBT
Input Voltage (V)		AC230V±15%	
Input Power Capacity (KVA)		8.5	
No-Load Voltage (V)		66	
Output Current Range (A)		10-270	
Rate Input Current (A)		61.9	
Power Factor		0.73	
Duty Cycle (%)		60	
Insulation Grade		F	
Net Weight (KG)		7.5	
Dimension (Inch)		15 X 6 X 11.5	
Plate Thickness (MM)		2.0 - 10.0	
Electrode Size (MM)		2.0 - 4.0	

Product Purchase Guide			
Base Material	Plate Thickness (mm)	Electrode Size (mm)	Applicable Model
Carbon Steel	2.0 - 10.0	2.0 - 4.0	ARC 270 S
Stainless Steel	2.0 - 10.0	2.0 - 4.0	ARC 270 L
Low -Alloy Steel			



ARC WELDER (Mosfet Series)

ARC 300 S / ARC 300 L

TOSH WELD
INVERTER WELDING SYSTEM

FEATURES

- Adapted Powerful Mosfet Technology
- Excellent ARC stability with low spatter
- Over Voltage, Over Current, Over Heat auto protection function
- Reliable with High Efficiency and High Energy Savings
- ARC Force for Anti Sticking



ARC 300S



ARC 300 L

Parameter				
Model	ARC 300S		ARC 300 L	
Parameter	1Phase	Mosfet	1&2 Phase	Mosfet
Input Voltage (V)	AC230V±15%		AC230V / 415V±15%	
Input Power Capacity (KVA)	9.4		9.4	
No-Load Voltage (V)	66		66	
Output Current Range (A)	20-300		20-300	
Rate Input Current (A)	14.4		14.4	
Power Factor	0.93		0.93	
Duty Cycle (%)	60		60	
Insulation Grade	F		F	
Net Weight (KG)	13.5		13.5	
Dimension (Inch)	20 X 8 X 15		20 X 8 X 15	
Plate Thickness (MM)	2.0 - 10.0		2.0 - 10.0	
Electrode Size (MM)	2.0 - 4.0		2.0 - 4.0	

Product Purchase Guide			
Base Material	Plate Thickness (mm)	Electrode Size (mm)	Applicable Model
Carbon Steel	2.0 - 10.0	2.0 - 4.0	ARC 300 S
Stainless Steel	2.0 - 10.0	2.0 - 4.0	ARC 300 L
Low -Alloy Steel			



ARC WELDER (Mosfet Series)

ARC 300 / ARC 400



FEATURES

- Adapted Powerful Mosfet Technology
- Excellent ARC stability with low spatter
- Over Voltage, Over Current, Over Heat auto protection function
- Reliable with High Efficiency and High Energy Savings
- ARC Force for Anti Sticking



ARC 300



ARC 400

Parameter			
Parameter	Model	ARC 300	
		3Phase	Mosfet
Input Voltage (V)		AC415V±15%	
Input Power Capacity (KVA)		9.4	
No-Load Voltage (V)		66	
Output Current Range (A)		20-300	
Rate Input Current (A)		14.4	
Power Factor		0.93	
Duty Cycle (%)		60	
Insulation Grade		F	
Net Weight (KG)		13.5	
Dimension (Inch)		20 X 8 X 15	
Plate Thickness (MM)		2.0 - 10.0	
Electrode Size (MM)		2.0 - 4.0	

Product Purchase Guide			
Base Material	Plate Thickness (mm)	Electrode Size (mm)	Applicable Model
Carbon Steel	2.0 - 10.0	2.0 - 4.0	ARC 300
Stainless Steel	2.0 - 20.0	2.0 - 4.0	ARC 400
Low -Alloy Steel			



ARC WELDER (IGBT Series)

ARC 315 S / ARC 315 L / ARC 315

TOSH WELD
INVERTER WELDING SYSTEM

FEATURES

- Advance IGBT Technology with Easy ARC Starting
- Excellent ARC stability with low spatter
- Over Voltage, Over Current, Over Heat auto protection function
- Reliable with High Efficiency and High Energy Savings
- ARC Force for Anti Sticking
- With VRD Function



ARC 315 S



ARC 315 L



ARC 315

Parameter

Model	ARC 315 S	ARC 315 L	ARC 315
Parameter	1Phase IGBT	1&2 Phase IGBT	3 Phase IGBT
Input Voltage (V)	AC230V±15%	AC230V/415V±15%	AC415V±15%
Input Power Capacity (KVA)	10.5	10.5	10.5
No-Load Voltage (V)	66	66	66
Output Current Range (A)	30-315	30-315	30-315
Rate Input Current (A)	76.5	55.8 / 18.1	18.1
Power Factor	0.73	0.73 / 0.93	0.93
Duty Cycle (%)	60	60	60
Insulation Grade	F	F	F
Net Weight (KG)	9	9	9
Dimension (Inch)	16.5 X 8 X 13.5	16.5 X 8 X 13.5	16.5 X 8 X 13.5
Plate Thickness (MM)	2.0 - 12.0	2.0 - 12.0	2.0 - 12.0
Electrode Size (MM)	2.0 - 4.0	2.0 - 4.0	2.0 - 4.0

Product Purchase Guide

Base Material	Plate Thickness (mm)	Electrode Size (mm)	Applicable Model
Carbon Steel	2.0 - 12.0	2.0 - 4.0	ARC 315 S
Stainless Steel	2.0 - 12.0	2.0 - 4.0	ARC 315 L
Low -Alloy Steel	2.0 - 12.0	2.0 - 4.0	ARC 315



ARC WELDER (IGBT Series)

ARC 400 GLT / ARC 400 GT



FEATURES

- Advance IGBT Technology with Easy ARC Starting
- Excellent ARC stability with low spatter
- Over Voltage, Over Current, Over Heat auto protection function
- Reliable with High Efficiency and High Energy Savings
- ARC Force for Anti Sticking
- With VRD Function and Remote Option



ARC 400 GLT



ARC 400 GT

Parameter			
Parameter	Model	ARC 400 GLT	
		1 & 2 Phase	IGBT
Input Voltage (V)		AC230V / 415V±15%	
Input Power Capacity (KVA)		16	
No-Load Voltage (V)		68	
Output Current Range (A)		30-400	
Rate Input Current (A)		27.7	
Power Factor		0.93	
Duty Cycle (%)		60	
Insulation Grade		F	
Net Weight (KG)		13.5	
Dimension (Inch)		18 X 9 X 15	
Plate Thickness (MM)		2.0 - 16.0	
Electrode Size (MM)		2.0 - 4.0	

Product Purchase Guide			
Base Material	Plate Thickness (mm)	Electrode Size (mm)	Applicable Model
Carbon Steel	2.0 - 16.0	2.0 - 4.0	ARC 400 GLT
Stainless Steel	2.0 - 16.0	2.0 - 4.0	ARC 400 GT
Low -Alloy Steel			



ARC WELDER (IGBT Series)

ARC 400 DON / ARC 400 SUMO



FEATURES

- Advance IGBT Technology with Easy ARC Starting
- Excellent ARC stability with low spatter
- Over Voltage, Over Current, Over Heat auto protection function
- Reliable with High Efficiency and High Energy Savings
- ARC Force for Anti Sticking
- With VRD Function and Remote Option



ARC 400 DON



ARC 400 SUMO

Parameter					
Parameter	Model	ARC 400 DON		ARC 400 SUMO	
		3 Phase	IGBT	3 Phase	IGBT
Input Voltage (V)		AC415V±15%		AC415V±15%	
Input Power Capacity (KVA)		18.2		18	
No-Load Voltage (V)		68		68	
Output Current Range (A)		30-400		30-400	
Rate Input Current (A)		25.3		17	
Power Factor		0.93		0.93	
Duty Cycle (%)		60		60	
Insulation Grade		F		F	
Net Weight (KG)		16		22	
Dimension (Inch)		20 X 9.5 X 17.5		20.5 X 10.5 X 21.5	
Plate Thickness (MM)		2.0 - 20.0		2.0 - 30.0	
Electrode Size (MM)		2.0 - 4.0		2.0 - 5.0	

Product Purchase Guide			
Base Material	Plate Thickness (mm)	Electrode Size (mm)	Applicable Model
Carbon Steel	2.0 - 20.0	2.0 - 4.0	ARC 400 DON
Stainless Steel	2.0 - 30.0	2.0 - 5.0	ARC 400 SUMO
Low -Alloy Steel			



ARC WELDER (IGBT Module Series)

ARC 400 CI / ARC 400 BIJ / ARC 400 IJ / ARC 630 IJ

TOSH WELD[®]
INVERTER WELDING SYSTEM

FEATURES

- Advance IGBT Module Technology with Easy ARC Start
- Excellent ARC stability with low spatter
- Over Voltage, Over Current, Over Heat auto protection function
- Reliable with High Efficiency and High Energy Savings
- ARC Force for Anti Sticking
- With VRD Function and Remote Option
- Increased Duty Cycle Maintaining Stable Welding with 100mtr Cable
- Bigger Models like ARC630IJ are able to perform Carbon Gauging Function



ARC 400 CI



ARC 400 BIJ



ARC 400 IJ



ARC 630 IJ

Parameter

Model	ARC 400 CI	ARC 400 BIJ	ARC 400 IJ	ARC 630 IJ
Parameter	3Phase IGBT Module	3Phase IGBT Module	3Phase IGBT Module	3Phase IGBT Module
Input Voltage (V)	AC415V±15%	AC415V±15%	AC415V±15%	AC415V±15%
Input Power Capacity (KVA)	18.2	18.2	18	36
No-Load Voltage (V)	68	68	68	85
Output Current Range (A)	30-400	30-400	30-400	50-630
Rate Input Current (A)	17	17	17	53.1
Power Factor	0.93	0.93	0.93	0.93
Duty Cycle (%)	60	60	60	60
Insulation Grade	F	F	F	F
Net Weight (KG)	16	18	26	44
Dimension (Inch)	19.5 X 9.5 X 17.5	19.5 X 9.5 X 17.5	21.5 X 11 X 21.5	25.5 X 12 X 25
Plate Thickness (MM)	2.0 - 20.0	2.0 - 25.0	2.0 - 40.0	2.0 - 60.0
Electrode Size (MM)	2.0 - 4.0	2.0 - 5.0	2.0 - 5.0	2.0 - 6.3

Product Purchase Guide

Base Material	Plate Thickness (mm)	Electrode Size (mm)	Applicable Model
Carbon Steel	2.0 - 20.0	2.0 - 4.0	ARC 400 CI
	2.0 - 25.0	2.0 - 5.0	ARC 400 BIJ
Stainless Steel	2.0 - 40.0	2.0 - 5.0	ARC 400 IJ
Low -Alloy Steel	2.0 - 60.0	2.0 - 6.3	ARC 630 IJ



TIG /ARC WELDER (Mosfet Series)

TIG 200 / TIG 300 S / TIG 300

TOSHIELD®
INVERTER WELDING SYSTEM

FEATURES

- Adapted Powerful Mosfet Technology
- High Frequency ignition with superior performance
- Over Voltage, Over Current, auto protection function
- Dual function of TIG and ARC
- Unique output Characteristic design, Especially to wire filled welding process
- Adaptable to the welding application on Stainless Steels, Carbon Steels, Copper Steels and other metals



TIG 200



TIG 300 S



TIG 300

Parameter

Parameter	Model	TIG 200		TIG 300 S		TIG 300	
		1Phase	Mosfet	1Phase	Mosfet	3Phase	Mosfet
Input Voltage (V)		AC230V±15%		AC230V±15%		AC415V±15%	
Input Power Capacity (KVA)		6/6		6.5/9.4		6.5/9.4	
No-Load Voltage (V)		56		60		60	
Output Current Range (A)		7-200		7-300		7-300	
Rate Input Current (A)		28/43		9.6/14.4		9.6/14.4	
ARC Ignition		HF		HF		HF	
Power Factor		0.73		0.93		0.93	
Duty Cycle (%)		60		60		60	
Insulation Grade		F		F		F	
Net Weight (KG)		9		19		19	
Dimension (Inch)		15.5 X 6 X 12		20 X 8 X 15		20 X 8 X 15	
Plate Thickness (MM)		0.3-5.0 / 1.0-6.0		0.3-8.0 / 2.0-10.0		0.3-8.0 / 2.0-10.0	
Electrode Size (MM)		2.0 - 3.2		2.0 - 4.0		2.0 - 4.0	

Product Purchase Guide

Base Material	Welding Method	Plate Thickness (mm)		Applicable Model
		TIG	ARC	
Carbon Steel	ARC / TIG	0.3-5.0	1.0-6.0	TIG 200
Stainless Steel	ARC / TIG	0.3-8.0	2.0-10.0	TIG 300 S
Low -Alloy Steel	ARC / TIG	0.3-8.0	2.0-10.0	TIG 300



TIG /ARC WELDER (IGBT Module Series)

TIG 400 Sumo / TIG 400 IJ / TIG 630 IJ

TOSH WELD
INVERTER WELDING SYSTEM

FEATURES

- Advanced IGBT Technology with easy start with High Frequency ignition with superior performance
- Over Voltage, Over Current, auto protection function
- Unique output Characteristic design, Especially to wirefilled welding process
- Adaptable to the welding application on Stainless Steels, Carbon Steels, Copper Steels and other metals
- With Up Slope and Down Slope function and 2T-4T function
- Dual function of TIG and ARC



TIG 400 Sumo



TIG 400 IJ



TIG 630 IJ

Parameter

Parameter	Model	TIG/ARC 400 Sumo		TIG / ARC 400 IJ		TIG / ARC 630 IJ	
		3Phase	IGBT	3Phase	IGBT Module	3Phase	IGBT Module
Input Voltage (V)		AC415V±15%		AC415V±15%		AC415V±15%	
Input Power Capacity (KVA)		13.1 / 18.2		13/18		16/36	
No-Load Voltage (V)		65		68		85	
Output Current Range (A)		7-400		7-400		50-630	
Rate Input Current (A)		20/27.7		13.1 / 18.2		16/53	
ARC Ignition		HF		HF		HF	
Power Factor		0.93		0.93		0.93	
Duty Cycle (%)		60		60		60	
Insulation Grade		F		F		F	
Net Weight (KG)		24		30		44	
Dimension (Inch)		20.5 X 10.5 X 21.5		21.5 X 11 X 21.5		25.5 X 12 X 25	
Plate Thickness (MM)		0.5-12.0 / 2.0-30.0		0.5-12.0 / 2.0-40.0		0.5-20 / 2.0-60	
Electrode Size (MM)		2.0 - 5.0		2.0 - 6.3		2.0 - 6.3	

Product Purchase Guide

Base Material	Welding Method	Plate Thickness (mm)		Applicable Model
		TIG	ARC	
Carbon Steel	ARC / TIG	0.5 - 12.0	2.0 - 30.0	TIG 400 Sumo
Stainless Steel	ARC / TIG	0.5 - 12.0	2.0 - 40.0	TIG 400 IJ
Low -Alloy Steel	ARC / TIG	0.5 - 20.0	2.0 - 60.0	TIG 630 IJ



TIG WELDER - Pulse Series

TIG 200 M / TIG 200P AC/DC

TOSHIELD®
INVERTER WELDING SYSTEM

FEATURES

- Pulse TIG function with frequency, Base and Peak Current Adjustable
- Meter to Pre-Set and display welding current
- Over Voltage, Over Current, Over Heat auto protection function
- Adaptable for welding application on Aluminum, Alloy, Stainless Steels and other metals
- With 2T - 4T function



TIG 200 M



TIG 200P AC/DC

Parameter					
Parameter	Model	TIG 200 M		TIG 200P AC/DC	
		1Phase	Mosfet	1Phase	Mosfet
Input Voltage (V)		AC230V±15%		AC230V±15%	
Input Power Capacity (KVA)		6		6	
No-Load Voltage (V)		56		44	
Output Current Range (A)		10-200		5 -200	
Rate Input Current (A)		28		32.5	
ARC Ignition		HF		HF	
Power Factor		0.73		0.73	
Duty Cycle (%)		60		60	
Insulation Grade		F		F	
Net Weight (KG)		15		28.5	
Dimension (Inch)		20 X 8 X 18		19.5 X 13.5 X 14.5	
Plate Thickness Aluminum (MM)		-		0.8 - 4.0	
Plate Thickness Steel (MM)		0.3 - 4.0		0.3 - 5.0	

Product Purchase Guide			
Base Material	Welding Method	Plate Thickness Steel (mm)	Applicable Model
Carbon Steel	DC TIG	0.3 - 4.0	TIG 200 M
Stainless Steel	DC TIG	0.3 - 5.0	TIG 200 P AC/DC
Low -Alloy Steel			
Aluminum	AC TIG	0.8 - 4.0	TIG 200 P AC/DC
Aluminum-Magnesium Alloy			



TIG WELDER - Pulse Series

TIG 315BP ACDC / TIG 500P AC/DC

TOSH WELD
INVERTER WELDING SYSTEM

FEATURES

- Pulse TIG function with frequency, Base and Peak Current Adjustable
- Meter to Pre-Set and display welding current
- Over Voltage, Over Current, Over Heat auto protection function
- Adaptable for welding application on Aluminum, Alloy, Stainless Steels and other metals
- With 2T - 4T function
- High Duty Cycle for large scale production line



TIG 315BP ACDC



TIG 500P AC/DC

Parameter			
Parameter	Model	TIG 315BP ACDC	
		3 Phase	Mosfet
Input Voltage (V)		AC415V±15%	
Input Power Capacity (KVA)		8.9	
No-Load Voltage (V)		60	
Output Current Range (A)		5-315	
Rate Input Current (A)		13.6	
ARC Ignition		HF	
Power Factor		0.93	
Duty Cycle (%)		60	
Insulation Grade		F	
Net Weight (KG)		33	
Dimension (Inch)		22.5 X 14.5 X 18	
Plate Thickness Aluminum (MM)		0.8 - 12.0	
Plate Thickness Steel (MM)		0.3 - 12.0	

Product Purchase Guide			
Base Material	Welding Method	Plate Thickness Steel (mm)	Applicable Model
Carbon Steel	DC TIG	0.3 - 12.0	TIG 315BP AC/DC
Stainless Steel	DC TIG	0.3 - 30.0	TIG 500P AC/DC
Low -Alloy Steel			
Aluminum	AC TIG	0.8-12.0	TIG 315BP AC/DC
Aluminum-Magnesium Alloy	AC TIG	0.8-30.0	TIG 500P AC/DC



MIG / MAG WELDER (IGBT Series)

MIG/ARC 250YS/ MIG/ARC 250Y / MIG/ARC 315F

TOSH WELD[®]
INVERTER WELDING SYSTEM

FEATURES

- Advanced IGBT Technology with MIG and ARC function
- High Stability to assure smooth finishing
- Adapted with inbuilt wire feeding circuit design
- With 2T - 4T function
- Reliable with high efficiency and energy savings upto 80-85%



MIG/ARC 250YS



MIG/ARC 250Y



MIG/ARC 315F

Parameter				
Model		MIG/ARC 250 YS		MIG/ARC 315 F
Parameter		1Phase	IGBT	3Phase IGBT
Input Voltage (V)		AC230V±15%		AC415V±15%
Input Power Capacity (KVA)		9.7		11.8
Output Voltage Adjustment (V)		26.5		29.8
Output Current Range (A)		30-250		30-315
Wire Feeder Speed (Mtr / Min)		2-24		2-24
Power Factor		0.73		0.93
Duty Cycle (%)		60		60
Insulation Grade		F		F
Net Weight (KG)		21		21
Dimension (Inch)		19 X 10 X 17		20 X 8 X 15
MIG Wire Diameter (MM)		0.6 - 1.0		0.6 - 1.0

Product Purchase Guide			
Base Material	Welding Method	Wire Diameter (Ø) mm	Applicable Model
Carbon Steel	MIG / MAG	0.6 - 1.0	MIG/ARC 250YS
Stainless Steel	MIG / MAG	0.6 - 1.0	MIG/ARC 250Y
Low -Alloy Steel	MIG / MAG	0.6 - 1.0	MIG/ARC 315F



MIG / MAG WELDER (Mosfet Series)

MIG 250 FS / MIG 250 F

TOSH WELD[®]
INVERTER WELDING SYSTEM

FEATURES

- Adapted powerful mosfet technology with MIG and ARC function
- High Stability to assure smooth finishing
- Adapted with external wire feeding circuit design
- With 2T - 4T function
- Reliable with high efficiency and energy savings upto 80-85%



MIG/ARC 250 FS



MIG/ARC 250 F

Parameter			
Parameter	Model	MIG / ARC 250 FS	
		1Phase	Mosfet
Input Voltage (V)		AC230V±15%	
Input Power Capacity (KVA)		8.5	
Output Voltage Adjustment (V)		26.5	
Output Current Range (A)		50 -250	
Wire Feeder Speed (Mtr / Min)		2.5 - 18	
Power Factor		0.93	
Duty Cycle (%)		60	
Insulation Grade		F	
Net Weight (KG)		21	
Dimension (Inch)		20 X 8 X 15	
MIG Wire Diameter (MM)		0.6 - 1.0	

Product Purchase Guide			
Base Material	Welding Method	Wire Diameter (Ø) mm	Applicable Model
Carbon Steel	MIG / MAG	0.6 - 1.0	MIG / ARC 250 FS
Stainless Steel	MIG / MAG	0.6 - 1.0	MIG / ARC 250 F
Low -Alloy Steel			



MIG / MAG WELDER (IGBT Module Series)

MIG/ARC 400 SUMO / MIG/ARC 400 IJ / MIG/ARC 630 IJ



FEATURES

- Advanced IGBT Technology with MIG and ARC function
- High Stability to assure smooth finishing
- Adapted with inbuilt wire feeding circuit design
- With 2T - 4T function
- Reliable with high efficiency and energy savings upto 80-85%
- High Duty Cycle for large scale production line
- High Welding efficiency



MIG/ARC 400 SUMO



MIG/ARC 400 IJ



MIG/ARC 630 IJ

Parameter

Model	MIG/ARC 400 SUMO	MIG/ARC 400 IJ	MIG/ARC 630 IJ
Parameter	3Phase IGBT	3Phase IGBT Module	3Phase IGBT Module
Input Voltage (V)	AC415V±15%	AC415V±15%	AC415V±15%
Input Power Capacity (KVA)	15	14	35
Output Voltage Adjustment (V)	34	31.5	44
Output Current Range (A)	30-400	50-400	80-630
Wire Feeder Speed (Mtr / Min)	2-24	3-24	3-24
Power Factor	0.93	0.93	0.93
Duty Cycle (%)	60	60	60
Insulation Grade	F	F	F
Net Weight (KG)	32	36	50
Dimension (Inch)	20.5 X 10.5 X 21.5	21.5 X 11 X 21.5	22.5 X 12 X 25
MIG Wire Diameter (MM)	0.8 - 1.2	0.8 - 1.2	0.8 - 1.6

Product Purchase Guide

Base Material	Welding Method	Wire Diameter (Ø) mm	Applicable Model
Carbon Steel	MIG / MAG	0.8 - 1.2	MIG/ARC 400 SUMO
Stainless Steel	MIG / MAG	0.8 - 1.2	MIG/ARC 400 IJ
Low -Alloy Steel	MIG / MAG	0.8 - 1.6	MIG/ARC 630 IJ



PLASMA CUTTER (Mosfet Series)

CUT 40 / CUT 70



FEATURES

- Adapted Powerful Mosfet Technology
- Outstanding Cutting performance with clean and Precise finishing
- High Frequency (HF) touch ARC starting
- Over Voltage, Over Current, Over Heat auto protection function
- Suitable for cutting stainless Steel, Copper, Carbon Steel, Aluminum and Other Metals in Cast and economical way
- Capable of cutting metals in any direction and shape



CUT 40



CUT 70

Parameter			
Parameter	Model	CUT 40	
		1Phase	Mosfet
Input Voltage (V)		AC230V±15%	
Input Power Capacity (KVA)		6.6	
No-Load Voltage (V)		253	
Output Current Range (A)		15-40	
Rate Input Current (A)		30	
Power Factor		0.73	
Duty Cycle (%)		60	
Insulation Grade		F	
Air Pressure (KG)		4-5	
Net Weight (KG)		9	
Dimension (Inch)		15.5 X 6 X 12	
Cutting Thickness (MM)		0.3-6.0	

Parameter	Model	CUT 70	
		3Phase	Mosfet
Input Voltage (V)		AC415V±15%	
Input Power Capacity (KVA)		7.8	
No-Load Voltage (V)		240	
Output Current Range (A)		20-70	
Rate Input Current (A)		12	
Power Factor		0.93	
Duty Cycle (%)		60	
Insulation Grade		F	
Air Pressure (KG)		4-5	
Net Weight (KG)		19	
Dimension (Inch)		20 X 8 X 15	
Cutting Thickness (MM)		0.3-12.0	

Product Purchase Guide			
Base Material	Plate Thickness Steel (mm)	ARC Ignition	Applicable Model
Carbon Steel	0.3-6.0	Contact	CUT 40
Stainless Steel	0.3-12.0	Contact	CUT 70
Low -Alloy Steel			



PLASMA CUTTER (IGBT Module Series)

CUT 100 IJ / CUT 160 IJ



FEATURES

- Advanced IGBT module Technology with Stable performance
- Easy to CUT thicker metals in a fast and economical way
- Outstanding Cutting performance with clean and Precise finishing
- High Frequency (HF) touch arc starting
- Over Voltage, Over Current, Over Heat auto protection function
- Suitable for cutting stainless Steel, Copper, Carbon Steel, Aluminum and Other Metals
- Capable of cutting metals in any direction and shape
- High Duty cycle for longer durations



CUT 100 IJ



CUT 160 IJ

Parameter			
Parameter	Model	CUT 100 IJ	
		3Phase	IGBT Module
Input Voltage (V)		AC415V±15%	
Input Power Capacity (KVA)		15.1	
No-Load Voltage (V)		290	
Output Current Range (A)		20-100	
Rate Input Current (A)		23.1	
Power Factor		0.93	
Duty Cycle (%)		60	
Insulation Grade		F	
Air Pressure (KG)		4-5	
Net Weight (KG)		36.5	
Dimension (Inch)		21.5 X 11 X 21.5	
Cutting Thickness (MM)		1.0 - 30.0	
		3Phase	
		IGBT Module	
		CUT 160 IJ	
		3Phase	
		IGBT Module	
		AC415V±15%	
		29	
		320	
		20-160	
		44.3	
		0.93	
		60	
		F	
		4-6	
		60	
		26.5 X 13 X 20	
		1.0 - 45.0	

Product Purchase Guide			
Base Material	Plate Thickness Steel (mm)	ARC Ignition	Applicable Model
Carbon Steel	1.0-30.0	Pilot ARC	CUT 100 IJ
Stainless Steel	1.0-45.0	Pilot ARC	CUT 160 IJ
Low -Alloy Steel			



SUB MERGED ARC WELDER (SAW) (IGBT Module Series) MZ 1000 / MZ 1250

TOSH WELD[®]
INVERTER WELDING SYSTEM

FEATURES

- Multi functional Submerged ARC Welding, ARC Welding and Carbon Gauging Functions
- With Constant current (CC) and Constant Voltage (CV) function
- Excellent Welding performances assuring deep welding pool and good seam
- Over Voltage, Over Current and Over Heat auto Protection
- High Duty Cycle for large scale production line



MZ 1000



MZ 1250

Parameter			
Parameter	Model	MZ 1000	
		3Phase	IGBT Module
Input Voltage (V)		AC415V±15%	
No-Load Voltage (V)		76	
Output Current Range (A)		112-1000	
Rate Input Current (A)		84.3	
No-Load Loss (W)		300	
Power Factor		0.93	
Duty Cycle (%)		60	
Insulation Grade		F	
Net Weight (KG)		85	
Dimension (Inch)		30 X 15 X 30.5	
Plate Thickness (MM)		8.0-20.0	
SAW wire Size (MM)		3.2-5.0	
		MZ 1250	
		3Phase	IGBT Module
Input Voltage (V)		AC415V±15%	
No-Load Voltage (V)		76	
Output Current Range (A)		112-1250	
Rate Input Current (A)		89	
No-Load Loss (W)		300	
Power Factor		0.93	
Duty Cycle (%)		60	
Insulation Grade		F	
Net Weight (KG)		85	
Dimension (Inch)		30 X 15 X 30.5	
Plate Thickness (MM)		8.0-above 20.0	
SAW wire Size (MM)		3.2-6.0	

Product Purchase Guide			
Base Material	Plate Thickness Steel (mm)	Wire Diameter (Ø) mm	Applicable Model
Carbon Steel	8.0-20.0	3.2-5.0	MZ 1000
Stainless Steel	8.0-above 20.0	3.2-6.0	MZ 1250
Low -Alloy Steel			

www.toshweld.com



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