

WORLD'S NO.1 WELDING BRAND

Your Best Welding Partner!

www.hyundaiwelding.com

**HYUNDAI
WELDING**

WELDING MACHINE



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2019 HYUNDAI Welding machine Catalog



INTRODUCTION

WORLD-CLASS ENTERPRISE SPECIALIZED IN WELDING

Hyundai Welding is a world-class manufacturer specialized in providing optimum welding solutions to customers by supplying welding materials and equipment of the best quality.

As welding is a compulsory element for industrial development, Hyundai Welding has been contributing to the development and success of the global welding industry for more than 40 years since its foundation in 1975.

As a leading welding manufacturer in Korea, we currently export welding materials and equipment to over 120 countries by establishing manufacturing plants and sales corporations in 15 major countries around the world.

Awarded in 2009 for reaching \$200 million in exports for the first time in the Korean welding industry, Hyundai Welding continues to grow while competing with industries around the world.

WELDING MACHINE BUSINESS DIVISION

Our welding machine business division constantly invests its R&D, ranging from SCR welding machines to inverter welding machines, as well as automatic welding machines, ballast water rectifiers, and so on.

The company is focused on developing technology by cooperating with the most prominent research institutions, while constantly operating a shop equipped with new products from the R&D center. That way, we are able to supply optimal, customized welding equipment to diverse industrial fields.

We look to contribute to the development of the welding industry by providing unique welding solutions. In addition, we tackle problems from our customers' point of view to fulfil their needs, while applying diverse test methods in order to secure high quality, credibility and safety. The DNA of Hyundai Welding is to prioritize the voice of customers who work on site, listen and respond immediately to their needs, develop new solutions through continuous communication, ensure stable quality by providing products manufactured from the best facilities, and have confidence in our welding materials and equipment.

These are the factors that drive our global success, and this allows Hyundai Welding to be one of the fastest growing welding solutions companies in the world.

COMPANY HISTORY

- | | | | |
|-------------|---|-------------|--|
| 2019 | Production of Hi Series, premium line of welding machines | 2007 | Production of DIGITAL CO2/MAG welding machine (HD auto + series) |
| 2017 | Production of H Series, a DIGITAL INVERTER welding machine | 2001 | Production of DC SAW 1500 (ZEUS 1500D) / AC SAW 1500 (HERA 1500A)
Hyundai Welding Co., Ltd. collaborated with Seongwu Precision Industrial Co, Ltd.
Establishment of the R&D center for welding machines (Korea Industrial Technology Association) |
| 2014 | Production of NEO series, a DIGITAL INVERTER Pulse MIG welding machine | 2000 | Production of CO2/MAG welding machine (FINE ARC 350) |
| 2013 | Production of DIGITAL INVERTER MULTIFUNCTION welding machine | 1999 | Technical cooperation with SANREX, Japan |
| 2012 | Environmental test of Ship Rectifier (HiPOWER 50D & 75D)
Production of DIGITAL INVERTER PLASMA Welding machine (NEO PW 300) | 1998 | Production of SCR welding machine production (DYNAMIC AUTO Series) |
| 2011 | Environmental Test of Ship Rectifier (HiPOWER 100D)
Production of DIGITAL INVERTER automated TIG welding machine (NEO TIG 350P)) | 1997 | Completion of Seongwu Precision Industrial Co., Ltd.'s Icheon plant |
| 2010 | Production of DIGITAL MAG welding machine (LiBERO)
Environmental test of Ship Rectifier (HiPOWER 35D) | 1995 | Establishment of Seongwu Precision Industrial Co., Ltd. |
| 2009 | Production of SCR MIG welding machine (aluminum only) | 1987 | Company name change to Hyundai Welding |
| 2008 | Production of DIGITAL CO2/MAG 600 (FINE ARC II) | 1977 | Completion of welding rod manufacturing plant in Pohang |
| | | 1975 | Establishment of Seohan Development Co., Ltd. |

WORLD'S NO.1
WELDING BRAND

OVERSEAS NETWORK

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MEXICO OFFICE [TAMPICO]	TEL : (+52-1) 833-140-9175	



GRADE PREMIUM

CONTENTS

06	Hi 400P
08	Hi 500P
10	Hi 500MT
12	Hi 1500SA

PULSE WELDING
Hi 400P

Excellent premium welding machine for automotive, pipe, thin plate and aluminium welding



Pulse MIG SPC SAC Synergic MIG MAG

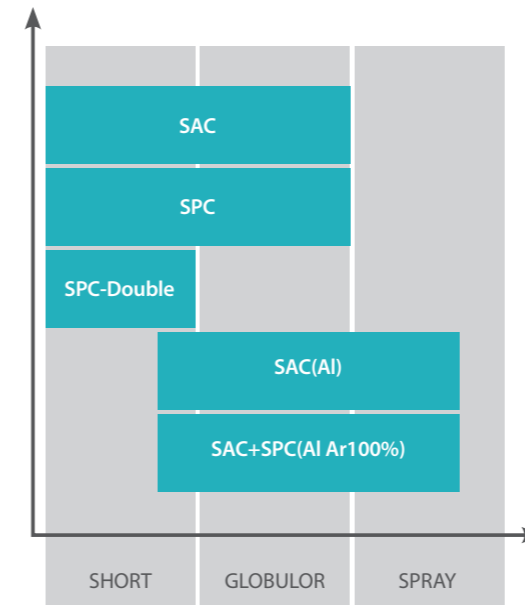
Package configuration
<ul style="list-style-type: none"> Welding machine Wire feeder Torch 5m (water-cooled) Input cable 5m Single cable 10m Gas hose 3m Earth cable 3m Water cooler

Options
<ul style="list-style-type: none"> Wire feeder (Wire cover type, square box type) Water cooler (other type) Regulator Trolley

Specification	
Rated Input power	400V, 3P, 50/60Hz (±15%)
Rated Output	400A, 36V (60%) / 350A (100%)
Communication	CAN, I/O Contact, Device Net
Welding Method	MAG, MIG, Pulse MIG
Weight	40kg
Dimension	320mm x 580mm x 590mm

- Features**
- ▶ Welding machines for steel and non-ferrous metal sheet welding
 - ▶ Built-in contact (analog, digital) and communication (device net) interface
 - ▶ Low heat input, low spatter welding function via SAC, SPC technique
 - ▶ Built-in Pulse Synthesizer (40, 30 + 10 user-developed synergies)
 - ▶ Excellent gap bridge performance and low spatter
 - ▶ Specialized in reducing the porosity of automotive parts
 - ▶ Convenient user operation

ARC PROCESS



SAC (Surface Arc Control)

Low heat input, low spatter short-circuit transfer control technology (CV+CC, Complex control)
- Carbon Steel
- Pipe root pass welding

SPC (Surface Pulse Control)

Low heat input pulse control technology
- Stainless steel, Nickel, non-ferrous
- SAW low heat input welding technology

SPC-Double

SPC-DOUBLE : exclusive Aluminum
- low heat input and double pulse control technology
- Thin Aluminum plate (3~5mmt)

SAC (AI)

Short circuit transfer control technology for Aluminum rear plate welding
DC control technology (CC)

SAC+SPC (AI)

Short circuit pulse control technology for Aluminum rear plate welding (Ar 100%)

MMI DIGITAL CONTROL

- Wide screen for synergic control
- Synergic add-on via USB port
- Welding sequence interface

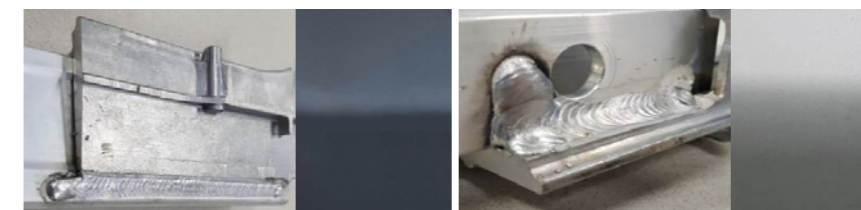


GAP BRIDGE PERFORMANCE



[590MPa Zinc Coating Steel 2.3mmt LAP JOINT, Ar+CO₂ (9:1), 180A/16V]

ALUMINUM BLOW HOLE FOR CAR BODY FREE PERFORMANCE



[Al6061 T6 4mmt + A365 T5 4mmt / Al40431.2-, Ar100%, 150A/18V]



[All in one with Trolley]

PULSE WELDING
Hi 500P

A new concept premium welding machine using Wide - SAC technology



Pulse MIG
SPC
SAC
Synergic
W-SAC
MIG MAG

Package configuration
<ul style="list-style-type: none"> Welding machine Wire feeder (wire cover type) Torch 5m (water-cooled) Input cable 5m Single cable 10m Gas hose 3m Earth cable 3m Water cooler

Specification	
Rated Input power	400V, 3P, 50/60Hz (±15%)
Rated Output	500A, 42V (100%)
Communication	CAN, I/O Contact, Device Net
Welding Method	MAG, MIG, Pulse MIG
Weight	70kg
Dimension	380mm x 610mm x 850mm

- Features**
- ▶ Integration with automation equipment and robot
 - ▶ Low heat input, low spatter welding SAC, SPC, Wider-SAC
 - ▶ Built-in Pulse synergic (Total 40 synergic, 30 pre-configured and 10 add-on)
 - ▶ Built-in pulse welding function for thin plates and shipbuilding (100% MAG welding)
 - ▶ Built-in pulsed submerged arc welding function for panel lines in shipbuilding (specialized low heat input)
 - ▶ Welding scrubber can substitute conventional TIG welding machines
 - ▶ Can choose between MIG wire feeder and regular wire feeder
 - ▶ Built-in Aluminum rear plate welding function (Ar 100%)

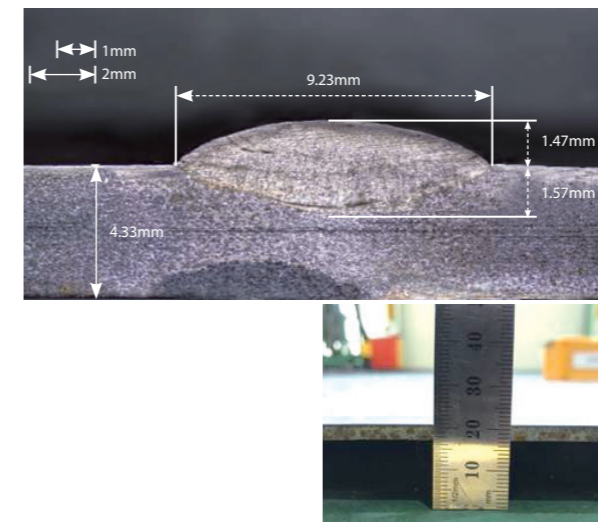
- Options**
- Wire feeder (Wire cover type, square box type)
 - Water cooler (other type)
 - Regulator

PERFORMANCE

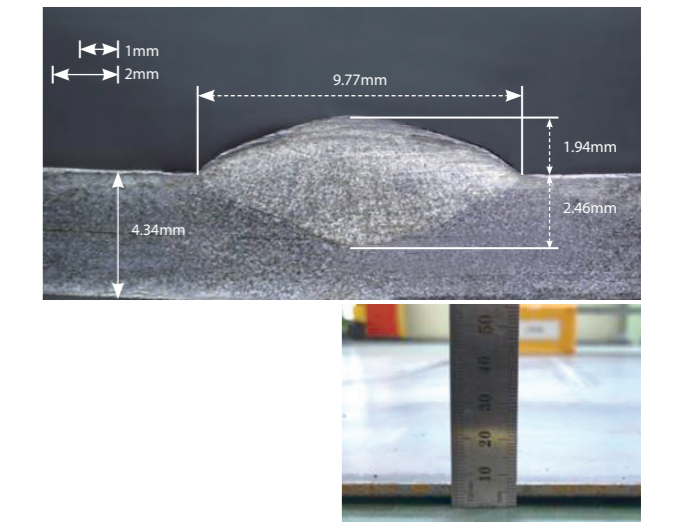
Pulsed submerged arc welding

- In comparison to DC submerged arc welding : Increases weld penetration by 35%, Decreases base metal deformation rate by 30%
- For welding thin plate panel lines in shipbuilding (below 6mmt)

[DC, 260A/32V, 640mm/min, 4.3mmt, weld penetration : 1.57mm]



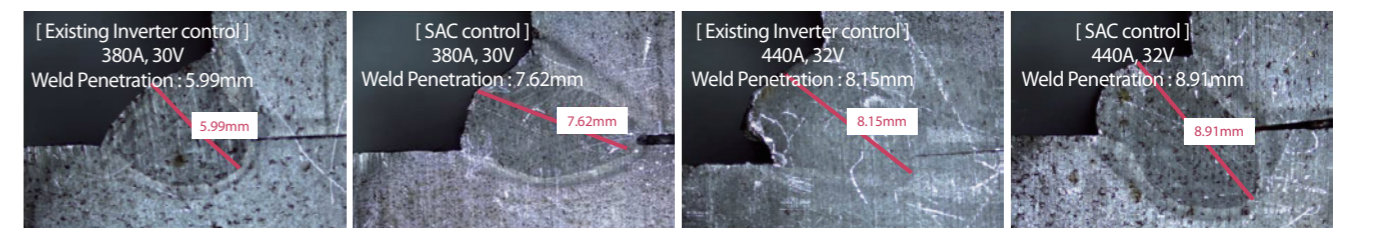
[Pulse, 280A/27V, 640mm/min, 4.3mmt, weld penetration : 2.46mm]



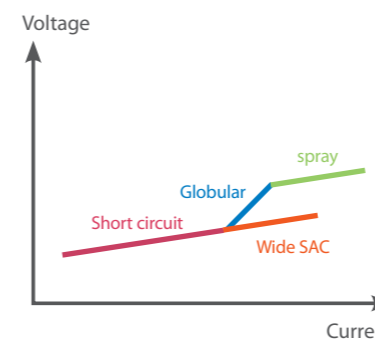
Wide Surface Arc Control (Wide-SAC)

- Forces short circuit control of flux cored/metal-cored wires in globular areas
- Low spatter, high weld penetration (Decreases spatter by 40%, Increases weld penetration by 20%) when compared to existing inverter welding machines

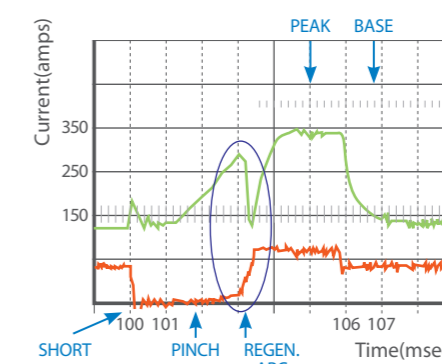
Comparison of weld penetration



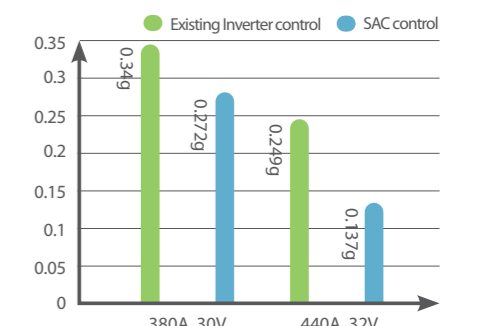
[Metal-cored wire dia 1.6mm, 100% CO2, Welding speed : 1,000mm/min]



[Wide SAC : Wide surface arc control]



[SAC control concept]



[Comparison of spatter quantity]



MULTI FUNCTIONAL WELDING Hi 500MT

Automatically switches polarity according to wire feeder
A multifunctional three-in-one welding machine

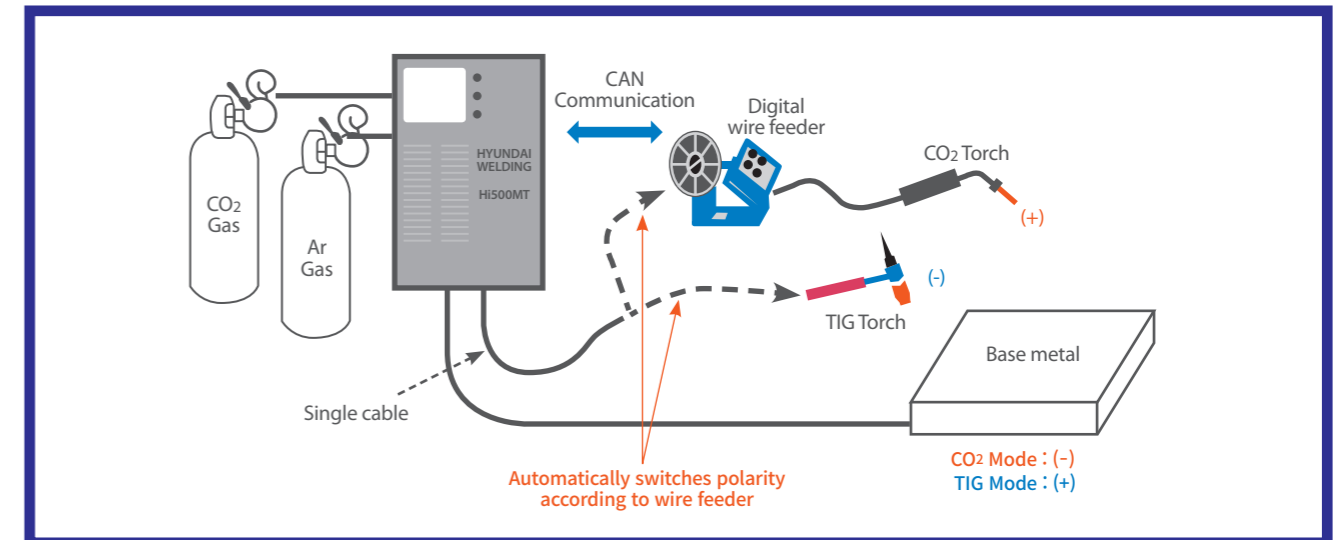


Model		Hi 500MT
TYPE		CO2 / TIG / STICK
Rated power	KVA	37KVA
Input voltage	V	440V ±10%, 3phase, 60Hz
Frequency	Hz	60
Rated output current	A	500
Rated output voltage	V	42
Rated output current range	A	10~500
Rated output voltage range	V	10~42
Max open circuit voltage	V	80V
Duty cycle	%	100
Weight	kg	83kg
Dimension (WxDxH)	mm	374x607x828

Application field
<ul style="list-style-type: none"> • Heavy industry • Construction site • Welding education center • Offshore plant

Features
<ul style="list-style-type: none"> ▶ 3 in 1 multifunctional welding machine ▶ CO2, TIG automatic polarity switching ▶ CAN communication base ▶ Built-in pulse function in TIG mode ▶ Switching frequency : 60kHz

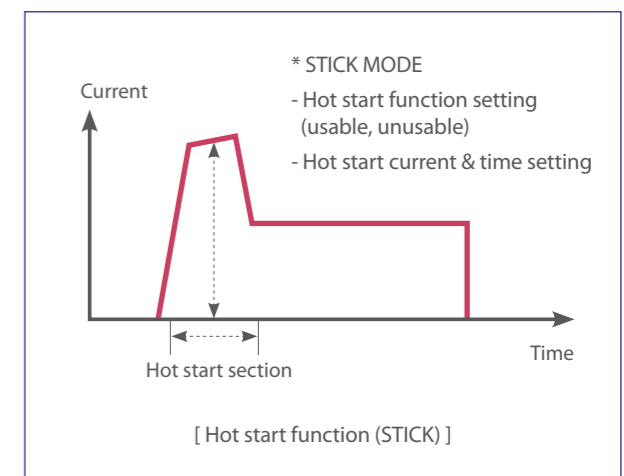
Components by welding method		
① CO2 welding	② TIG welding	③ STICK Welding
Digital wire feeder	Analog remote box	Analog remote box
CO2 torch	TIG torch	STICK holder
CO2 gas	Ar gas	Single cable
Single cable	Single cable	Earth cable
Earth cable	Earth cable	



- Automatic polarity switch according to whether the digital feeder is connected or not
- CO2 : Use digital transmitter / TIG, STICK : Use analog remote box
- Supply and CO2 torch connection : Torch (+), Base (-)
- Remote box and TIG torch connection : Torch (-), Base (+)

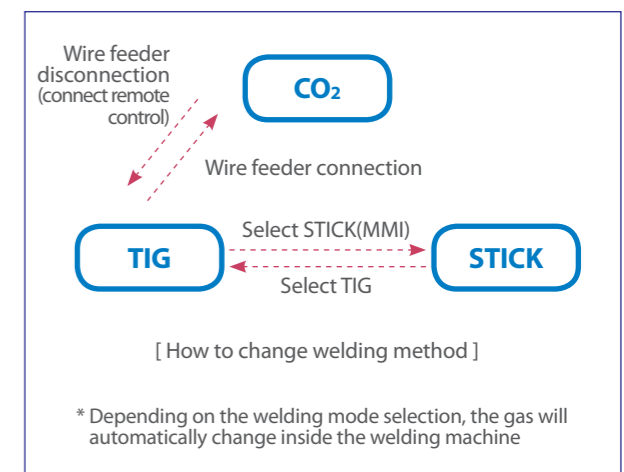
CO2 WELDING

- Constant Voltage Control (CV) based
- Transmitter : Setting of this voltage and current setpoint
- MMI : Variable setting (Pre Flow and After Flow, crater current / voltage setting)
- Torch operation mode selectable
- CAN communication based data transmission / reception



TIG WELDING

- Constant Current Control (CC) based
- Start method : HF / LIFT start
- Output method : DC / pulse
- Operation method : Normal mode / Repeat mode
- DC current and Peak / Base current setting using analog remote box
- MMI : Variable settings such as gas Flow (Pre Flow / After Flow), Slope control (up slope / down slope)



STICK WELDING

- Constant Current Control (CC) based
- DC current setting with analog remote box
- TIG / STICK mode can be changed by using MMI selection button



AC/DC SUBMERGED WELDING

Hi 1500SA

The largest Inverter DC/AC 1500A welding power



Model		Hi 700	Hi 1500
Rated power	KVA	40	90
Input voltage	V	3P 400V±10%	3P 380V/400V±10%
Frequency	Hz	60	60
Rated output current	A	700	1500
Rated output voltage	V	50	50
Rated output current range	A	250~700	300~1500
Rated output voltage range	V	25~50	25~50
Max open circuit voltage	V	80	80
Duty cycle	%	100	100
Weight	kg	160	395
Dimension (WxDxH)	mm	500x730x860	600x1000x1300

Package configuration

- Welding machine
- Control cable 10m
- Earth cable 5m
- Two-rail carriage (1.8m)
- Welding cable 10m
- Input cable 5m

Options

- Carriage
- Each cable distance
- Clamp shape

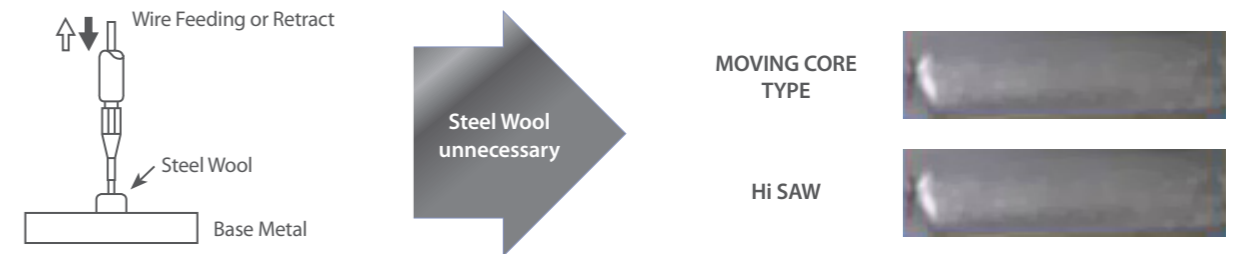
Recommended welding consumables(HYUNDAI)

S-707 x L-8, S-777MX x H14, etc.

Features

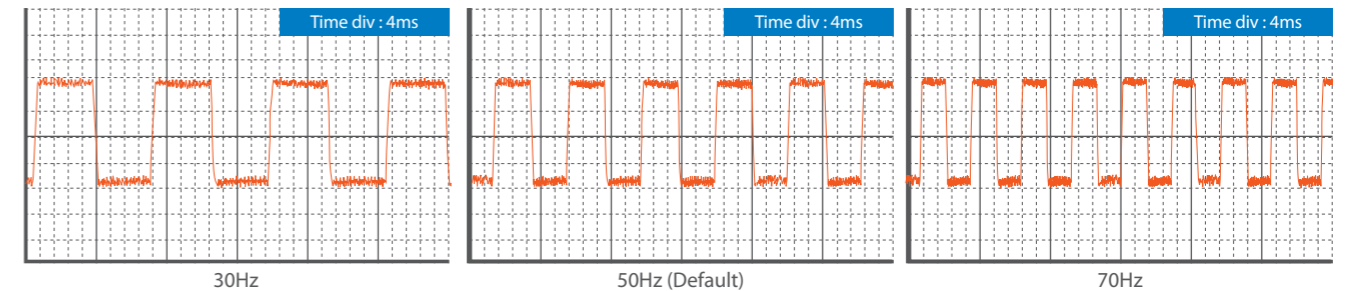
- Inverter Welding Machine (Hi700, Hi1500)**
- AC / DC combined power source designed for automatic welding
 - Able to High current SAW welding
 - Compatible with high current SAW welding
 - Increased productivity and quality with accurately controlled output
- Various welding output characteristics**
- Can select output characteristics by operating the mode switch (AC / DC, CC / CV, AC frequency, analog carriage / digital carriage)
- Stability**
- Overheating, over-current, short-circuit protection
 - Stable welding output even during an input power variation of ±10%

AC WELDING : GREAT ARC START WITHOUT STEEL WOOL



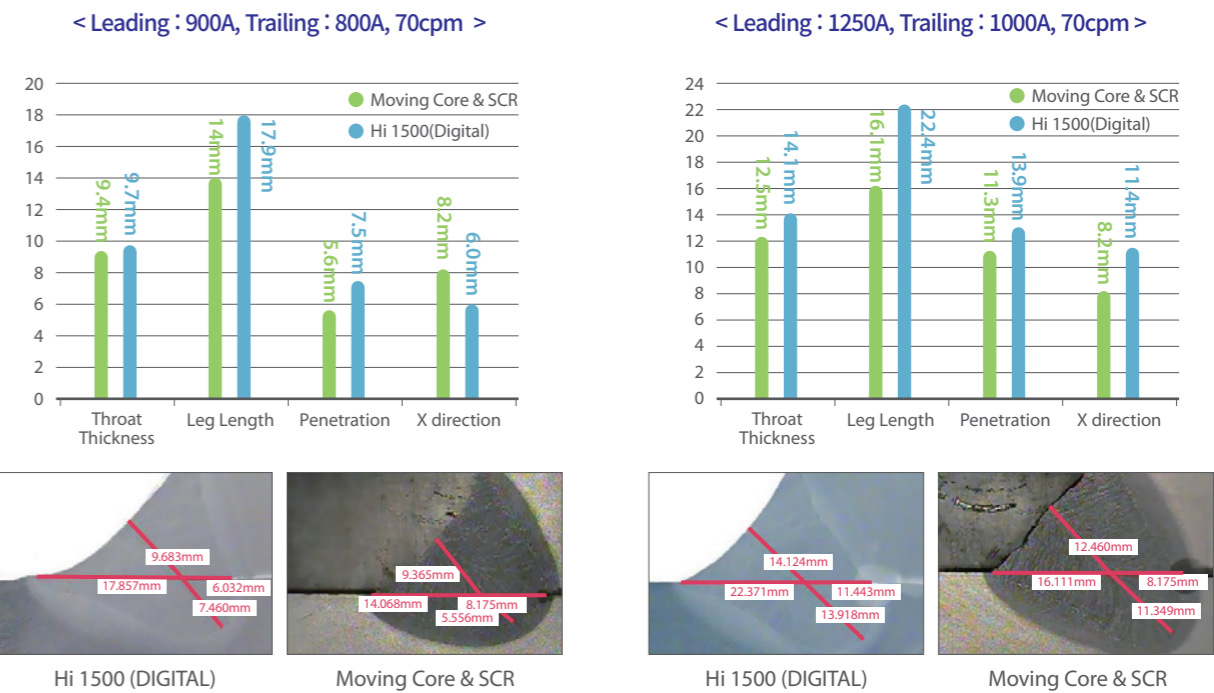
AC OUTPUT CONTROL WITH CHANGEABLE FREQUENCY

Optimum weldability and welding quality on variable base metals



WELDABILITY COMPARISON

Comparison of DIGITAL and SCR welding machine





High-efficiency wide carriage with moving sequence

Wide Carriage / Submerged Carriage

- Efficient control and high durability via a focus system panel
- Efficient welding process in 400A-1500A
- Stable in high speed welding (Four wheel drive)
- Improved productivity by using a 75kg wire reel
- Stable welding speed even during an input power variation of $\pm 10\%$

Process

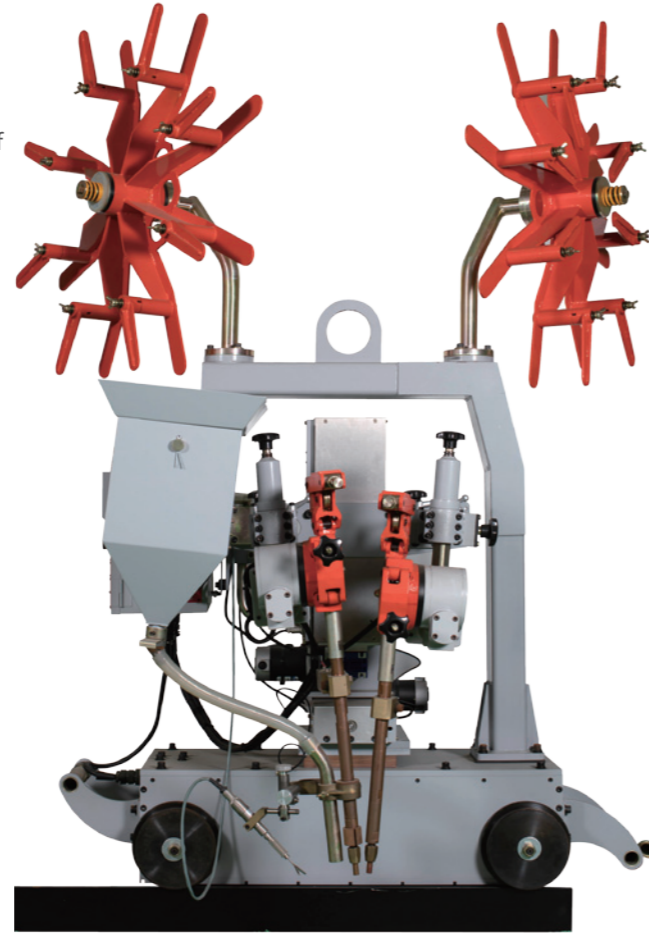
- Submerged Arc Welding

Compatible welding machine

- Hi 1500SA/SD

Key Features

- NOZZLE Range Vertical/Horizontal : 370mm ea. (Including fine adjustment 70mm)
- WIRE REEL 75kg COIL
- Operation 4WD Inverter vector control
- Operating Power 400W (three-phase induction motor)
- Speed Range 10-150cm/min
- Hopper capacity 12 | Seam Tracker(Optional hopper size)
- B-H (Able to use 40m Line)



Model		HD SW-41(AC or DC)	HD SA-24	HD WC-24	Hi41-CD
Type		Single	Tandem	Wide	Single
Wire feed rate	MPM	Single Double Triple	~2.1 ~4.2 ~6.2		
Wire dia	mm	3.2, 4.0, 4.8, 6.4	4.0, 4.8, 6.4	4.0, 4.8, 6.4	2.4, 3.2, 4.0
Wire feed roll	mm		Rough knurl 4.8~6.4		
Input voltage	V			AC110V	
Feed rate control		SCR	SCR	INVERTER	SCR
Nozzle adjustment range	mm	Vertical Horizontal	50 70	50 70	50 50
Wire reel weight	kg	25	25	75	25
Current voltage meter				ANALOG	
Hopper volume	liter	6	12	12	5
Weight	kg	57	280	600	57
Dimension (WxDxH)	mm	700x900x850	1300x1400x1900	1600x1500x2100	700x900x1000

GRADE
**BEST
SELLER**

CONTENTS

- 16 H Series
- 18 HD Auto + Series
- 19 HERA 1500 / ZEUS 1500
- 20 BETA Series
- 21 ALPHA Series / HOTWIRE TIG

INVERTER WELDING

H Series

CO₂/MAG

Low Power Universal Inverter Welding machine
Simple and Easy operation method for beginner



		350S	500M	600M	600MS
Type		CO ₂ /MAG		CO ₂ /MAG/GOUGING	
Rated power	kVA	19	24.5	37	
Input voltage	V	220V/380V/440V±10%	415V±10%	220V/380V/440V±10%	380V/440V±10%
Frequency	Hz		50/60		
Rated output current	A	350	500	600	
Rated output voltage	V	36	42	50	
Rated output current range	A	60~350	80~500	80~600	
Rated output voltage range	V	12~36	12~42	12~50	
Max open circuit voltage	V	57	76	83	83
Duty cycle	%	60	60	60	100
Weight	kg	55	72	82	90
Dimension (WxDxH)	mm	370x530x660	400x590x750	425x690x790	460x690x870

Package configuration

- Welding machine
- Input cable 5m
- Torch 5m
- Earth cable 3m
- Analog wire feeder
- Single cable 10m
- Gas hose 3m

Options

- Wire feeder (2roll / 4roll)
- Each cable meter
- Digital wire feeder
- Regulator

Recommended welding consumables(HYUNDAI)

- Solid Wire : SM-70, SM-70G, SM-70S, etc.
- Flux Cored Wire : SF-71, SF-71LF, SF-71LH, etc.

Power source characteristics

Inverter Welding machine

- ▶ CO₂, MAG Welding / GOUGING (M meaning : Multifunctional)
- ▶ General purpose inverter welding machine that can replace conventional SCR welding power sources
- ▶ Compatible with analog and digital feeders

Enhanced durability

- ▶ A built-in protection circuit enhances durability against short cables, IGBT overcurrent, and abnormal operations to prevent semiconductor and control board damage

Arc volume control by electronic reactor

- ▶ Various welding methods are possible depending on the wire diameter and current

Start current control function

- ▶ Optimum Arc start for every wire diameter
- ▶ Increased welding quality from Arc characteristics

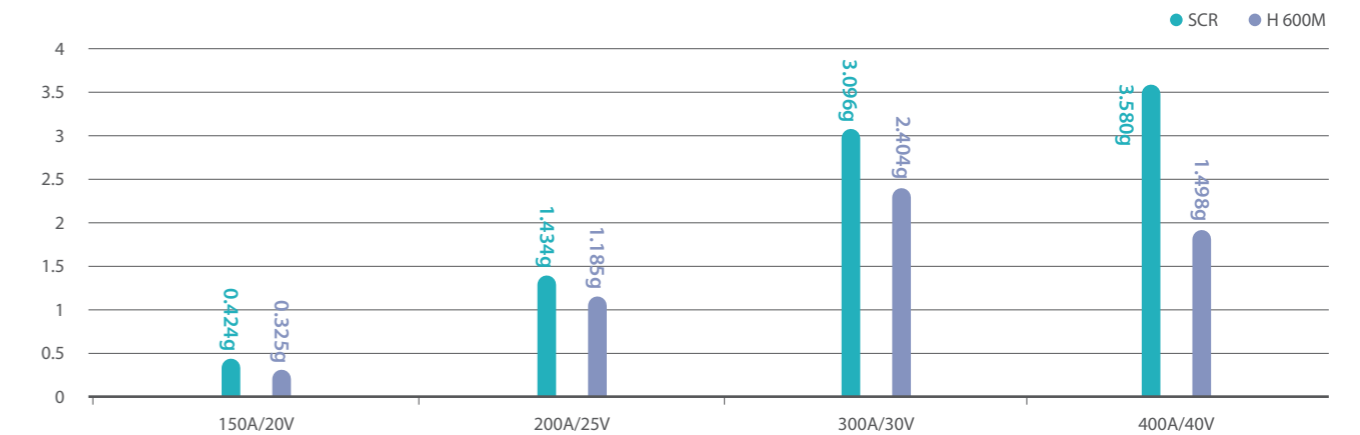
HIGH POWER EFFICIENCY

Comparison and evaluation of power efficiency : Output 400A / 33V standard

Item	Hyundai SCR welding machine	H 600M
Power factor	0.590	0.934
Active power	16.42	14.41
Apparent power	27.78	15.43
Efficiency	80.9	91.4

- As the power factor increases, the electricity charge decreases
- Able to reduce power receiving capacity

Solid Wire Spatter rate comparison



Welding condition	150A/20V	200A/25V	300A/30V	400A/38V
Spatter(g)	0.423g	1.434g	1.547g	1.491g
SCR				
Spatter(g)	0.324g	1.185g	1.204g	0.812g
H 600M				

THYRISTOR WELDING HD AUTO+ Series CO₂/MAG

High performance welding machine
with stable arc output and digital control



Model		350S	500S	600S	600M	800S
Rated power	KVA	18	30	40	40	56
Input voltage	V	3P 220V/380V/400V±10%				
Frequency	Hz	50/60				
Rated output current	A	350	500	600	600	800
Rated output voltage	V	36	42	50	50	50
Rated output current range	A	40~350	40~500	60~600	60~600	150~800
Rated output voltage range	V	10~36	15~42	15~50	15~50	15~50
Max open circuit voltage	V	60	70	80	80	80
Duty cycle	%	60	60	100	100	70
Weight	kg	130	203	220	220	250
Dimension (WxDxH)	mm	420x670 x785	480x695x850	490x728x880	490x728x880	530x728x980

Package configuration

- Welding machine
- Input cable 5m
- Torch 5m
- Earth cable 3m
- Wire feeder (2Roll)
- Single cable 10m
- Gas hose 3m

Options

- Wire feeder (2roll / 4roll)
- Each cable meter
- Regulator

Recommended welding consumables(HYUNDAI)

- Solid Wire SM-70, SM-70G, SM-70S, etc.
- Flux Cored Wire SF-71, SF-71LF, SF-71LH, etc.

Power source characteristics

Digital control welding machine

- Established a convenient digital control that differentiates it from analog-type welding machines
- Modes can be easily changed on-site, as all sequences are processed digitally
- Excellent arc stability with a stable output even during an 10% change in input voltage
- Minimized the change of output voltage
- Excellent weldability in various ranges, thanks to automatic slowdown speed based on the wire diameter
- Minimized the standby power by adopting a power saving circuit
- Excellent durability & maintainability
- Blocks output during over-current or overload
- Minimized the failure rate by adopting a PCB damage prevention circuit even during a short control cable circuit

HERA 1500 AC SAW

Power source characteristics

AC SUBMERGED ARC WELDING MACHINE HERA Series 994

- Moving Core AC SAW welding machine applied with an electric Actuator
- Power factor improvement
- Excellent welding efficiency
- Convenient connection method
- Excellent durability & easy maintenance

Recommended welding consumables (HYUNDAI)

SAW S-707 x L-8, S-777MX x H14, etc.



ZEUS 1500 DC SAW

Power source characteristics

DC SUBMERGED ARC WELDING MACHINE ZEUS Series

- DC SAW welding machine with the characteristics of digital CC / CV
- Digital sequence control
- Diverse selection of current and voltage (Constant current / constant voltage)
- Minimized standby power
- Excellent durability & maintainability

Recommended welding consumables (HYUNDAI)

SAW S-707 x L-8, S-777MX x H14, etc.



Model		HERA 1500	ZEUS 1000	ZEUS 1500	ZEUS 2000
Rated power	KVA	92	80	120	160
Input voltage	V	1P 220V/440V, 380V		3P 220V/380V/440V	
Frequency	Hz	50/60			
Rated output current	A	1500	1000	1500	2000
Rated output voltage	V	44	48	52	60
Rated output current range	A	500~1500	300~1000	300~1500	300~2000
Rated output voltage range	V	90	28~48	28~52	28~60
Max open circuit voltage	V	90	72	75	82
Duty cycle	%	80			
Weight	kg	620	415	700	720
Dimension (WxDxH)	mm	760x1180x1440	750x1100x1150	780x1135x1490	800x1050x1400

AC/DC INVERTER TIG BETA Series

AC / DC Pulse Tig Welding machine for aluminum, nonferrous metal, thin plate welding with excellent output and durability using full bridge method



Model	Detailed		BETA 200D	BETA 350D	BETA 350DP	BETA 500DP	BETA 350AP	BETA 500AP
Rated power	TIG	KVA	8	11	11	17.5	11	17.5
	MMA	KVA	7	11	11	14.5	11	14.5
Input voltage		V	1P 220V		1P, 3P 220V/380V/440V±10%			
Frequency		Hz	50/60					
Rated output current	TIG	A	200	350	350	500	350	500
	MMA	A	140	240	240	300	200	300
Rated output voltage		V	18	24	24	30	24	30
Rated output current range	TIG	A	20~200	10~350	10~350	10~500	10~350	10~500
	MMA	A	20~140	10~240	10~240	15~300	10~200	15~300
Rated output voltage range		V	72	75	75	90	70	70
Duty cycle		%	60					
Pulse	LOW	Hz					0.1~25	
	HIGH	Hz					0.5~400	
	PULSE WIDTH	Hz					15~85	
Weight		kg	11	22.5	25	60	65	79
Dimension (WxDxH)		mm	180x400x220	260x510x465	260x510x465	390x520x620	390x520x620	410x600x740

Package configuration

- Welding machine
- Remote 10m
- Base metal cable 3m
- Torch 10m

Options

- Torch (water cooling, air cooling)
- Regulator

Recommended welding consumables(HYUNDAI)

Stainless ST-308, ST-308L, ST-309, ST-309L, etc.

Power source characteristics

- INVERTER TIG WELDING MACHINE BETA Series
- AC/DC inverter pulse TIG welding machine for aluminum and nonferrous metal plates
- Excellent welding for nonferrous metal plates and aluminum due to low-speed and high speed pulse functions
- Thin plates and base metals with different thicknesses can all be welded by selecting a pulse
- High-speed pulse (10~50Hz)
- Low Speed pulse (10-25Hz)
- Excellent output and durability by adopting Full Bridge method (Applied to 200A or over)
- Excellent durability and high output due to small voltage and stress imposed to the switching element, unlike the Half Bridge method
- Diverse welding materials with a single welding machine
- AC/DC TIG, AC/DC MMA, AC/Pulse TIG are all weldable with this welding machine, based on BETA AP
- Adopted a diverse arc start method
- High-frequency start or start scratch method
- Various built-in protective functions improve durability and stability

DC INVERTER ALPHA Series

Model		ALPHA II 500M	ALPHA III 500M
Rated power	KVA	40	
Input voltage		3P 220V/380V/400V±10%	
Frequency	Hz	50/60	
Rated output current	A	500	
Rated output voltage	V	40	
Rated output current range	A	12~500	7~500
Rated output voltage range	V	3~40	
Max open circuit voltage	V	80	
Duty cycle	%	60	
Weight	kg	234	
Dimension (WxDxH)	mm	480x800x960	

Power source characteristics

Staturable TIG welding machine exclusively for shipbuilding, plants and construction sites

- A High-performance Magnet Amplifier makes a stable drooping and controlling the wide current band possible

Excellent arc characteristic

- By adopting a powerful high-frequency arc start method, a stable arc can be created even when the length of torch is extended

Diverse functions

- A diverse welding method with 3 built-in functions of crater indicator and repetition
- Adjustable amount of pre flow and after flow gases

Recommended welding consumables(HYUNDAI)

Stainless ST-308, ST-308L, ST-309, ST-309L, etc.



DC INVERTER HOTWIRE TIG

Model		MHW-200DT	MHW 200DM
Rated output current	A	25~150	30~200
Rated input power	V	1/3P 220V/380V/440V	
Duty cycle	%	60	
Dimension (WxDxH)	mm	280x500x560	

Power source characteristics

- System for increasing the deposition amount and improving bead quality

High efficiency INVERTER system using IGBT

- Stable output with quick response to fluctuation of input voltage and load
- By supplying additional wire to the arc while increasing the temperature to 300~1000°C, materials can be melted faster. In addition, stable welding is achievable due to the stable melting rate on the bead surface



PORTABLE GRADE

CONTENTS

- 23 MIG / MIG LCD
- 24 MMA
- 25 TIG / PLASMA CUTTING
- 26 ICONS

MIG

MIG STANDARD | HG200

MIG, MMA & LIFT TIG Function
 VRD function built in
 Light weight design make it easy to be carried
 Adopt advanced single IGBT technology, increased reliability
 2T/4T mode
 Arc force, hot start, anti-stick built in

PRODUCT PARAMETER

Model	HG160			HG200		
Power supply voltage	230±10%			230±10%		
Rated input capacity	5.7	4.3	7.3	7.8	6	7.5
Frequency(Inverter)	42			42		
Rated input current	25\13.5	19\10	32\17	35\20	26\13	33\25
Output current range	50-160	10-160	10-150	50-200	10-200	10-160
Function	MIG	TIG	MMA	MIG	TIG	MMA
Duty cycle (40°C 10min)	30%160A 60%115A 100%90A	30%160A 60%115A 100%90A	30%150A 60%105A 100%80A	30%200A 60%115A 100%90A	30%200A 60%115A 100%90A	30%160A 60%115A 100%90A
No load voltage	51			51		
Efficiency	85			85		
Dimension	450x180x290					
Electrode diameter	0.6-0.8-1.0		Ø2.5/3.2	0.6-0.8-1.0		Ø2.5/3.2
Electrode type	6013, 7018, etc.			6013, 7018, etc.		
Net weight	8.5					



MIG LCD

HG300

MIG, MMA & LIFT TIG Function
 VRD function built in
 Light weight design make it easy to be carried
 Adopt advanced single IGBT technology, increased reliability
 2T/4T mode
 Arc force, hot start, anti-stick built in

PRODUCT PARAMETER

Model	HG220			HG250			HG300		
Power supply voltage	230±10%			380±10%			380±10%		
Rated input capacity	9.2	6.8	7.5	8.3	6.8	8.4	9.8	8.3	9.3
Frequency(Inverter)	50			20			20		
Rated input current	40\30	30\23	42\32	12\9	10\8	13\10	15\11	12\9	14\11
Output current range	50-220	10-220	10-200	50-250	15-250	20-230	50-300	15-350	20-250
Function	MIG	TIG	MMA	MIG	TIG	MMA	MIG	TIG	MMA
Duty cycle (40°C 10min)	60%220A 100%170A	60%220A 100%170A	60%220A 100%155A	60%250A 100%191A	60%250A 100%191A	60%230A 100%177A	60%300A 100%230A	60%300A 100%230A	60%250A 100%190A
No load voltage	54			55			55		
Efficiency	85			85			85		
Dimension	617x245x430			617x245x430			617x245x430		
Electrode diameter	0.6-0.8-1.0		Ø2.5/3.2	0.8-1.0-1.2		Ø2.5/3.2/4.0/5.0	0.8-1.0-1.2-1.6		Ø2.5/3.2/4.0/5.0
Electrode type	6013, 7018, etc.			6013, 7018, etc.			6013, 7018, etc.		
Net weight	20			23			23		



MMA

MMA STANDARD | HG200A

MMA Function
 International patented design, unique appearance
 Single phase fan-cooled inverter MMA
 Adopt advanced single IGBT technology, increased reliability
 Complete accessories-electrode holder and earth clamp with cable, mask and bush



PRODUCT PARAMETER

Model	HG160A	HG200A
Power supply voltage	230±10%	230±10%
Rated input capacity	5.7	6.5
Frequency(Inverter)	42	42
Rated input current	25\14	30\16
Output current range	10-120	10-150
Function	MMA	MMA
Duty cycle(40°C10min)	30% 120A	30% 150A
	60% 92A	60% 115A
	100% 65A	100% 89A
No load voltage	60-70	60-70
Efficiency	85	85
Power factor	0.76	0.76
IP	21S	21S
Insulation class	H	H
Cooling way	FAN&AIR	FAN&AIR
Dimension	310x120x223	310x120x223
Electrode diameter	Ø2.5/3.2	Ø2.5/3.2/4.0
Electrode type	6013, 7018, etc.	6013, 7018, etc.
Net weight	3.7	3.7



MMA

HOT-START | HG200AH

MMA & LIFT TIG Function
 International patented design, unique appearance
 Single phase fan-cooled inverter MMA
 Adopt advanced single IGBT technology, increased reliability
 Complete accessories-electrode holder and earth clamp with cable, mask and bush
 Arc force, hot start, anti-stick and VRD built in



PRODUCT PARAMETER

Model	HG160AH	HG180AH	HG200AH	HG220AH
Power supply voltage	230±10%	230±10%	230±10%	230±10%
Rated input capacity	7.5	8.7	9.6	11
Frequency(Inverter)	42	42	42	42
Rated input current	33\18	38\21	42\26	49\28
Output current range	10-160	10-180	10-200	10-220
Function	MMA & LIFT TIG	MMA & LIFT TIG	MMA & LIFT TIG	MMA & LIFT TIG
Duty cycle(40°C10min)	30% 160A	30% 180A	30% 200A	30% 200A
	60% 125A	60% 140A	60% 155A	60% 155A
	100% 88A	100% 100A	100% 110A	100% 110A
No load voltage	82	82	82	82
Efficiency	85	85	85	85
Power factor	0.76	0.76	0.76	0.76
IP	21S	21S	21S	21S
Insulation class	H	H	H	H
Cooling way	FAN&AIR	FAN&AIR	FAN&AIR	FAN&AIR
Dimension	335x120x218	335x120x218	335x120x218	335x120x218
Electrode diameter	Ø2.5/3.2	Ø2.5/3.2/4.0	Ø2.5/3.2/4.0/5.0	Ø2.5/3.2/4.0/5.0
Electrode type	6013, 7018, etc.	6013, 7018, etc.	6013, 7018, etc.	6013, 7018, etc.
Net weight	5	5	5	5



TIG

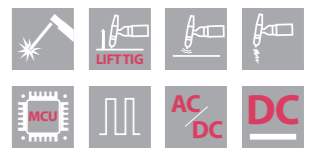
TIG STANDARD | HG200T

HF TIG, LIFT TIG & MMA function
 Arc force and hot start in MMA mode
 Digital display and control, high performance MCU
 Adopt advanced single IGBT technology, increased reliability
 Automatic storage for preset data
 Pulse TIG function and all the pulse parameters can be adjustable
 International patented design, unique appearance



PRODUCT PARAMETER

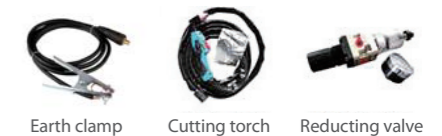
Model	HG200T		HG200T		HG220T	
	230±10%		110±10%		230±10%	
Power supply voltage	230±10%		110±10%		230±10%	
Rated input capacity	8.2	11	5	5	8.2	11
Frequency(Inverter)	42		50		42	
Rated input current	36\18	48\24	45\35	45\35	36\18	48\24
Output current range	10-200	10-200	10-145	10-120	10-200	10-200
Function	TIG	MMA	TIG	MMA	TIG	MMA
Duty cycle(40°C 10min)	25% 200A	20% 200A	25% 200A	25% 200A	25% 220A	25% 220A
	60% 125A	60% 110A	60% 145A	60% 120A	60% 125A	60% 110A
	100% 100A	100% 90A	100% 110A	100% 100A	100% 90A	100% 110A
No load voltage	64		64		64	
Efficiency	60	66	60	66	60	66
Power factor	0.76		0.76		0.76	
IP	21S		21S		21S	
Insulation class	H		H		H	
Cooling way	FAN & AIR		FAN & AIR		FAN & AIR	
Dimension	580x240x430		580x240x430		580x240x430	
Electrode diameter	Ø2.5/3.2/4.0		Ø2.5/3.2		Ø2.5/3.2/4.0	
Electrode type	6013, 7018, etc.		6013, 7018, etc.		6013, 7018, etc.	
Net weight	14		14		14	



PLASMA CUTTING

HG50P

High Frequency
 Compared with oxy-cutting, Cutting capacity
 Increased 2times higher in cutting speed
 Suitable metal sheet can be cut easily and quickly
 Suitable for cutting stainless steel, copper, iron and aluminum etc.
 Simple operation and smooth cutting surface
 Less damage to the torch tips
 Supplied complete with plasma cutting torch and earth clamp,
 Reducing valve and carton box



PRODUCT PARAMETER

Model	HG40P	HG50P	Model	HG40P	HG50P
Power supply voltage	230±10%	230±10%	Cutting thickness	Carbon steel	8mm
Rated input capacity	6	8		Stainless steel	8mm
Frequency	35	35		Copper	6mm
Rated input current	27	34	Aluminum	5mm	
Cutting current range	20-40	20-50	IP	IP21S	IP21S
Polit current			Insulation class	F	F
Duty cycle(40°C 10min)	40%	40%	Cooling way	FAN & AIR	FAN & AIR
No load voltage	250	250	Dimension	370x153x260	370x153x260
Max cutting thickness	10MM	15mm	Net weight	6.5	7

ICONS

OUTPUT ICONS

Constant Current Characteristics	Constant Voltage Characteristics
Constant current, Constant voltage Characteristic	AC Characteristics
DC Characteristics	AC, DC Characteristics
2Roll Wire Feeder	4Roll Wire Feeder

INPUT ICONS

Single-phase Input power	Three-phase Input power
Single phase Three-phase Input power	50Hz available Products
60Hz available Products	For both 50Hz and 60Hz products

WELDING PROCESS

SMAW Shield metal arc welding	Manual, coated welding	GTAW Gas tungsten arc welding	TIG welding
FCAW Flux cored arc welding	Semi-automatic welding	EGW Electrogas welding	SEG welding
GMAW Gas metal arc welding	MIG, MAG welding		
SAW Submerged arc welding	Automatic welding		

MIG	MAX OUTPUT CURRENT	HOT START	MMA	IGBT
ARC FORCE	HF TIG	LIFT TIG	CONSTANT CURRENT	FREQUENCY
FAN	CONSTANT VOLTAGE	THERMOSTAT	VOLTAGE REDUCTION DEVICE	PULSED
INPUT VOLTAGE ±10%	HF CUT	OVER VOLTAGE PROTECTION	DIRECT CURRENT	MOSFET
OVER CURRENT PROTECTION	ALTERNATE CURRENT	CURRENT DISPLAY	CURRENT DISPLAY	SINGLE PHASE
GAS	CUTTER	THREE PHASE	GASLESS	HIGH FREQUENCY START
AC/DC	GENERATOR	IGBT MODULE	SYNERGY	SPOOL GUN
LCD	1KG SPOOL	5KG SPOOL	15KG SPOOL	3 in 1

WORLD'S NO.1
Your Best Welding Partner!

HYUNDAI WELDING

WELDING CONSUMABLES

