



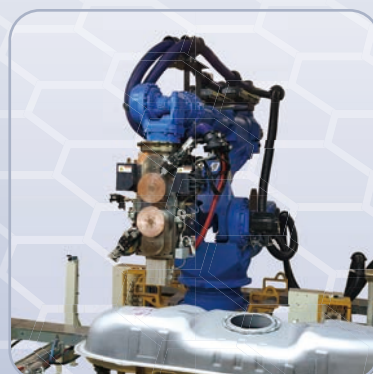
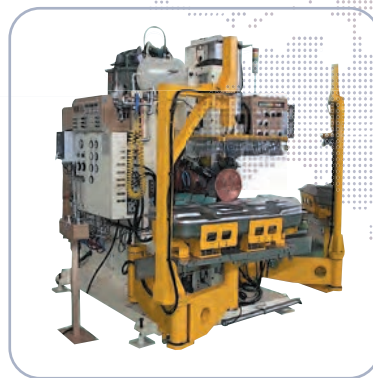
기술혁신형 중소기업(INNO-BIZ) · 벤처기업(Venture Business)



SHINHWA WELTEC
(주)신화웰텍

WELDING MACHINE

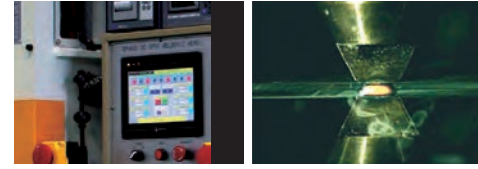
ShinhwaWeltec leads the welding machine industry of Korea



<http://www.shinhwaweltec.co.kr>

공압식 SPOT 용접기

Air Pressure Spot & Projection Welder



공압식 SPOT 용접기 SH-50,75,100,160 시리즈 / Pedestal Spot & Projection Welder Series

보조 에어 크 장치 / Auxiliary air tank

공기압이 부족할 경우 보조 에어 크 장치가 가능합니다.(옵션)

When air pressure is not sufficient, one can install an auxiliary air tank(option)

인체공학적 설계 / Ergonomic design

에어 게이지를 작업자 눈높이에 배치하여 확인, 조정이 용이합니다.

The air gauge installed at the not sufficient, one can install an auxiliary air tank(option)

작업의 안정성 증시

/ Enhanced safety tank

실린더의 Ram 가이드부 안전 커버를 설치하여 작업자의 안전성을 도모하였습니다.

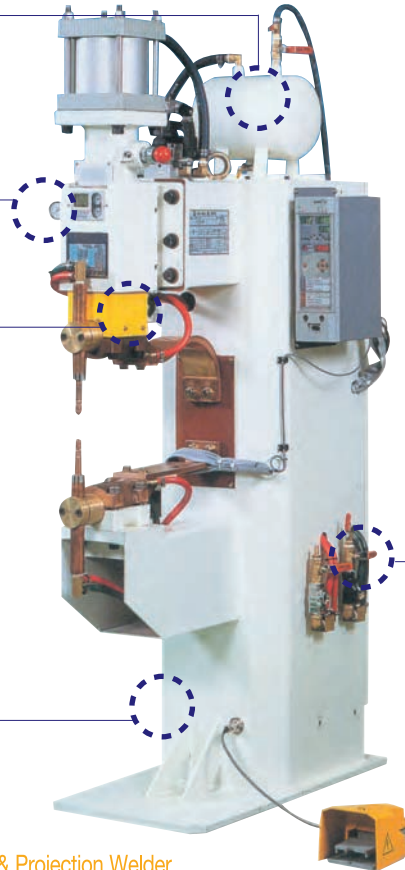
The safety cover for the ram guide of a cylinder ensures user safety

Compact한 디자인

/ Compact design

기존 제품 Size 대비 70%의 Compact한 디자인으로 좁은 장소에도 설치가 가능합니다.

Compact design (70% of legacy product size) allows installation in a small area



신화웰텍의 SPOT 용접기 시리즈는 기존의 용접기보다 한 단계 업그레이드 된 CLEAN SPOT 용접기입니다.

Upgraded clean spot welder ensuring reliable and high quality welding

냉각효과 극대화 / Maximized cooling effect

냉각수 배관방식 변경으로 냉각효과를 극대화 시켰습니다.
The changed coolant piping maximized the cooling effect



공압식 교류 SPOT 용접기 / Pedestal Spot & Projection Welder

MODEL		SH-50	SH-75	SH-100	SH-160
Regular capacity	kVA	50	75	100	160
Input voltage	V	220 / 380 / 440			
Maximum input capacity	kVA	150(129)	188(161)	225(196)	482(413)
Maximum short current	A	20,000	22,000	26,000	40,000
Maximum welding current	A	18,000	19,800	22,500	36,000
pressure force	kg f	600	1,000		
pocket depth size	mm	500			
pocket interval size	mm	210			
Regular usage	%	5.5(7.5)	8(10)	8(10)	5.5(7.5)
Regular frequency	Hz	60/(50)			
Control voltage	V	110			
Electrode stroke	mm	20/60	20/80		
Electrode diam.	mm	16	18		
Electrode holder diam.	Ø	25	32		
Electrode holder length	mm	180	220		
Horn diameter	Ø	60	70		
Weight	kg	385	365	400	550
Timer type		SYSCOM-010			
Contact type		D-SIZE		E-SIZE	

* 주 : () 내 치수는 50Hz의 경우입니다.

고성능 몰드변압기 채택 / High performance mold transformer

간 에폭시 Molding으로 내구성, 저진동, 내습성이 우수합니다.
Simple epoxy molding provides good durability, moisture resistance and low vibration



IGBT INVERTER 제어 DC SPOT

IGBT Inverter control DC spot



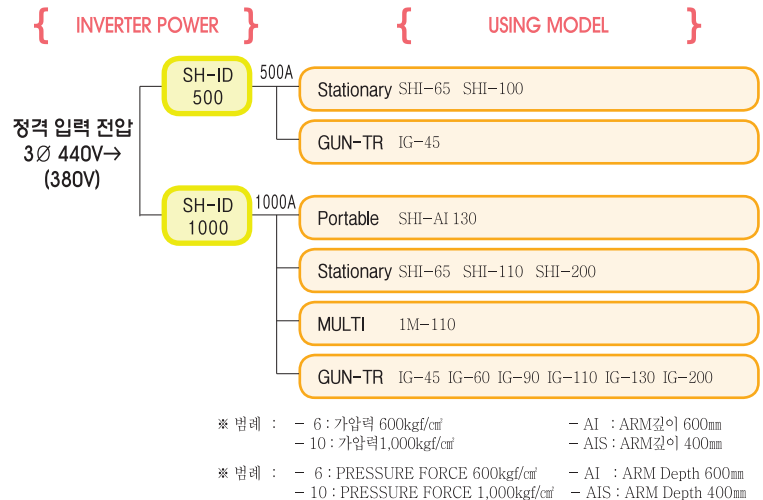
SH-ID Series

INVERTER 기술의 혁신

A renovation of Shinhwa's inverter technology



| Servo pressure inverter spot |



특징 / Distinctive features

- 고정도의 Micom Timer가 내장된 Compact한 디자인으로 설계되었으며 remote control system을 채택하여 용접조건 설정이 매우 편리합니다.
- 완벽한 보호기능을 채택하였습니다.
 - ① 과전류, 결상검출, 냉각수 이상검출 ② IGBT, 정류기의 과열검출
 - ③ 용접변압기의 자기술림 방지 및 누전차단기 내장
- 다양한 저항 용접 전원엔 폭넓게 적용할 수 있습니다.
 - ① Robot용 스폿용접기 ② 정치식 스폿용접기 및 프로젝션용접기 ③ 포터블 스폿용접기
- Compact design with precise Micom timer, adopting remote control system to easily set welding conditions
- Perfect protection functions
 - ① Detecting over-current, phase open, and abnormal cooling water
 - ② Detecting overheating at IGBT and rectifier
 - ③ Prevents welding transformer from being leaned and holding short circuit breaker
- Wide application for a variety of resistance welding power
 - ① Robot spot welder
 - ② Stationary spot welder and projection welder
 - ③ Portable spot welder

표준사양 / Standard Specification

형식		SH-ID 500(220V)	SH-ID 1000(220V)	SH-ID 500(440V)	SH-ID 1000(440V)
Regular capacity	kVA	45, 60	45, 60, 90, 110	45, 60, 90, 110	45, 60, 90, 110, 130, 190
Input voltage	V	3Ø 220±10%×1	3Ø 220±10%×1	3Ø 440±10%×1	3Ø 440±10%×1
Regular frequency	Hz	50, 60			
Maximum output voltage	V	300 at 220V	300 at 220V	600 at 440V	600 at 440V
Maximum output current	A	500(Pick 값)	1000(Pick 값)	500(Pick 값)	1000(Pick 값)
Output frequency	Hz	600 : 800 : 1,000			
Regular usage	%	10			
Weight	kg	48	68	48	68
Dimension (WxDxH)	mm	380×575×655	380×675×655	380×575×655	380×675×655

* Note : 1. The capacity in case of actual load can vary depending on transformer.
 2. To use stationary spot welder, please refer to the asterisk mark for input voltage.

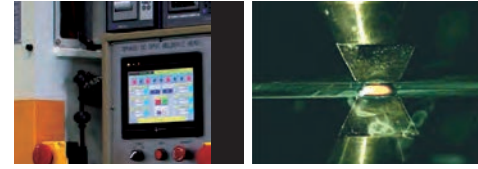
Program box

Program box

- 인버터전원 7대까지의 용접조건 기억가능
- 데이터보호를 위한 패스워드 설정 가능
- 고정도의 정전류제어 방식
- 32조건설정, 가압력 2계열
- 3단통전, 슬로프, 다운슬로프 가능
- 고정도의 10시간 한정기능
- 용접전류 5단 Step-up 기능
- 용접타점 모니터링 및 이상검출 모니터링 기능
- Memorizing welding power conditions for up to seven inverters
- Password setting for data protection
- Precise static current controlling
- Setting 15 conditions and 2-series for pressure machine
- 3-step weld time, slope, and down slope
- Limited time setting in precision for ten hours
- Five step-up function for welding current
- Welding point monitoring and abnormality detection monitoring

MULTI Projection 특수기

Multi Projection Special Machine



3상 정류식 & AC 단상 시리즈 / 3-Phase rectifying and AC single phase Series

자동차 및 고속전철의 알루미늄 합금 차체, 자동차 연료 크 등 아연 도금 및 수지피복강판 등 대용량 Projection 용접 등에 적용되며, 단시간 대전류 용접실현으로 고품질의 용접을 약속합니다.

The machine can be used for large-sized projection welding such as aluminum alloyed bodies of vehicles and high-speed subways, and zinc-plated and resin coated steel sheet such as vehicle fuel tanks, enabling short-time current welding to get high-quality welding.



특징 / Distinctive features

- 최대 용접 능력 : 정격용량 300kVA
최대전류 130,000A
- 독자 설계의 저마찰식 가압구조로 압력 Parameter가 우수, 저소음 최적의 용접품질 실현
- 통전전류 제어정도 오차 1% 이내의 뛰어난 제어 System으로 완벽한 용접결과 실현
- Touch-Screen Panel 채용 및 용접조건 결과 Display
- 각종 이상 신호 출력 및 용접 조건 설정치에 대한 상하한 설정 비교로 전원전압 Drop 등에 의한 제품 불량 방지
- 생산 Model(용량) : 150kVA, 200kVA, 250kVA, 300kVA, 350kVA
- Maximal welding ability : Input capacity 300kVA
Maximal current 130,000A
- Unique design in low friction pressure structure, making satisfying pressure parameters and optimized welding quality in low noise
- Excellent control system with less than 1% of error rate in control of flowing current to get perfect welding result
- Adopting touch-screen panel and displaying the outcome of welding condition
- Displaying various abnormal signals and comparing limited settings for designating welding conditions to prevent bad outcome due to power voltage drop, etc.
- Manufactured models (per capacity) : 150kVA, 200kVA, 250kVA, 300kVA, and 350kVA



표준사양 / Standard Specification

MODEL		3-phase rectifying type			AC single phase type				
		SPW-3P200	SPW-3P250	SPW-3P300	SPW-1P75	SPW-1P100	SPW-1P160	SPW-1P240	SPW-1P260
Regular input capacity(kVA)		200	250	300	75	100	160	240	260
Input voltage(V)		220, 380, 440							
Tolerant usage(%)		1.3	1.3	1.3	3.4	3.4	4.2	3.6	3.6
2nd short current	Maximum(A)	100,000	125,000	150,000	20,000	25,000	40,000	55,000	60,000
	Minimum(A)	25,000	30,000	30,000	5,000	5,000	5,000	10,000	10,000
Depth(mm)		400	400	400	600	600	300	300	300
Axis interval(mm)		110	110	110	210	210	200	200	200
Maximal pressure(kgf)		2,000	2,500	3,000	950	950	1,500	2,000	
Height(mm)		1,000	1,000	1,000	900	900	900	900	
Stroke(mm)	commercial	200	200	200	80	80	200	200	
	work	20			20	20	20	20	
Timer controller		Touch panel type, dedicated 3-phase Micom timer and controller			SH-030			SH-030	
Option		Double head, quality monitoring meter, upper/lower pole JIG system, ejector, current work detector, sensor, automatic robot handling, etc.							

SEAM 용접 특수기

Seam weld Special Machine



SEAM 용접기 시리즈 / Seam welder Series

MASH SEAM



SEAM



특징 / Distinctive features

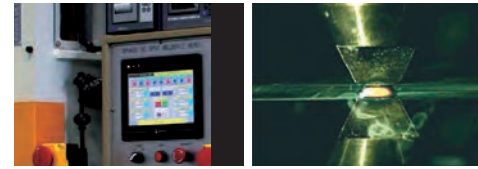
- 고정도의 적응성이 뛰어난 가압기구 - 8각 RAM 방식
- 높은 수명 유지 설계의 급전부 - 급전 하우징 회전축의 대전류에 적합한 윤활 및 냉각 INVERTER 제어의 전극구동
- 출력형식의 AC & INVERTER DC 채용 및 내열, 내진 내온의 높은 사용율의 용접 TRANS 채용
- 3조건 동기식 Micom 제어의 Seam 용접 전용 Timer로 직선, 곡선 구간별 최적의 용접조건 입력제어에 의한 용접품질 및 Speed 향상
- Iron-Man 장착의 자동 Seam 용접 전용기 및 Robot에 의한 전용기
- 스테인레스, 수지피복강판, 알루미늄재질 용접전원 대응(AC & INVERTER DC 출력제어)
- 각종 특수 전용기 기본 Model 구축
 - ① 자동차 승용/상용차의 연료 Tank 제작용 특수기
 - 수동 Seam 용접기
 - Iron-Man 자동 Seam 용접 특수기
 - Robot Handling Seam 용접 특수기
 - 아연도금 강판의 무가공식 소모전극형 Wire Seam
 - ② 자동차 차체 Tailored Blank공법 Mash Seam 특수기
 - ③ 변압기 방열 Tank(Radiator), Drume 등 밀폐식 용기 용접용
- Pressure machine with precise adaptability
Adopting Hyosung's own 8-angle RAM method
- Power feeder designed for longer life
- Lubrication and cooling method suitable for large volume of current for the turning axis of power feeder housing
- Pole operation to control the inverter
- Employing AC & inverter DC in output type and welding TRANS with high usage of heat/vibration/temperature tolerance
- Using dedicated SEAM welding timer to control 3-conditional synchronous Micom, the machine can improve welding quality and speed by controlling optimized welding condition input for each straight line, curve, and section.
- With Iron-Man in it, the machine works as a dedicated SEAM welding device using robots.
- Used for stainless, resin coated steel sheet and aluminum welding power (AC & inverter DC output control)
- Making basic models for a variety of special machines
 - ① Special machines for manufacturing fuel tanks of vehicles(automobile/car)
 - Manual SEAM welder
 - Iron-Man automatic SEAM special welder
 - Robot handling SEAM special welder
 - ② Wire SEAM of zinc-plated steel sheet in pole consumption type with no manufacturing performed
 - ③ Mash SEAM special machine using tailored blank techniques of vehicle bodies
 - ④ Welding covered containers such as tanks (radiators) to protect transformers from heat, and drums



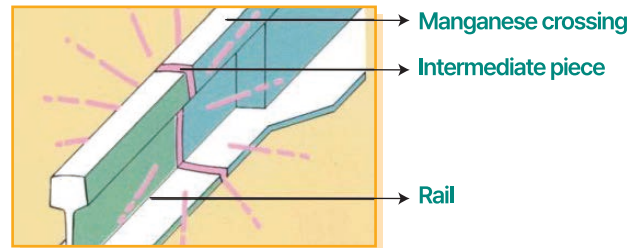
표준사양 / Standard Specification

MODEL		Horizontal SEAM welder SE-V type			Vertical SEAM welder SU type				MASH SEAM	
		SH-SEAM-V100	SH-SEAM-V150	SH-SEAM-V200	SH-SEAM-H100	SH-SEAM-H150	SH-SEAM-H200	SH-SEAM-H250	Movable welder	Movable JIG
Regular capacity(kVA)		100	150	200	100	150	200	250	260-350	260-350
Input voltage(V)		220, 380, 440								
Usage(%)		50			50				20	
2nd short current	Maximum(A)	20,000	20,000	25,000	20,000	20,000	25,000	25,000	30,000	30,000
	Minimum(A)	10,000			10,000		13,000		10,000	
Depth(mm)		470	560	560	600	1,000	600	1,000	1,400	
Axis interval(mm)		50	50	110	50					
Maximal pressure(kgf)		600	900	1,000	600		900		2,500	
Work height(mm)		950								
Turning pole (mm)	Thickness	12(4,8)							15	
	Diameter	250	260	260	200				450	
Stroke(mm)		40	40	100					40	
Pole speed(m/min)		1 ~ 4							1 ~ 20	
Welding ability		Soft steel 1.6tx2	2.8t×2	**	Soft stee 1.6t×2		2.8t×2		Plated steel 2.8t×2	
Available range		Vehicles/motorcycles, various fuel tanks, heatproof pipes of transformer, heaters, etc.							Tailored blanks such as vehicles	
Option		Automatic welding JIG system (Iron-Man), lower part pole adjuster, plated steel sheet wire SEAM, robot, automatic robot handling, quality monitoring meter, etc.							Cooperative if required	

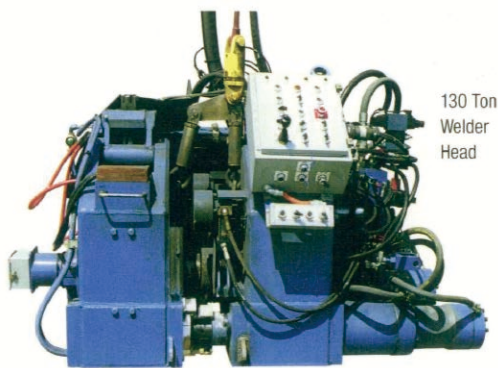
Stationary / Mobile Inverter Flash Butt Welding Machines



Stationary FBW



Mobile FBW



Characteristic

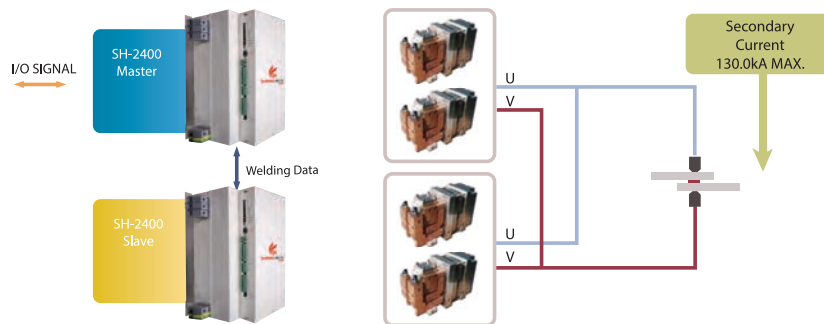
- A welding machine design to weld rail and manganese crossing together in order to produce weldable crossing.
- Maximum welding ability – Input capacity : 300kVA, Maximum current 130,000A
- Making satisfying pressure parameters and optimized welding quality with a low noise by having unique low-friction pressure structural design
- State-of-art classed control system which has less than 1% error rate in controlling the current enables the user to get the perfect welding result.
- Adopt touchscreen panel to display the outcome of the welding condition
- Displaying various abnormal signals and showing comparison of designated welding conditions with limited settings to enable to user to prevent the welding failure.
- Manufacturing models (per capacity) : 150kVA, 200kVA, 250kVA, 300kVA, 350kVA

Stationary / Mobile Inverter Flash Butt Welding Machines



Inverter control

- Enables the user to conduct welding with less energy (60% less)



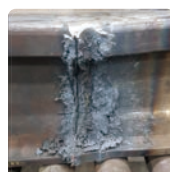
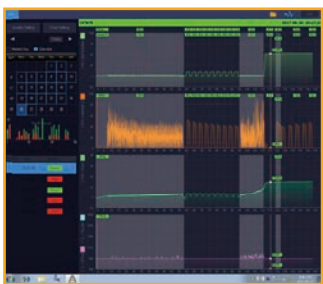
Pre-set welding programme by Rail profile

PROGRAM SELECT					
PRG. NO	PRODUCT NAME	PRG. NO	PRODUCT NAME	PRG. NO	PRODUCT NAME
01	UIC 54 RAIL+RAIL	60	11	50KG RAIL+SUS	60
02	UIC 54 RAIL+SUS	60	12	50KG R+SUS+MN	60
03	UIC 54 R+SUS+MN	60	13	UIC 60 RAIL+RAIL	60
04	60KG RAIL+RAIL	60	14	UIC 60 RAIL+SUS	60
05	60KG RAIL+SUS	60	15	UIC 60 R+SUS+MN	60
06	60KG R+SUS+MN	60	16		60
07	UIC 54A RAIL+RAIL	60	17		60
08	UIC 54A RAIL+SUS	60	18		60
09	UIC 54A R+SUS+MN	60	19		60
10	50KG RAIL+RAIL	60	20		60
MANUAL AUTO DATA PLC IN PLC OUT ALARM					

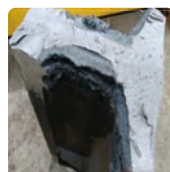
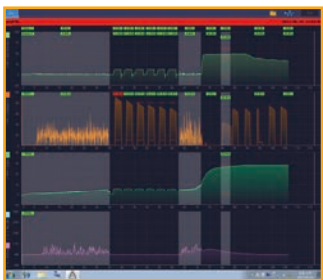
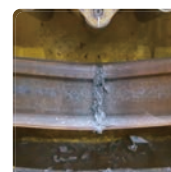
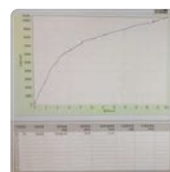
- Save up to 63 pre-set welding programs to simplify the welding process



Welding Quality Management



Pass

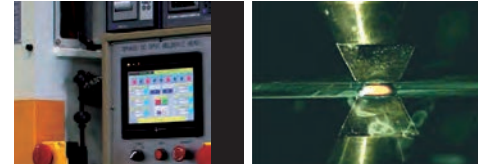


Failure

- Display pressure, current, displacement and melting temperature to enable the user to conduct quality management

PORTABLE SPOT 용접기

Portable spot welder



SH-PSL Series



특징 / Distinctive features

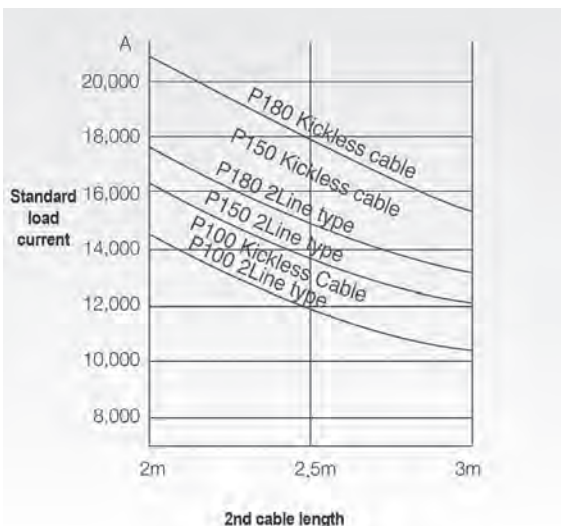
- 공기배관계통
실제 사용현장에 적합하도록 불 요한 부분을 제거한 COMPACT DESIGN
- 수냉배관계통
급수작분기관(Manifold)의 단순화 및 편리한 급수제어
- 고진공 주형의 Molded Coil(0.1, Torr)로 신뢰성 및 내구성이 우수
- 알루미늄 Frame 및 철심노출형으로 외기(外氣)에 의한 우수한 냉각
- Kickless Cable, 2선식 겸용
- Swivel-Bearing 내장으로 작업시 유동이 원활
- Air piping
Compact design for on-the-spot usage by removing useless functions
- Water cooling piping
Simple water integrator (Manifold) and easy-to-use water supply control
- Molded coil (0.1, Torr) in high-vacuum mold, making excellent reliance and durability
- Aluminum frame and iron core exposed type, conducting highquality cooling by external air
- Combined use of kickless cable and 2-wire type
- Swivel-bearing embedded to seamless movement

SP-ASL형 TRANS 표준사양

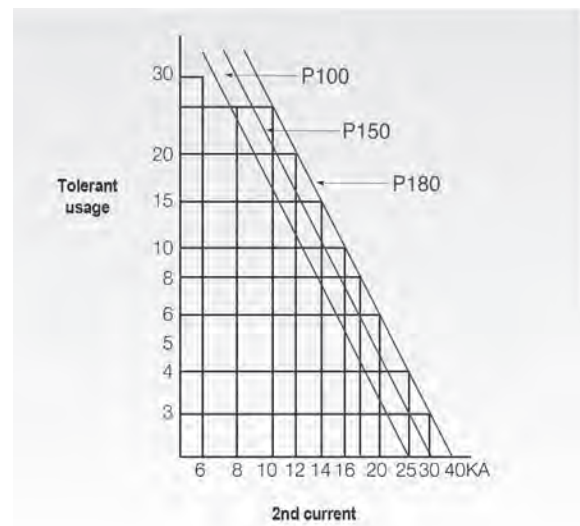
/ Standard specifications of SP-ASL type TRANS

Regular mount (50% usage)	Regular frequency	Regular 1st voltage	2nd no -load voltage	Insulation grade	Roughly measured weight	Cooling water
SH-PSL 100kVA	50, 60Hz	220, 380, 440V	21.0V	F	135kg	5 l in less than 30° C/min
SH-PSL 150kVA	50, 60Hz	220, 380, 440V	23.5V	F	160kg	5 l in less than 30° C/min
SH-PSL 180kVA	50, 60Hz	220, 380, 440V	25.0V	F	190kg	5 l in less than 30° C/min
SH-PSL 250kVA	50, 60Hz	220, 380, 440V	33.0V	F	220kg	5 l in less than 30° C/min

부하데이터 / Load data



변압기 허용 사용률 / Tolerant usage of transformer

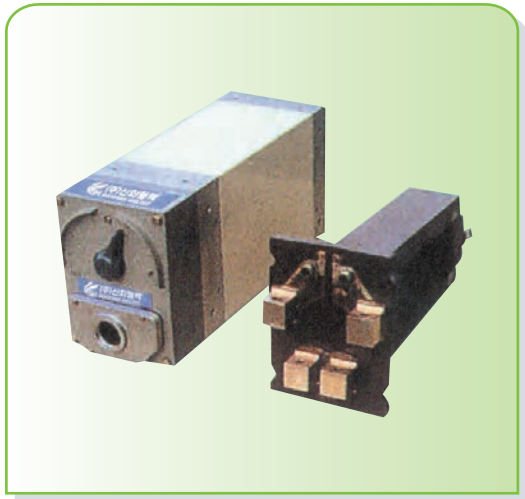


MULTI-SPOT 용접기

Multi spot welder



M-Series



특징 / Distinctive features

- 내구성 우수
고진공의 Molded Coil을 사용하여 내구성이 매우 뛰어남
- 독특한 설계, 제작
고정도의 가공, Compact한 설계로 소형 경량화를 실현하여 용접자동화 전용장치의 어떠한 방향에도 매우 쉽게 적용이 가능함
- Excellent durability
Using high-vacuum molded coil to keep durability in high quality
- SHINHWA' s unique design and manufacturing
In precise production and compact design, the machine is featured with small size and light weight to get employed to any direction of a dedicated automatic welding machine.

표준사양 / Standard Specification

Regular amount(kVA)	Type	Input voltage (V)	Frequency (Hz)	2nd regular voltage(V)	Current adjustment(Tap)	Insulation grade	Weight (kg)
125	M125 kVA	220,380,440	50,60	10.52~8.16	4T+OFF	F	135kg
150	M150 kVA	220,380,440	50,60	11.76~9.3	4T+OFF	F	160kg
175	M175 kVA	220,380,440	50,60	13.3~10.52	4T+OFF	F	185kg

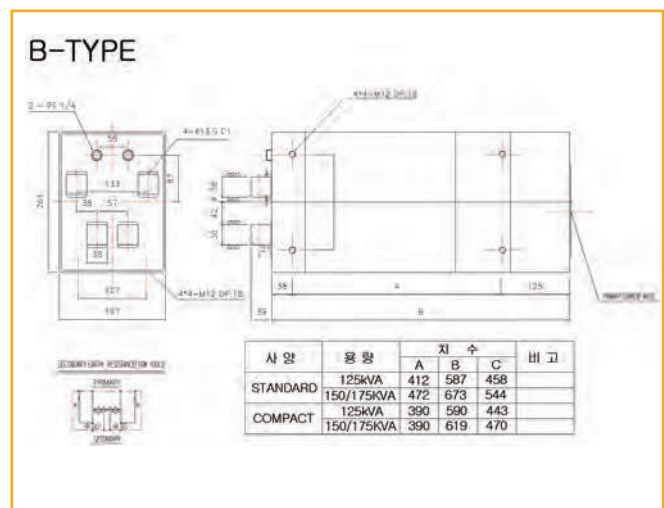
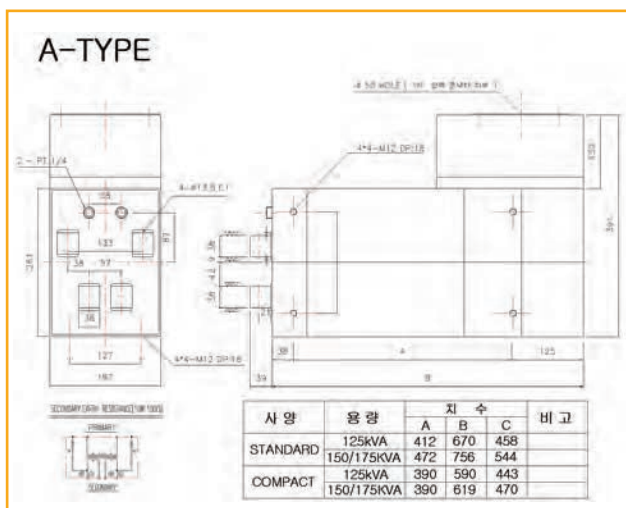
※ TAP CHANGER Found.

COMPACT 사양 / COMPACT specifications

Regular amount(kVA)	Type	Input voltage (V)	Frequency (Hz)	2nd regular voltage(V)	Insulation grade	Weight (kg)
125	CSE-M125 kVA	220,380,440	50,60	10.5	F	113kg
150	CSE-M150 kVA	220,380,440	50,60	11.5	F	134kg
175	CSE-M175 kVA	220,380,440	50,60	13.3	F	134kg

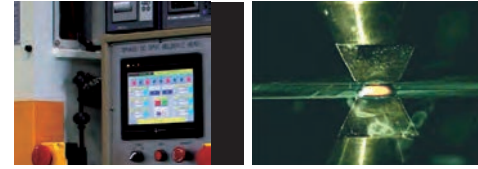
※ TAP CHANGER Unfound.

외형도 / Appearance

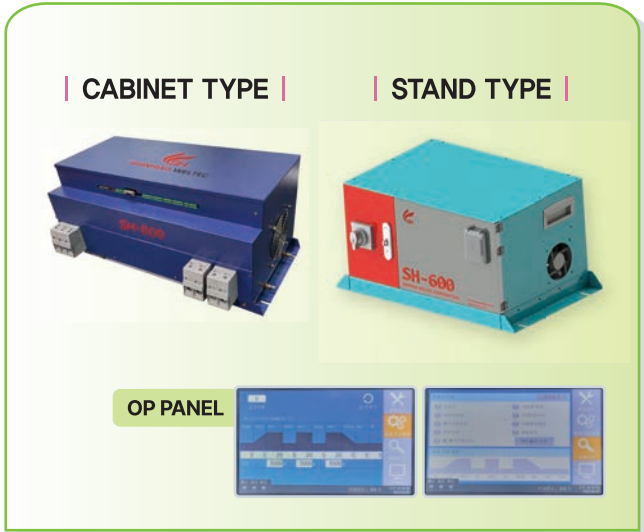


D/C Inverter 용접제어 전원

D/C Inverter Welding Controller



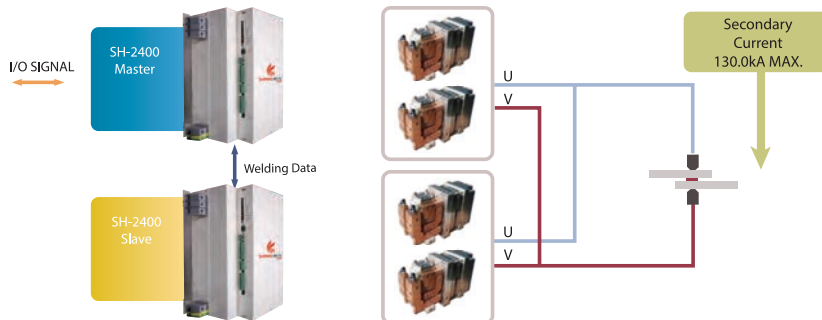
Inverter Welding Controller



특징 / Distinctive features

- 동기식 정전류 제어 Digital 표시 · MICOM 기억 · 모니터 기능으로 어떠한 용접에도 품질관리 · 작업관리 최상
 - 3단 통전방식(UP-Slope방식, Pre-Heating방식, Tempering방식)에 의해 확실한 용접이 가능
 - 이상검출 모니터에 의한 자기진단 기능에 따라 이상 내용을 램프로 표시하고 이상신호를 보냅니다.
 - 사용자와의 다양한 제어방식을 지원함
 - Remote teaching box
 - Touch panel
 - FND-display program box
 - Communicatoion network
 - 전류 파형 제어로 다양한 재질에 따른 용접조건을 최적화함
 - 병렬 조합모드를 통해 용접전류를 증가시킴
-
- Digital display of synchronous static current control, Micommemorizing, and monitoring function to ensure the best quality/work management in any welding method
 - Three-step conducting methods (up-slope, pre-heating, and tempering) to make welding fully done
 - Self-diagnosis function using abnormality detection monitoring to display any faulty status on lamps and send abnormality signals
 - Support different types of user interface
 - Remote teaching box
 - Touch panel
 - FND-display program box
 - Communicatoion network
 - Current waveform control for optimized welding by type of material
 - Increased welding current in the parallel operation mode

병렬조합 / Parallel Operation method



표준사양 / Standard Specification

MODEL \ Type	SH-400	SH-401	SH-1000	SH-2400	SHSE-1000
Use	SPOT/ PROJECTION				SEAM
Welding power	3-phase, 380/400/440V 50/60Hz				
No. of welding conditions	63 series				31 series 8 sections
Time control unit	1ms				
Inverter control method	1kHz PWM control				
Current control method	Static current control by initial feedback control of welding machine transformer				
Primary max. current	400A (10% or lower)		1000A (10% or lower)	2400A (7.5% or lower)	1000A (10% or lower)
Secondary max. current	2.0~25.0kA		2.0~50.0kA	5.0 ~ 100.0kA	2.0~50.0 kA
Welding sequence	3-step conducting				2-step conducting
Stepper	15 steppers / 5 steps (Linear / Cascade)				-
Valve output	2 elements (DC 24V, AC 110V)				-
Current waveform control	1~19				
DC control	DC control				
Input/output I/F	Terminal block	One-touch		Terminal block	

용접 통합 모니터링 시스템

Welding Integrated Monitoring



1. C/S Monitoring System summary

1) Summary

생산 자동화LINE의 확대적용으로 작업자가 직접용접상태를 감시하지 못함

It does not watch a work own direct welding condition with magnification application of production automation LINE

이에 따른 최적공정 조건 설정 및 실시간 용접부 상태 판정 공정변수의 이상으로 인한 연속 불량률의 위험 발생등 어려움 발생으로 용접 품질 관리가 안되는 실정임.

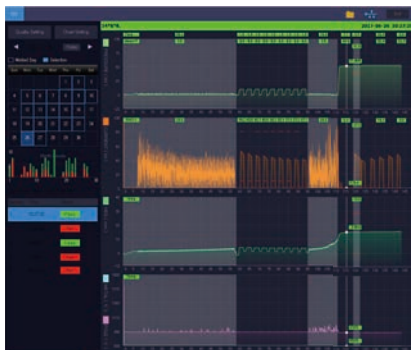
Above the optimum process conditional set which it follows hereupon and real-time weld zone condition decision process variable the Continuous defective dangerous occurrence back which is caused by it is the actual condition where the welding quality civil official does not become difficult producer.

C/S 모니터링 시스템은 용접 상태를 모니터링 감시하여 DATA분석 및 용접 품질의 산포 관리 /최적의 용접조건을 설정 가능토록 관리하는 목적으로 하는 SYSTEM입니다.

The C/S the monitoring system the monitoing watches a welding condition and it is a SYSTEM which it does in the objective which set in order to be possible, manages the spread civil official of DATA analysis and welding quality/welding condition of optimum. It is an affection.

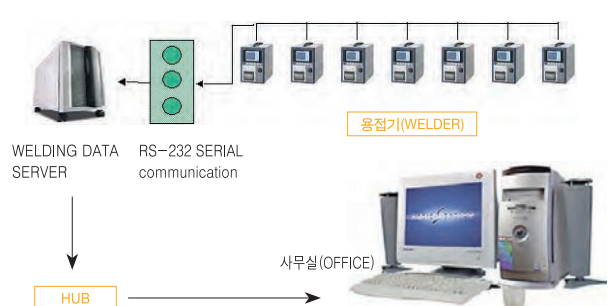
2. C/S Monitoring system information

MAIN PROGRAM



3. C/S Monitoring NETWORK system

NETWORK SYSTEM

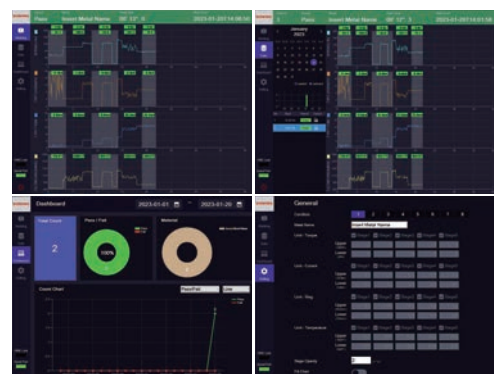


4. C/S Monitoring System 특징(FEATURES)

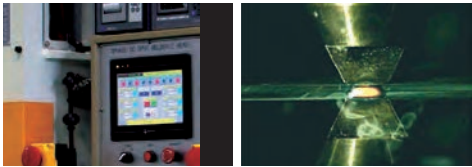
- 1) 여러 용접기의 데이터를 실시간으로 수집가능.
Data of multi welding machine at real-time collection possibility
- 2) 간단하면서 편리한 인터페이스로 구성.
The simple it does and it is easy with interface composition
- 3) 용접데이터의 보존 및 보관으로 인한 데이터 분석 가능.
The data analysis possibility which is caused by with preservation and custody of welding data.
- 4) 상세분석에서 파형으로 데이터를 제공함으로써 빠른 문제점 파악.
From details analysis it provides a data with the corrugation quick problem point it grasps.
- 5) 사용자별 권한설정으로 인한 사용자별 관리 가능.
The user civil official possibility which is caused by with the authority set which it follows in the user
- 6) 파형의 확대 및 축소 등 다각도에서 용접데이터 파형을 볼수 있음.
There is a possibility of seeing the welding data corrugation from magnification of the corrugation and abridgment back many-sidedness degree.

5. C/S Monitoring system Application

WELD CHECKER



트윈 Spot 용접기
Twin Spot(Series) Welder Specifications



Twin Spot Assy



Twin Gun



Twin Timer



표준사양 / Standard Specification

1. TRANSFORMER + TWIN GUN

Spec		SH - TWIN 12	REMARK
Regular capacity	kVA	12kVA	(Duty 50%)
Input voltage	V	1ϕ 380V ± 10%	220/415/440V
Regular frequency	Hz	50/60	
Regular usage	%	9.2	
Maximum welding current	A	11,000	
Out voltage	V	3.2	
Dimension(W x D x H)	mm	138 x 400 x 94	
Weght	Kg	13	
Switching device		SCR	

2. Weld current /Time Controller Spec.

TYPE		SH-01	REMARK
CONTROL		MICRO COMPUTER CONTROL	
OPERATE		MONITER부 TOUCH	
CURRENT CONTROL		CONSTANT VOLTAGE	
WELD CURR -ENT	WELD SEQUENCE	MINIMU TIME UNIT: 1CYCLE, 1 ms: 50/60HZ	
	Electrification method	1 STEP	MULTI STEP(OPTION)
	Current setting range	1 ~ 99% (2 ~ 11KA)	
	Electric current degree(%)	± 5%	

setting time(CYCLE)range

	SQ	W	HO	OFF
0 ~ 99				
0 ~ 99				
0 ~ 99				

자동화 용접 라인 Automation welding line



기업의 최대 생산성을 고려하여 최적화시킨
용접자동화 시스템으로 귀사의 경쟁력이 올라갑니다.

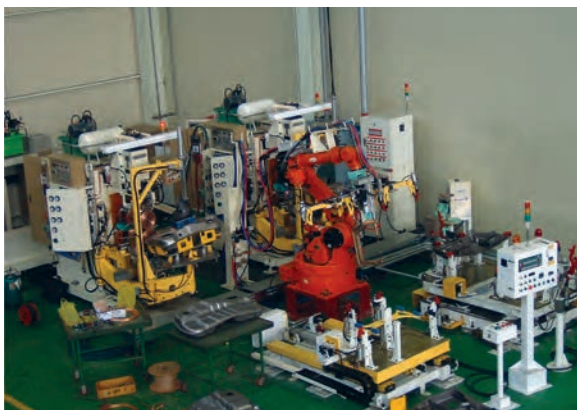
자동차 라인 1. / Automobile welding line 1



자동차 라인 2. / Automobile welding line 2



자동차 라인 3. / Automobile welding line 3



자동차 라인 4. / Automobile welding line 4



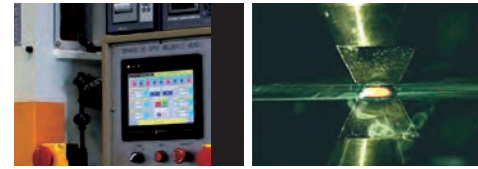
수동 Portable 라인 1 / Manual portable welding line 1



수동 Portable 라인 2 / Manual portable welding line 2



철도객차 자동화 라인 Railway car welding line



Nc series spot welding machine



Keystone arc welding machine



Side balaman welding line



Indirect spot welding machine



Roof robot welding line



Car body assembly welding line



버스 용접 라인 Bus car welding line



Roof spot welding line 1



Roof spot welding line 2



Gantry spot welding line



Window spot welding line



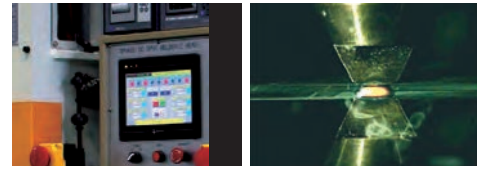
Twin spot welding machine



Portable spot welding line



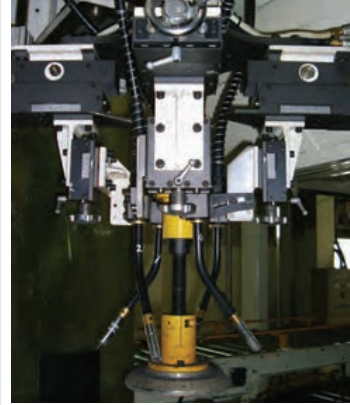
자동화 용접 라인 Automation welding line



브레이크슈 용접장비 / Brake shoe welding m/c



원주 용접장치
/ Circle arc welding machine



ARC ROBOT welding machine



ROBOT SEAM welding machine



철사 용접장치 / Wire mesh spot welding machine



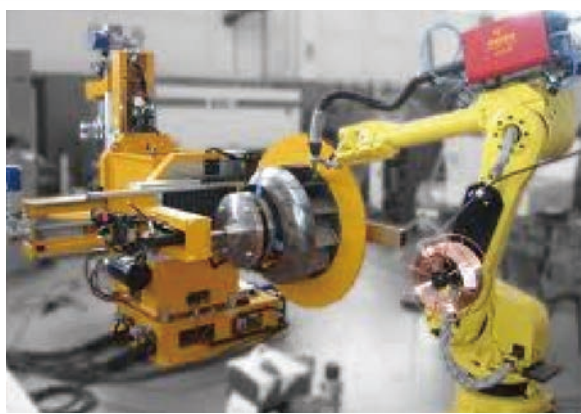
벨브용 자동 용접기 / Valve



자동화 용접 라인 Automation welding line



Fan Arc welding m/c



Radiator multi spot welding m/c



Seperator spring auto welding system



Shelf auto welding/load system



Hot stamping system

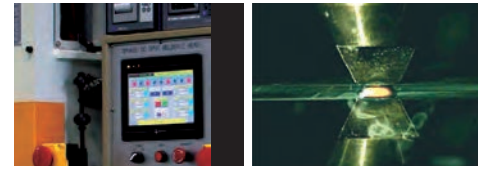


Keyston seam welding system



인버터 직류 아크 용접기

INVERTER DC ARC WELDING MACHINE



■ ■ ■ ■ 파트너 I - 160 / 파트너 I - 180 / 파트너 II - 230 / 파트너 II - 250
■ ■ ■ ■ ■ / 파트너 II - 300 / 파트너 II - 400 / 파트너 II - 500

특징 / Distinctive features

- 가정용 전원 사용
- 소형, 경량화
- 좋은 품질, 높은 용접성
- 탁월한 안정성
- 스파터 감소
- 부드러운 스타트
- 전격방지 기능 내장
- Use of electricity for house.
- weight and size reduction.
- High quality and good weldability.
- Excellent stability.
- Reduction of spatter.
- Smooth start-up.
- Protection function is built-in.

표준사양 / Standard Specification

Model		파트너 I-160	파트너 I-180	파트너 II-230	파트너 II-250	파트너 II-300	파트너 II-400	파트너 II-500
Rated output current	A	10~160	10~180	10~230	10~250	10~300	10~400	10~500
Rated Input	k.V.A	4.2	5.0	6.6	8.2	12	19.5	26.5
Rated frequency	Hz	50~60	50~60	50~60	50~60	50~60	50~60	50~60
Rated input voltage	V	1 φ 220	1 φ 220	1 φ 220	1 φ 220	1~3 φ 220/380/440	1~3 φ 220/380/440	1~3 φ 220/380/440
Rated unload voltage	V	80	80	85	85	85	85	85
Rated load voltage	V	25	26	28	30	32	36	40
Rated of useness	%	40	40	40	40	40	60	75
(W×D×H) External size	mm	140×385×210	140×420×230	250×450×250	175×430×280	260×430×400	315×600×600	315×600×600
Weight	kg	≒8	≒9	≒15	≒16	≒23	≒43	≒48

CO2 반자동 아크 용접기

SEMI-AUTO CO₂ / MIG / MAG ARC WELDING MACHINE

SH - 350IX / SH - 500IX / SH - 650IX

특징 / Distinctive features

- 과전압, 과출력전류, 소자이상 온도상승 검출등 각종 보호 기능 내장
- 고속용접 및 아크 안정성향상
- 아크스타트 특성개선
- 간단한 용접조건 설정 (일원 및 개발)
- 전용기 단자대 부착으로 자동화용이
- 각종 보호기능 내장
- 용접시 스퍼터가 적고 아크가 안정
- 아크 길이 변화시에도 아크 끊김이 없이 일정한 아크유지
- 아크스타크 보상회로 채택으로 순발아크스타트
- 다양한 용접기능을 간단한 조작으로 최적조건을 얻을 수 있음
- Over input voltage, Over Output current, Filtering the over-heated parts (diode, IC chip, etc.)
- High speed welding and stable welding
- Improvment of arc start
- Simple setting of weld schedule
- Easy automation by bracket for special purposed equipment
- Internally installation of protector.
- Improving arc stability, Lowspatter constant arc welding
- Constant Arc welding and fine and good-looking bead through the improvement of Arc curve features.
- Good and perfect Arc start through the compensative Arc circuit program.
- Various function, simple operation.

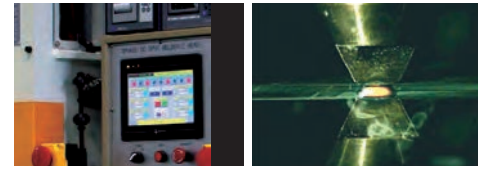


표준사양 / Standard Specification

Model		SH-350IX	SH-500IX	SH-650IX
Rated output current	A	350	500	650
Input Voltage	V	220/380/440	220/380/440	220/380/440
Phase	φ	3	3	3
Rated Frequency	Hz	50/60	50/60	50/60
Rated input	KVA	18.1	32	43
Rated Duty Cycle	%	60	60	60
Output Current	A	60~350	60~500	60~650
Output Voltage	V	15~36	15~42	15~44
Noload Voltage	V	70	75	80
(W×D×H) Dimensions (W×D×H)	mm	350×550×500	350×600×500	350×600×550
(Weight) Approx	kg	50	56	65

IGBT 인버터 TIG 아크 용접기

IGBT INVERTER CONTROL TYPE DC PULSE TIG ARC WELDING MACHINE



SH - 200DT / SH - 300DT / SH - 500DT



특징 / Distinctive features

- IGBT 인버터 방식 채용
- 탁월한 순간 아크 스타트
- TIG 및 직류 ARC 용접
- 리모트박스 기본사양 (4m)
- 단상, 삼상 겸용
- 기, 용접, 크레이터 전류 개별 조정
- 아크 스폿 기능 추가
- 완벽한 보호기능
 - 이상 표시등 (온도, 입력 전원)
 - Circuit Protector (NFB)
 - 결상 검출 회로
- Adapt IGBT inverter type
- Superior instant arc start
- Tig and DC arc welding
- Basic specification of remote box (4m)
- Single phase and three phase, dual use.
- Separate adjustment of start and crater welding current
- Add arc spot function
- Perfect protection function
 - Malfunction display lamp (Temperature, input power)
 - Circuit protector (NFB)
 - Omission phase detect circuit



표준사양 / Standard Specification

Model			SH-200DT	SH-300DT	SH-500DT
Rated output current	A		200	300	500
Rated input voltage	V		1 ϕ 220	1 ϕ , 3 ϕ 220/380/440	1 ϕ , 3 ϕ 220/380/440
Rated frequency	Hz		50/60	50/60	50/60
Output Current	TIG	A	5~200	5~300 (1 ϕ 240)	5~500 (1 ϕ 320)
	DC ARC	A	5~180	5~240 (1 ϕ 180)	5~450 (1 ϕ 300)
Output Voltage	TIG	V	18	22	24
	DC ARC	V	26	32	40
Rated Input	TIG	KVA	6.3 (4.7kw)	10.2 (7.9kw) 1 ϕ 6.3 (4.7kw)	18 (16kw) 1 ϕ 12 (8kw)
	DC ARC	KVA	7.0 (5.2kw)	11.8 (9.4kw) 1 ϕ 7.0 (5.2kw)	21 (18kw) 1 ϕ 17 (12kw)
Rated Duty Cycle	%		40	60	60
No-load Voltage	V		65	70	75
(W×D×H) / Dimensions (W×D×H)	mm		170×380×280	260×430×380	350×550×500
Weight (Approx)	kg		20	25	55

교류/직류 TIG 아크 용접기

AC/DC PULSE TIG ARC WELDING MACHINE



SH - 350AD / SH - 500AD



특징 / Distinctive features

- 각종 보호기능 내장
- 용접시 스퍼터가 적고 아크가 안정
- 아크 길이 변화시에도 아크 끊김이 없이 일정한 아크유지
- 아크스타트 보상회로 채택으로 순발아크스타트
- 다양한 용접기능을 간단한 조작으로 최적조건을 얻을 수 있음.
- 과전압, 과출력전류, 소자이상 온도상승 검출등 각종 보호 기능 내장
- 고속용접 및 아크 안정성향상
- 아크스타트 특성개선
- Internally installation of protector.
- Improving arc stability, Lowspatter constant arc welding
- Constant Arc welding and fine and good-looking bead through the improvement of Arc curve features.
- Good and perfect Arc start through the compensative Arc Circuit program.
- Various function, simple operation.
- Over input voltage, Over Output current, Filtering the over-heated parts (diode, IC chip, etc.)
- High speed welding and stable welding
- Improvment of arc start

표준사양 / Standard Specification

Model			SH-350AD	SH-500AD	Model		SH-350AD	SH-500AD
Welding method		-	A.C/D.C/MIEXD TIG & MMA		Rated pulse current range	A	5~350	5~500
Input voltage		V	1~3 ϕ 220V/380/440 ±10%		Low pulse frequency	Hz	0.5~15	0.5~15
Rated frequency		Hz	50~60		Middle pulse frequency	Hz	15~500	15~500
input power	TIG	K.V.A	14 (10.5KW)	19 (16KW)	Pulse width adj range	%	20~80	20~80
	MMA	K.V.A	14.6 (11.4KW)	21 (18KW)	after flow time	sec	0.1~25	0.1~25
Welding current range	TIG	A	5~350	5~500	Rated load voltage	V	24	30
	MMA	A	10~290	20~400	Rated duty cycle	%	60	80
Rated inital current range		A	5~350	5~500	(W×D×H) External size	mm	350×550×500	350×600×500
Rated crater current range		A	5~350	5~500	Weight	kg	≒55	≒62

에어 플라즈마 절단기

AIR PLASMA CUTTING MACHINE



SH - 50P / SH - 70P / SH - 100P / SH - 120P / SH - 150P



특징 / Distinctive features

- IGBT 인버터방식 채용
- 소형, 경량화, 고기능화 실현
- 모든 금속이 깨끗하게 절단
- 가스 절단에 비해 가늘고 저렴한 절단
- 보호기능 내장
(입력, 온도, AIR 이상진단)
- Adapt IGBT inverter type
- Low-cost cutting
- All kind materials cutting
- High speed cutting and low running cost
- Clean cutting surface and very small cutting width, safety cutting

표준사양 / Standard Specification

모 델 (Model)		SH-50P	SH-70P	SH-100P	SH-120P	SH-150P
Rated output current	A	50	70	100	120	150
Input Voltage	V	1 φ, 3 φ 220	1 φ, 3 φ 220	1 φ, 3 φ 220/380	1 φ, 3 φ 220/380	1 φ, 3 φ 220/380
Rated frequency	Hz	50/60	50/60	50/60	50/60	50/60
Rated input	KVA	9.5	12	19	25	28.5
Rated Output Voltage	V	120	130	140	150	160
No-load Voltage	V	250	280	280	300	320
Rated Duty Cycle	A	40	40	60	60	80
Output Current	%	20~50	20~70	20~100	20~120	20~150
(W×D×H) Dimensions (W×D×H)	mm	270×410×390	270×410×390	350×550×500	350×600×500	350×600×500
(Weight) Approx	kg	25	27	45	52	55

A.C ARC 용접기 & AIR ARC 가우징 머신

A.C ARC WELDING & AIR ARC GOUGING MACHINE



A.C Arc 용접기 / 에어 아크 가우징 머신 (Gouging & Blasting)



특징 / Distinctive features

- 전류 조절이 연속적이고 미세조절가능
- 박판, 후판의 용접에 적합
- 아크의 안정으로 작업능률 향상
- 코일은 H종 절연으로 내열, 내습성 향상
- Current change is continuous and detailed change is possible
- Appropriate for thick plate welding
- Increased operational efficiency with stable arc
- Heatproof with temperance in smoking of Type H coil, improved wetproof

표준사양 / Standard Specification

모델 (Model)	정격용량 Rated Capacity		출력전류 Output Current	무부하전압 No Load Voltage	부하전압 Load Voltage	사용율 Duty Cycle	용접케이블 Welding Cable	용접봉 Welding Electrodes	중량 weight
	KVA	KW	V	V	V	%	mm ²	mm ²	Kg
SHA-100	7	3.5	100A	65	25	35%	22	1.6~3.2	39
SHA-120	10	5	120A	65	25	35%	22	1.6~3.2	45
SHA-180	15	7.5	180A	70	30	35%	30	3.2~4.0	95
SHA-240	20	10	240A	75	35	45%	38	3.2~4.0	105
SHA-300	24	12	300A	80	40	45%	38	3.2~5.0	115
SHA-360	30	15	360A	80	40	40%	50	3.2~5.0	130
SHA-480	40	20	480A	85	42	50%	50	4~6.0	145
SHA-720	60	30	720A	90	45	60%	80	4~8.0	185



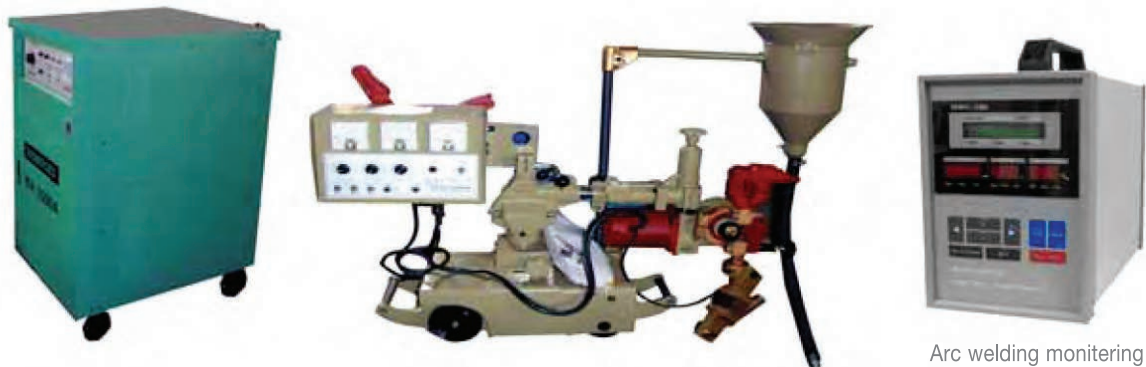
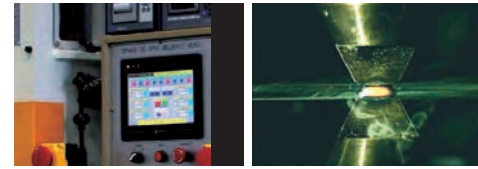
특징 / Distinctive features

- 구멍확장, 절단, 홈파기, 비드제거 등 여러가지 형상에 따른 그 사용용도가 다양합니다.
- 가우징절단면이 깨끗하여 재용접시 용착이 잘되며 중공업, 조선분야에서 널리 사용됩니다.
- 작업능률이 높고 소비전력이 절감되어 타가종에 비해 유지면에서 경제적입니다.
- Wide application such as enlarging hole, chipping, grooving, and removing bead etc.
- Good at re-welding with clean cutting section.
- Propet complement for heavy industry and shipbuilding
- Economic running cost with high efficiency of working.

Model		SH-600	SH-800	SH-1000	SH-1200	SH-1500
Rated output current	A	600	800	1000	1200	1500
Rated input voltage	V	3 φ 220/380/440	3 φ 220/380/440	3 φ 220/380/440	3 φ 220/380/440	3 φ 220/380/440
Rated frequency	Hz	50/60	50/60	50/60	50/60	50/60
Rated Input	KVA	42	58	75	82	120
Rated of useness	%	60	60	80	80	80
Rated unload voltage	V	70	75	78	80	85
Rated load voltage	V	40	40	42	45	45
(W×D×H) External size	m/m	610×900×1000	790×980×1140	790×1070×1140	810×1070×1230	810×1090×1230

서브머지드 용접기

Submerged Welder



표준사양 / Standard Specification

1. Welding machine
 - 1) INPUT VOLTAGE: 415V, 3PHASE
 - 2) INPUT CAPA.: 120kVA
 - 3) OUTPUT CURRENT RANGE: 200 ~ 1500A
 - 4) OUTPUT VOLTAGE RANGE: 20 ~ 44V
 - 5) MAX.NO-LODE VALTAGE: 85V
 - 6) USING: 100%
 - 7) SIZE: 750 * 1170 * 1585
 - 8) WEIGHT: 750Kg
2. Carriage
 - 1) WIRE SIZE: 3.2 ~ 4.8DIA
 - 2) SPEED: 10 ~ 1000mm/min
 - 3) nozzle: ver50mm/hor50mm
 - 4) Hoper capa.: 6L
 - 5) WIRE MOTOR:60W DC (SUB)
 - 6) SPEED CONTROL: SCR CONTROL
 - 7) CURRENT/VOLTAGE MONITERING: (NWC-1000MS SD type)

특징 / Distinctive features

- With efficiency of top it is uniform and there is a possibility of getting the welding which is stabilized
- The ship construction, the steel infrastructure, the automobile and pressure vessel, it could be used in the welding which it sells profoundly, it is devised
- The IC it adopts THYRISTOR control circuit, it has both a continue voltage and continuecurrent type quality..

악세사리 / Accessory

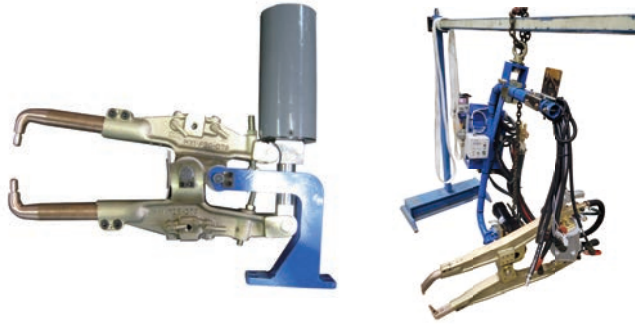
1. Cable150SQ * 10m : 1 set
2. RAIL1800mm : 2EA
3. FUSE: 3EA4. MANUAL

용접 건 & 전극

GUN ASS'Y & ELECTRODE



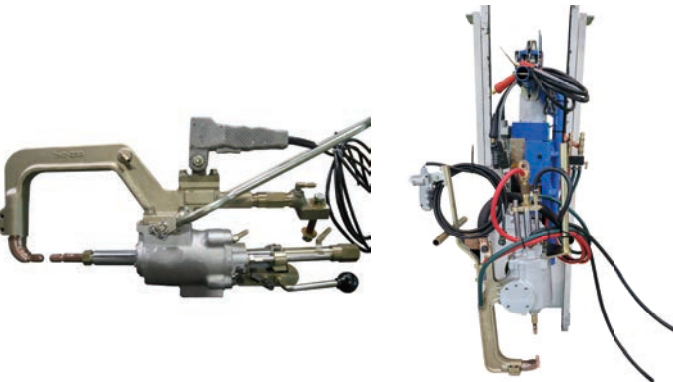
X-GUN



특징 / Distinctive features

- 협소한 작업공간에도 적용가능한 COMPACT 형
- 견고하고 전도성이 우수한소재 (KMS3)적용
- 저렴한 유지보수 및 편리한 보전성
- Compact size and fit for installation at limited working space
- Utilizes durable materials high in conductivity (KMS3)
- Affordable and convenient maintenance

C-GUN



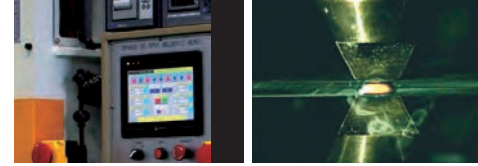
특징 / Distinctive features

- GUN ARM이 주물형
- 적용범위가 광범위함
- 내구성이 좋아 사고한 현상트러블이 없음
- 조작성이 편리함
- 제조원가에서 원자재 구성비가 저렴함
- Cast-type gun arm
- A broad scope of applications
- Durable and no minor troubles
- easy operation
- Raw materials take a very small portion out of the manufacturing costs

캡 팁 (CAP TIP)

구분 Model	형상(Shape)	제품(Product)	외경(Outer D)	전장(Length)	내경(Inner D)	내경각도(Taper)
포인트형 Pointed Electrodes		T-13-P	Φ 13	20	Φ 10.0	1/9.6
		T-16-P	Φ 16	23	Φ 12.6	1/9.6
		T-19-P	Φ 19	25	Φ 14.0	1/10.0
구면형 Radius Electrodes		T-13-R	Φ 13	20	Φ 10.0	1/9.6
		T-16-R	Φ 16	23	Φ 12.6	1/9.6
		T-19-R	Φ 19	25	Φ 14.0	1/10.0
원추형 Cone Electrodes		T-13-C	Φ 13	20	Φ 10.0	1/9.6
		T-16-C	Φ 16	23	Φ 12.6	1/9.6
		T-19-C	Φ 19	25	Φ 14.0	1/10.0
편심형 Eccentric Electrodes		T-13-E	Φ 13	20	Φ 10.0	1/9.6
		T-16-E	Φ 16	23	Φ 12.6	1/9.6
		T-19-E	Φ 19	25	Φ 14.0	1/10.0
평면형 Flat Electrodes		T-13-F	Φ 13	20	Φ 10.0	1/9.6
		T-16-F	Φ 16	23	Φ 12.6	1/9.6
		T-19-F	Φ 19	25	Φ 14.0	1/10.0
돔형 Dome Electrodes		T-13-D	Φ 13	20	Φ 10.0	1/9.6
		T-16-D	Φ 16	23	Φ 12.6	1/9.6
		T-19-D	Φ 19	25	Φ 14.0	1/10.0

전극 ELECTRODE



밴딩형(BENDING SHANK) - BeCu

DRAW	CODE	MODEL	L1	L2	B	H
	742250	TWB-092-250	53	25	50	9
	742260	TWB-092-260	63	35	60	9
	742280	TWB-092-280	83	55	80	9
	742450	TWB-092-450	53	25	50	13
	742460	TWB-092-460	63	35	60	13
	742480	TWB-092-480	83	55	80	13
	742660	TWB-092-660	63	35	60	19
	742680	TWB-092-680	83	55	80	19
	742600	TWB-092-600	103	75	100	19
DRAW	CODE	MODEL	L1	L2	B	H
	741151	NWS-092-151	55	26	51	5
	741161	NWS-092-161	65	36	61	5
	741171	NWS-092-171	75	46	71	5
	741351	NWS-092-351	55	26	51	10
	741361	NWS-092-361	65	36	61	10
	741371	NWS-092-371	75	46	71	10
	741561	NWS-092-561	65	36	64	15
	741571	NWS-092-571	75	46	71	15
	741581	NWS-092-581	85	56	81	15

일자형(STRAIGHT SHANK) - BeCu

DRAW	CODE	MODEL	L1	L2	B
	732140	TWS-091-40	42	17	40
	732150	TWS-091-50	52	27	50
	732160	TWS-091-60	62	37	60
	732180	TWS-091-80	82	57	80
	732100	TWS-091-00	102	77	100
DRAW	CODE	MODEL	L1	L2	B
	732240	TWS-092-40	44	15	40
	732250	TWS-092-50	54	25	50
	732260	TWS-092-60	64	35	60
	732280	TWS-092-80	84	55	80
	732200	TWS-092-00	104	75	100
DRAW	CODE	MODEL	L1	L2	B
	732140	TWS-091-40	42	17	40
	732150	TWS-091-50	52	27	50
	732160	TWS-091-60	62	37	60
	732100	TWS-091-00	102	77	100
DRAW	CODE	MODEL	L1	L2	B
	732140	TWS-091-40	42	17	40
	732150	TWS-091-50	52	27	50
	732160	TWS-091-60	62	37	60
	732100	TWS-091-00	102	77	100
DRAW	CODE	MODEL	L1	L2	B
	732240	TWS-092-40	44	15	40
	732250	TWS-092-50	54	25	50
	732200	TWS-092-00	104	75	100

밴딩형(BENDING SHANK) - BeCu

DRAW	DRAW																				
<table border="1"> <tr> <th>외경 (OUTER DIMENSION)</th><th>외경 (OUTER DIMENSION)</th></tr> <tr> <td>길이 (LENGTH)</td><td>φD1 X φD2</td></tr> <tr> <td>높이 (HEIGHT)</td><td>L1, L2</td></tr> <tr> <td>각도 (ANGLE)</td><td>H</td></tr> <tr> <td>TAPPER</td><td>φD4, 1/10, 1/20</td></tr> </table>	외경 (OUTER DIMENSION)	외경 (OUTER DIMENSION)	길이 (LENGTH)	φD1 X φD2	높이 (HEIGHT)	L1, L2	각도 (ANGLE)	H	TAPPER	φD4, 1/10, 1/20	<table border="1"> <tr> <th>외경 (OUTER DIMENSION)</th><th>외경 (OUTER DIMENSION)</th></tr> <tr> <td>길이 (LENGTH)</td><td>φD1 X φD2</td></tr> <tr> <td>높이 (HEIGHT)</td><td>L1, L2</td></tr> <tr> <td>각도 (ANGLE)</td><td>H</td></tr> <tr> <td>TAPPER</td><td>φD4, 1/10, 1/20</td></tr> </table>	외경 (OUTER DIMENSION)	외경 (OUTER DIMENSION)	길이 (LENGTH)	φD1 X φD2	높이 (HEIGHT)	L1, L2	각도 (ANGLE)	H	TAPPER	φD4, 1/10, 1/20
외경 (OUTER DIMENSION)	외경 (OUTER DIMENSION)																				
길이 (LENGTH)	φD1 X φD2																				
높이 (HEIGHT)	L1, L2																				
각도 (ANGLE)	H																				
TAPPER	φD4, 1/10, 1/20																				
외경 (OUTER DIMENSION)	외경 (OUTER DIMENSION)																				
길이 (LENGTH)	φD1 X φD2																				
높이 (HEIGHT)	L1, L2																				
각도 (ANGLE)	H																				
TAPPER	φD4, 1/10, 1/20																				

아답터(ADAPTER)

DRAW

Technical drawing of a hexagonal nut. Dimensions are labeled: A (outer diameter), B (length), C (hole diameter), D (taper), E (hex length), F (thread length), G (hex outer diameter), and H (thread).

A	외경(DIAMETER)	고객사요청 (CUSTOMER REQUEST)
B	길이(LENGTH)	고객사요청 (CUSTOMER REQUEST)
C	내경 (HOLE DIAMETER)	기본규격(STANDARD)
D	테이퍼(TAPER)	기본규격(STANDARD)
E	육각길이 (HEX LENGTH)	기본규격(STANDARD)
F	나사부길이 (THREAD LENGTH)	기본규격(STANDARD)
G	육각외경(HEX)	고객사요청 (CUSTOMER REQUEST)
H	나사(THREAD)	P.T OR N.P.T

DRAW

Technical drawing of a hexagonal bolt. Dimensions are labeled: A (hex outer diameter), B (length), C (thread length), D (taper), E (hex length), F (thread length), G (hex outer diameter), and H (thread).

A	육각외경(HEX)	고객사요청 (CUSTOMER REQUEST)
B	길이(LENGTH)	고객사요청 (CUSTOMER REQUEST)
C	나사부길이 (THREAD LENGTH)	기본규격(STANDARD)
D	테이퍼(TAPER)	기본규격(STANDARD)
E	나사(THREAD)	P.T OR N.P.T

전극 ELECTRODE



SEAM HOUSING



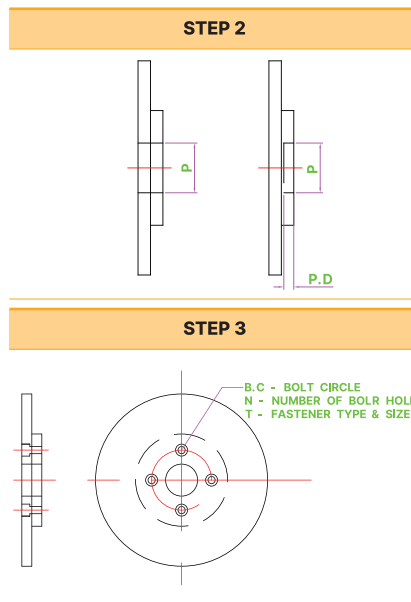
특징 / Distinctive features

- 전기 저항 용접의 일종, 비교적 얇은 금속판의 이음 용접에 사용하는 방법이다.
- 용접부를 겹치거나 맞대어 붙인 다음 이것을 전극(電極)을 이루는 한 쌍의 롤러 사이에 삽입하고 롤러의 회전에 의하여 차례로 접합선에 따라서 연속적으로 용접하는 방법이다.
- Resistance Seam welding is a high-speed resistance welding process that produces leak-tight, continuous joints for sheet metal applications.
- In seam welding, the sheet metal parts are clamped between rotating wheel electrodes that transmit continuous pulses of electrical current while advancing the work piece, forming a series of overlapping weld nuggets.



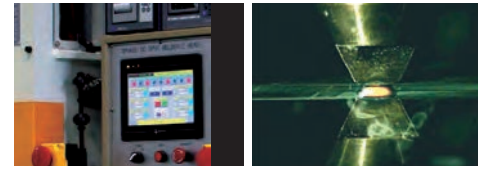
전극 휠(SEAM WELDER WHEEL)

STEP 1			
TYPE 1	TYPE 2	TYPE 3	TYPE 4
TYPE 5	TYPE 6	TYPE 7	TYPE 8



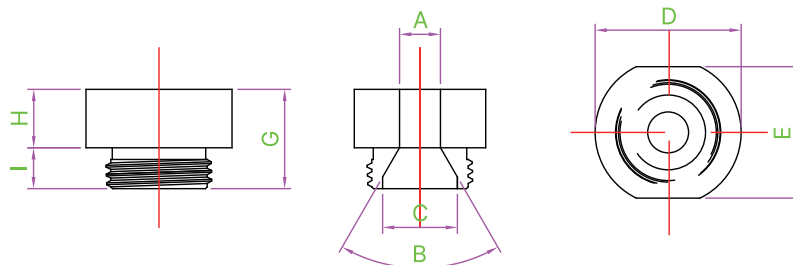
- STEP 1** - 전극 휠의 타입을 결정 & 치수 결정 : D1-휠외경, D2-결합부외경, F-용접두께, W-휠두께, R-R값
(CHOOSE WHEEL TYPE : D1-WHEEL DIA, D2-HUB DIA, F-WELD FACE, W-WHEEL THICKNESS, R-RADIUS)
- STEP 2** - 전극 휠의 내경을 결정한다. P - 결합부 내경, P.D - 결합부 깊이
(CHOOSE PILOT TYPE - P - PILOT DIA, P.D - PILOT DEPTH)
- STEP 3** - 볼트 결합 타입 및 개수 결정 : B.C. - 볼트 중심외경, N - 볼트 개수, T - 볼트 타입 및 사이즈
(MOUNTING DEFINITION - B.C. - BOLT CIRCLE, N - NUMBER OF BOLT HOLE, T - FASTENER TYPE & SIZE)

전극 ELECTRODE



Stud & Nut Welding Air Assemblies

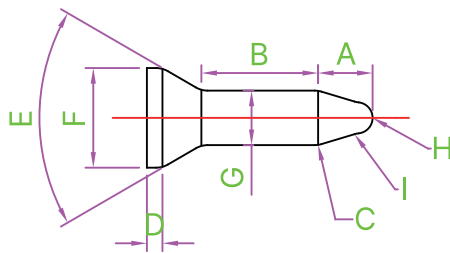
DRAW



A	내경(HOLE DIAMETER)	고객사요청 (CUSTOMER REQUEST)
B	테이퍼(TAPER)	고객사요청 (CUSTOMER REQUEST)
C	내경(HOLE DIAMETER)	고객사요청 (CUSTOMER REQUEST)
D	외경(DIAMETER)	고객사요청 (CUSTOMER REQUEST)
E	외경(DIAMETER)	고객사요청 (CUSTOMER REQUEST)

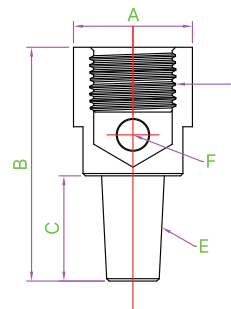
F	나사(THREAD)	고객사요청 (CUSTOMER REQUEST)
G	길이(LENGTH)	고객사요청 (CUSTOMER REQUEST)
H	길이(LENGTH)	고객사요청 (CUSTOMER REQUEST)
I	길이(LENGTH)	고객사요청 (CUSTOMER REQUEST)

DRAW



A	길이(LENGTH)	고객사요청 (CUSTOMER REQUEST)
B	길이(LENGTH)	고객사요청 (CUSTOMER REQUEST)
C	R	고객사요청 (CUSTOMER REQUEST)
D	길이(LENGTH)	고객사요청 (CUSTOMER REQUEST)
E	테이퍼(TAPER)	고객사요청 (CUSTOMER REQUEST)
F	외경(DIAMETER)	고객사요청 (CUSTOMER REQUEST)
G	외경(DIAMETER)	고객사요청 (CUSTOMER REQUEST)
H	R	고객사요청 (CUSTOMER REQUEST)
I	테이퍼(TAPER)	고객사요청 (CUSTOMER REQUEST)

DRAW



A	외경(DIAMETER)	고객사요청 (CUSTOMER REQUEST)
B	길이(LENGTH)	고객사요청 (CUSTOMER REQUEST)
C	길이(LENGTH)	고객사요청 (CUSTOMER REQUEST)
D	나사(THREAD)	고객사요청 (CUSTOMER REQUEST)
E	테이퍼(TAPER)	고객사요청 (CUSTOMER REQUEST)
I	탭(TAP THREAD)	고객사요청 (CUSTOMER REQUEST)

기타 장비

Other equipment



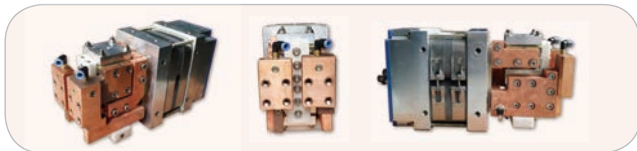
INVERTER 트랜스포머 / INVERTER transformer

SHWT-100kVA



Size	100 X 100 X 276L
Weight	8kg
Max. 2nd Current	21kA

SHWT-200kVA



Size	130 X 188 X 335L
Weight	26kg
Max. 2nd Current	40kA

악세사리 / Accessory

전극부 / Electrode



모든 조건에 만족되는
품질의 SHANK와
HOLDER Cu-AI203
TIP보다 우수한 성능의
NITRO TIP 공급

케이블 / Welding cable



KICKLESS CABLE
SUB CABLE
JUMP CABLE

CO₂ TORCH

CO₂ MANUAL TORCHCO₂ AUTOMATIC TORCH

Tig Spare Parts



▲ Tig torch a' ssu

1	2	3	4	5
Torch S/W	Collet body	collet chuck	ceramic nozzle	Long cap
6	7	8	9	10
Short cap	Head connector	S/W connector	Water cooling line	Gas line

▲ Torch head 350A

▲ Torch head 500A

Plasma Spare Parts



▲ Plasma torch a' ssy

▲ P-80 torch head

▲ M-3000 torch head

▲ Plasma compass

Technology Certification



Technology Certification





SHINHWA WELTEC
(주)신화윌텍

신화윌텍 본사

Head office/Plant _ SHIN HWA WEL TEC CORPORATION
(14930) 경기도 시흥시 수인로 3122번길 41-1 (안현동)
41-1, Suin-ro 3122beon-gil, Shieung-si, Gyeonggi-do, Korea
zip code: 14930

TEL : +82-32-655-1179 FAX : +82-32-656-1179 MOB: +82-10-3688-1179
+ 91-99718-98060

E-mail : lgc12@hanmail.net / lgc12027@gmail.com



인도 사무소

India Sales Office _ SHINHWA WELTEC INDIA PVT LTD.,
L1, 2nd Floor, South Extension PartII, New Delhi-110049, India
TEL : +91-11-4555-7928 MOB : +91-99103-34125 / +91-98100-61511