



AUTOWEL

Total Welding Solution

ISO9001 / ISO14001

“

AUTOWEL

Welder making a special business

Starting from auto welding machine manufacturer specialized in 1988.
Changed company's name to Autowel Co. in 2002, and started as one of leading
company of welding and cutting machine with very stable quality.

1988년 자동화 용접전문회사에서 출발하여 2002년 회사명을 오토웰로 변경,
표준용접기기 개발 및 생산을 시작하였고 국내 용접기기 제작사의 선두주자로
안정된 기초를 다졌습니다.

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TECHNOLOGY

- Patents of DC MMA for AI welder, TIG Remote controller
- Durability, uniformity and stability of SCR welder proven by customers
- Application of MICOM by own technology
- Own development of control electronic circuit and power
- Own development of Control SW
- Own development of Plasma welder with graphical touch panel
- Design and optimization of Auto welding machine
- Design of Transformer
- Production process control and quality control systematized
- 특허 2건 (알루미늄 DC ARC, TIG 리모트 장치)
- 조선 철구 중공업 플랜트부분 SCR 용접기기 내구성 및 안정성 확인
- SCR CO₂/MAG/MIG 용접기기 MICOM 방식 도입 (정전류/정전압 기능, 과전류 보호기능, 절전기능)
- 용접기기 전자회로 및 Power 부분 자체개발
- 제어부분 프로그램 자체개발
- Plasma 용접기 개발, 양산 (전기능 디지털 방식)
- 자동용접기기 설계 및 제조 (저항SPOT, TIG 및 CO₂ 자동용접) 기술
- Transformer 설계 및 제조기술
- 표준용접기기 생산기술 및 품질관리 체계화
- Submerged Carriage 설계 및 제조기술

CERTIFICATES





CONTENTS

- 1988** Founded DongWon Welding Co.
- 1990** Launching Shunt resistance welding machine
- 1992** Developed 'Auto SAW system' for steel pipe
- 1998** Registered DRAGON brand
- 2002** Founded Autowel Co.
- 2004** Launching almost all kinds of Standard welding machine.
- 2005** Changed to stock company, and merged with DongWon Ind. Co.
- 2006** Certificate of KSA/ISO14001:2004
- 2007** Certificate of MAINBIZ company from SMBA / Move to new factory constructed by Autowel
/ Exclusive supplier of welding machine to one Korean Shipbuilding company
/ Patent of AI Inverter welding machine
- 2008** Launch Plasma welding machine / Certificate of R&D Center
/ Certificate of INNO BIZ by SMBA / Newly founded Transformer factory
/ Nomination of Excellent Quality's Items by local government
- 2009** Participating in Going Export Business / Participating in Private-based Overseas Expansion Business
/ Participating in Export 500 Project / Certificate of CE
/ Nomination of company taking technical consulting for patent
/ Nomination of Components & Materials Company / Nomination of KOTRA Seal of Excellence
/ Nomination of Partner of Korea Institute of Industrial Technology
/ Nomination of Promising Small & Medium Enterprise
/ Nomination of Small & Medium Enterprise cooperating with Korea Western Power Co., Ltd.
/ Nomination of Clean Business Field
/ Registration of a patent for Remote control for TIG welding machine

HISTORY

- 1988 6월** 동원산업전기설립 (용접기제조업)
- 1990 1월** 선트 저항용접기기 개발
- 1992 2월** SAW 자동용접기기 강관파이프용 내면/외면 겸용 용접기기 개발
- 1998 7월** DRAGON 상표등록
- 2002 11월** 오토웰 상호 변경 및 대표자 변경
- 2004 1월** 표준용접기기 전 품목 생산
- 2005 12월** (주)오토웰 법인전환 / 동원산업전기 합병
- 2005 6월** ISO9001:2000 인증
- 2006 3월** KSA/ISO14001:2004 인증
- 2007 3월** 알루미늄 인버터용접기기 실용신안 등록
- 2007 4월** 경영혁신 중소기업 (MAIN-BIZ) 인증
- 2007 10월** 선박 중공업부분 CO₂ 용접기 및 SAW 공급
- 2007 12월** 신 공장 이전 (남동공단 363-4번지 건축 완료)
- 2008 1월** Plasma 용접기 개발
- 2008 2월** 기업부설기술연구소 설립 / 알루미늄 인버터 용접기 특허 등록
- 2008 3월** Transformer 생산 / 기술혁신 중소기업 (INNO-BIZ) 인증
- 2008 6월** 벤처기업 선정 / 수출유망중소기업 인증
- 2008 7월** 품질우수제품 선정
- 2008 11월** 병역특례업체 선정
- 2009 2월** 수출기업화사업 선정 (중소기업청) / 해외민간거점활용사업 선정 (중소기업진흥공단)
- 2009 3월** 수출500프로젝트 참여기업 선정 (중소기업청) / CE인증 획득
- 2009 4월** 특허기술지도업체 선정 (인천지식센터) / 부품소재전문기업 선정 (지식경제부)
/ KOTRA 보증 브랜드 선정
- 2009 5월** 한국생산기술연구원과 파트너쉽 협약
- 2009 7월** 인천시 유망중소기업 선정
- 2009 8월** 한국서부발전㈜ 협력중소기업 선정
- 2009 11월** 클린 사업장 인정
- 2009 12월** TIG 용접기 리모콘 기능 특허 등록

- 04** Thyristor submerged ARC Welder
서브머지드 자동 용접기
- 05** Submerged Auto Carriage
서브머지드 자동 캐리지
- 06** Manipulator / Turning Roller
매니퓰레이터 / 터닝 롤러
- 07** Submerged Welding
서브머지드 용접
- 08** Built-up Beam Machine / CNC Cutting Machine
H-빔 제작기 / 자동 절단기
- 09** Gouging Machine
가우징
- 10** Thyristor CO₂/MAG/MIG Welder
Thyristor CO₂/MAG/MIG 용접기
- 11** Thyristor CO₂/MAG/MIG Welder
Thyristor CO₂/MAG/MIG 용접기
- 12** Inverter CO₂/MAG/MIG Welder
인버터 CO₂/MAG/MIG 용접기
- 13** Inverter Pulse MIG Welder
인버터 펄스 MIG 용접기
- 14** Inverter DC ARC Welder
인버터 DC ARC 용접기
- 15** Thyristor DC ARC Welder
Thyristor DC ARC 용접기
- 16** Inverter DC TIG/MMA Welder
인버터 DC TIG/MMA 용접기
- 17** Inverter DC Pulse TIG/MMA Welder
인버터 DC 펄스 TIG/MMA 용접기
- 18** Inverter AC/DC Pulse TIG/MMA Welder
인버터 AC/DC 펄스 TIG/MMA 용접기
- 19** Saturable Reactor DC TIG Welder
가포화 DC TIG 용접기
- 20** Plasma ARC Welder
플라즈마 용접기
- 21** Orbital Auto Welding System (TIG/Plasma)
원주 자동용접장치 (TIG/Plasma)
- 22** Inverter Plasma Cutter
인버터 플라즈마 절단기
- 23** Inverter Plasma Cutter
인버터 플라즈마 절단기
- 24** ARC Stud (DRAGON/Stud Series)
아크 스타드
- 25** CD Stud Welder / AC ARC Welder
스타드 용접기 / 교류 ARC 용접기
- 26** Multi Operator Station SMAW/TIG/Gouging Welder
멀티 오퍼레이터 스테이션 SMAW/TIG/가우징 용접기
- 27** Multi Operator Station DC MMA Welder
멀티 오퍼레이터 스테이션 DC MMA 용접기
- 28** Portable Spot / Auto Resistance Welder
포터블 스폿 / 자동 저항용접기
- 29** Resistance Welder
저항용접기
- 30** Mini Seg-ARC Auto Welding Carriage (EGW)
미니 EGW 용접 캐리지
- 31** Auto Carriage
오토 캐리지
- 32** Accessory
엑세서리
- 33** Accessory
엑세서리
- 34** Accessory
엑세서리
- 35** Transformer
용접기 변압기



Thyristor submerged ARC Welder

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AUTOWEL
(주)오토웰

서브머지드 자동 용접기 (DRAGON/SAW Series)

Auto welding machine with abundant heat capacity and durability to be applied to shipbuilding, heavy ind., steel beam, plant engineering and many other fields. Providing very high speed welding with fine welding quality.

조선, 중공업, 철구, 플랜트 사업 등에 광범위하게 적용되는 자동화 용접기로 간편한 조작 및 풍부한 열적용량과 내구성을 갖춘 장비. 고속용접 및 우수한 용접성능을 보장.

FEATURE 특징

- Wide range of input voltage : $\pm 15\%$
- Sufficient heat capacity and durability
- Operator friendly carriage control panel
- Function for adjusting wide range of pole and angle
- Tandem function as per AC-AC and DC-AC combination
- Hi-efficiency welder as per hi-speed and hi-quality welding
- Save expenses via deep melting and narrow bead
- Very stable moving carriage
- Warning for over load and temperature
- 광대역 입력 전압: $\pm 15\%$
- 풍부한 열적용량 및 내구성 확보
- 사용자 친화적 대차 조작판
- 전극간격 및 각도의 광대역 조정
- AC-AC 및 DC-AC 조합으로 탠덤 적용
- 고속용접 및 고품질 비드로 고효율 용접
- 깊은 용입 및 좁은 개선탄으로 비용절감
- 안정된 주행성 확보
- 과부하 및 과열 경고 및 정지



SPECIFICATIONS

Description	Unit	AC Type			DC Type		
		1000SA	1500SA	2000SA	1000SD	1500SD	2000SD
Rated input electricity	V, Hz	1P (380)220/415/440 50/60			3P (380)220/415/440 50/60		
Rated input power	KVA	90	135	180	80	120	160
Output current range	A	300~1000	300~1500	300~2000	100~1000	150~1500	200~2000
Max. no load voltage	V	90			80		
Duty cycle	%	80					
Insulation class		H					
Projection class		IP23					
Dimension (W×D×H)	mm	600×800×1200	820×1120×1380		600×800×1200	820×1120×1380	
Weight	Kg	300	500	670	350	600	640

※ The specification can be changed without notice to be upgraded.



Submerged Auto Carriage

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서브머지드 자동 캐리지

FEATURE

특징

- Using very strong wire motor, and delivering wire very smoothly
- Strong OP panel, and high efficiency with user-friendly design
- Very clean and qualified welding bead is guaranteed
- Inclined and wave plate is to be welded uniformly
- 강력한 와이어공급모터를 사용하여 원활한 와이어 공급
- 강도가 세고 사용자 편의 집중방식 설계로 능률적임
- 기울어진 판이나 곡면판에도 용접이 균일함
- 고품질로 깨끗한 비드 형성
- Seam Tracker is the device that automatically moves welding torch to welding line by moving slides of up/down/left/right tracking shape or distortion of welding product by sensor.
- It displays various performance in welding and cutting of product. Specially, it is excellent to submerged ARC welding.
- 용접물의 형상이나 변형을 센서의 안내에 의해 추적하면서 상하좌우 슬라이드의 이동으로 용접 토치를 자동으로 용접라인으로 이동시켜주는 장치
- 제품의 용접 및 절단 등 여러 분야에서 안전하고 완벽하게 성능을 발휘하며 특히 서브머지드 아크 용접에 뛰어난 성능을 발휘함



AT-102



AT-45CB



AT-25CH



AT-25CT

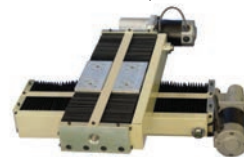
SEAM TRACKER (AT-200ST)



Controller
컨트롤러



Sensor
센서



X-Y Slider
X-Y 슬라이더

SPECIFICATIONS

Description	Unit	AT-25CT	AT-25CH	AT-45CB	AT-102	AT-25CMT
Welding wire dia.	φ(mm)	2.4~6.4		2.4~4.8	1.6~2.4	2.4~6.4
Running speed	cm/mm	15~100		10~100		15~150
Wire supply motor	W	150 W DC	150 W DC	120 W DC	75 W DC	150 W DC
Nozzle control range	↑ (mm)	75		45	30	75
	↓ (mm)	100		50	30	100
Hopper capacity	ℓ	12		6	5	12
Welding source		AC and/or DC				
Welding method		Tandem	H-Beam	Butt Joint	Fillet-Butt	Manipulator
Dimension (W×D×H)	mm	1500×730×1500	1300×450×850	960×450×690	360×280×680	1500×730×1500
Weight	Kg	170	100	65	25	170
Rail	m			1.8	1.8	

※ The specification can be changed without notice to be upgraded.



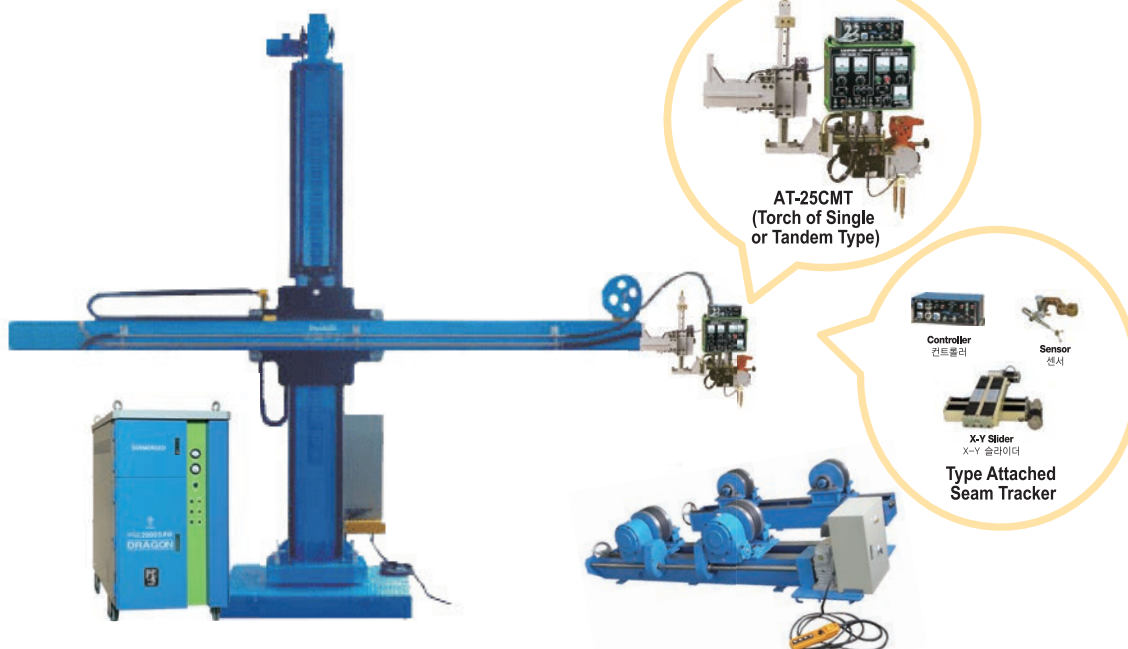
Manipulator & Turning Roller

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매니퓰레이터 & 터닝 롤러

Device that straightly welds tank, pipe, steel plate, etc. or circumferentially welds them with turning roller.

탱크, 파이프, 금속판재 등의 직선용접 또는 터닝롤러를 이용하여 원주용접을 하는 장치임.



Manipulator | 직선/원주 자동 용접기

SPECIFICATIONS

Manipulator (Welding Column & Boom)											
Description	Unit	AT-MP3030	AT-MP3040	AT-MP4040	AT-MP4060	AT-MP5040	AT-MP5050	AT-MP6040	AT-MP6060		
Min. Height under Boom	mm	850	850	1100	1100	1100	1100	1200	1200		
Ma. Height under Boom	mm	3850	3850	5100	5100	6100	6100	7200	7200		
Boom (Max. Vert. Stroke)	mm	3000	3000	4000	4000	5000	5000	6000	6000		
Boom Reach (Max. Hor. Stroke)	mm	3000	4000	4000	6000	4000	5000	4000	6000		
Boom Travel Speed	mm/min	100~1500									
Max. Load at Boom End	Kg	125	125	140	150	150	150	150	200		
Column Swivel	°	360									
Trolley Speed	mm/min	1000	1000	1000	1200	1200	1200	1200	1200		
Inner Dist. Between Rails	mm	1440	1540	1440	1750	1750	1750	1900	1900		
Overall Length	mm	4500	5500	5500	7700	5700	6700	5700	8000		
Overall Height	mm	4900	5000	5900	7850	8850	8850	9300	9300		
Turning Roller (Welding Rotator)											
Description		Unit	AT-TR5	AT-TR10	AT-TR20	AT-TR30	AT-TR50	AT-TR80	AT-TR100	AT-TR200	
Total Load Capacity for Drive + Idler		Ton	5	10	20	30	50	80	100	200	
Rotating Capacity of Drive Unit.		Ton	5	10	20	30	50	80	100	200	
Job Dia. Range : Min. to Max.		mm	350~3500		400~4500		450~5000		500~6000	800~8000	
Speed Range -Surface Speed of Roller		mm/min	100~1500								
Type of Variable Speed Drive		mm	A.C.-VFD								
Roller Size Dia. x Width		mm	Ø400x120		Ø400x145	Ø500x145	Ø500x250	Ø550x250	Ø550x350	Ø650x250	
Roller Metal			PU.								Steel
Overall Dimension	Drive Unit	'L'	mm	2350	2900	3000	3500	3500	4200	4600	5900
		'W'	mm	580	650	700	700	800	1100	1250	1650
		'H'	mm	577	604	654	760	910	960	960	1420
	Idler Unit	'L'	mm	2150	2650	2850	3300	3300	3750	4200	5700
		'W'	mm	450	525	575	600	650	900	950	1400
		'H'	mm	577	604	654	760	910	960	960	1420

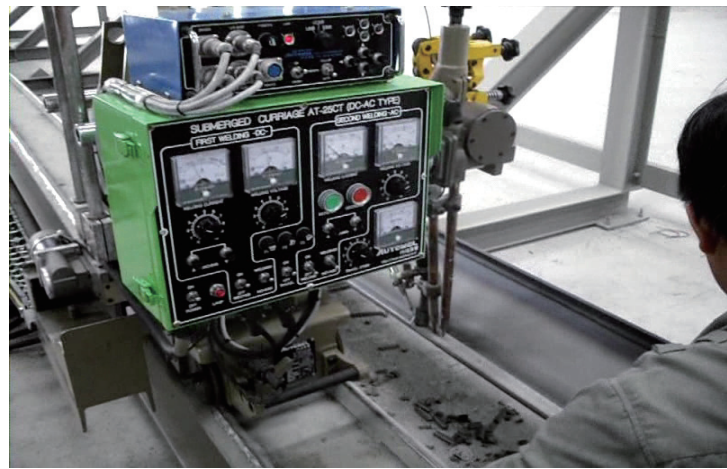
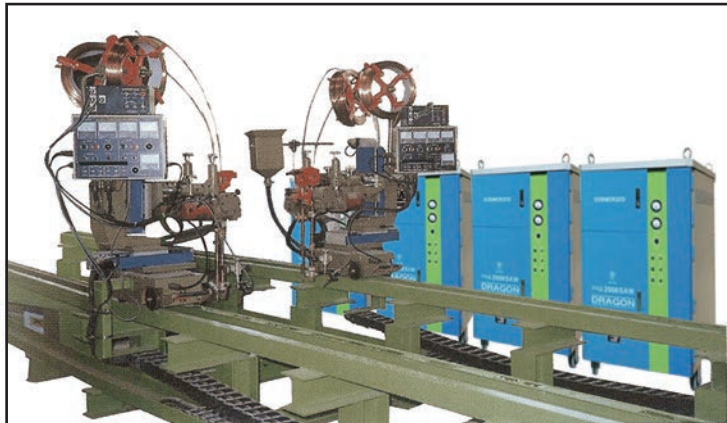
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Submerged Welding

서브머지드 용접

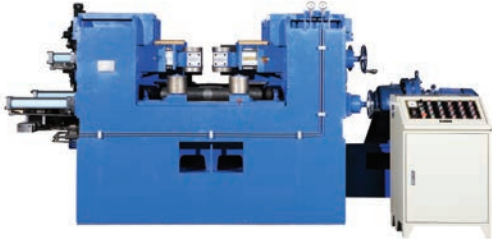
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Built-up Beam Machine

H-빔 제작기

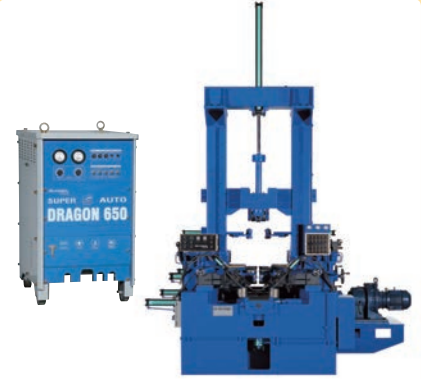
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B-H Straightening Machine
H-BEAM 교정기



B-H Assembling Machine
H-BEAM 조립기

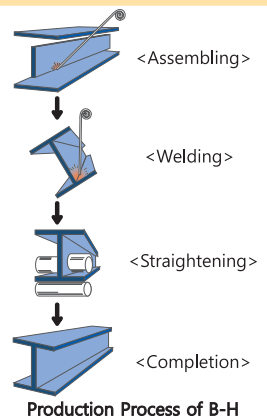


B-H Assembling & Straightening Machine
H-BEAM 조립교정 겸용기

SPECIFICATIONS

Description		B-H Straightening Machine	B-H Assembling Machine	B-H Assembling & Straightening Machine
Flange	MAX	800×70t	800×70t	800×70t
	MIN	200×16t	200×16t	200×16t
Web	MAX		2000~3000	2000~3000
	MIN	Over 312 inside	Over 312 inside	Over 312 inside
Welding speed(Tack)	MIN/M		0.5~7m	0.5~7m
Straightening speed	MIN/M	7m		7m
Straightening pressure	MAX	140 TON		140 TON
Dimension	W×L×H	4100×1800×1950	4100×1800×5650	4100×1800×5650
Hyd. unit		210Kgf/cm · 150L	210Kgf/cm · 150L	210Kgf/cm · 150L
Driving motor		15HP-289 : 1	7.5HP-60 : 1	15HP-289 : 1
Machine gross Weight		11.5 TON	10 TON	13 TON

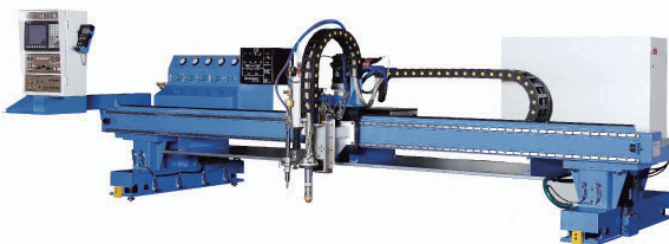
* The specification can be changed without notice to be upgraded.



CNC Plasma Cutting Machine / CNC Gas Cutting Machine

플라즈마 자동 절단기 / 가스 자동 절단기

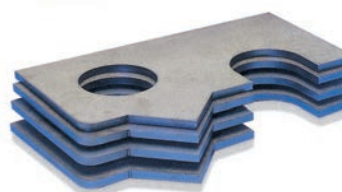
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SPECIFICATIONS

Description	KTP-250	KTP-320	KTP-420	KTP-500	KTP-640
Machine structure	Gantry type				
Driving type	Rack & pinion gear				
Maximum speed	10,000(mm/min)		12,000(MAX,18,000) (mm/min)		
Over rail span	4,330	5,030	6,030	7,030	8,200
Over rail length	8,200	10,000	12,000	16,000	20,000
Height	2,400	2,400	2,400	3,400	2,900
Rail width	3,350	4,050	5,050	6,050	7,200
Effective area	2,500	3,200	4,200	5,000	6,400

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Powder marking



Plasma marking



Gouging Machine

가우징

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Optimization for Bead removal, Cutting and Orthopedic treatment
비드제거, 절단, 정형작업에 최적

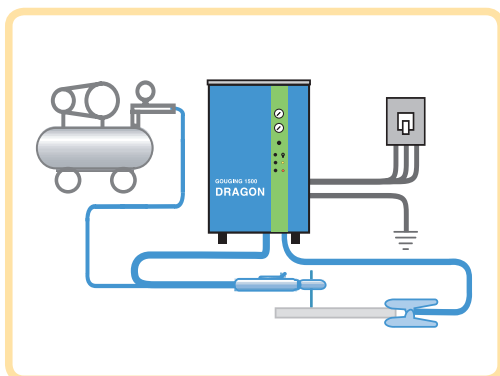
What is Gouging?

It is called Air-Carbene-ARC-Gouging, and the ARC on Base metal or weldment is generated by carbene electrode. When ARC generate, compressed air blows toward to the base metal melted by ARC, and the oxygen with compressed air blows out the melting metal in being oxidized.

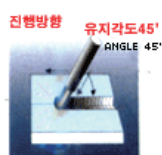
가우징이란?

공기탄소아크가우징 이라고 말하며 탄소전극봉으로 모재나 용접물에 아크를 발생시키고 이때 고압의 공기를 불면 공기중에 산소가 녹은 쇳물을 산화 시키면서 불어내는 것.

CONNECTION 접속도



개선가공
(GROOVE PROCESS)



구멍가공
(HOLE PROCESS)



절단(CUTTING)



Gouging Torch
가우징 토치



SPECIFICATIONS

Description	Unit	DRAGON-1000G	DRAGON-1200G	DRAGON-1500G
Rated input voltage	V, Hz	3P (380)220/415/440 50/60		
Rated output current	A	1000	1200	1500
Frequency	Hz	50/60		
Rated input power	KVA	73	87	103
Output voltage	V	50	56	
Open-circuit voltage	V	85		90
Duty cycle	%	60		
Insulation class		H		
Protection class		IP23		
Dimension (W×D×H)	mm	610×770×935		760×1070×1180
Weight	Kg	250	350	600

※ The specification can be changed without notice to be upgraded.



Thyristor CO₂/MAG/MIG Welder

Total Welding Solution
AUTOWEL
(주)오토웰

Thyristor CO₂/MAG/MIG 용접기

Semi-auto Welder maximized durability and efficiency in the field of shipyard, heavy ind., steel beam and plants.

조선, 중공업, 철구, 플랜트 사업부분에 특화된 내구성 및 효율성을 극대화한 용접기.

FEATURE 특징

- Wide range of input voltage : $\pm 15\%$
- Constant output voltage upto 100m welding cable
- Constant feeding speed against changing load current
- Constant ARC length against changing stick-out
- Low spatter with stable ARC
- Welding or gouging function via CV and CC control
- Protection of over current
- Protection of over temperature
- Reducing electrical power consumption
- Adjust start gas and after gas
- Adjust dealing time and current so that electrode doesn't stick to material when welding is finished
- 광대역 1차 입력전압: $\pm 15\%$
- 출력전압 일정유지 최대 100m 용접선
- 부하전류 변동에 관계없이 송급속도 일정유지
- 용접선 토출길이에 관계없이 일정아크 길이유지
- 아크 안정성
- 정전압 정전류 방식에 의한 용접 및 가우징 기능
- 과전류 보호기능
- 과열 보호회로 내장
- 절전기능
- 초기가스, 후기가스 조절기능
- 안티스틱기능(용접종료시 전극이 모재에 용착되지 않도록 처리하는 시간 및 전류조정기능)



Regulator



Torch



Single Cable



Wire Feeder





Thyristor CO₂/MAG/MIG Welder

Total Welding Solution
AUTOWEL
(주)오토웰

Thyristor CO₂/MAG/MIG 용접기



10-Pole Welding Machine (Bridge & Ship Construction) | 10-Pole 용접기 (교량 시공 & 조선)

SPECIFICATIONS

Description		Unit	DRAGON-350A	DRAGON-500A	DRAGON-650A	DRAGON-800A
Rated input electricity		V, Hz	3P (380)220/415/440 50/60			
Rated input power		KVA	18.5	32	45	58
Output current range	Welding	A	50~350	60~500	80~650	100~800
	Gouging/ARC		10~300	10~450	10~600	10~700
Open circuit voltage		V	53	65	70	73
Load voltage		V	13~34	16~42	16~50	18~54
Insulation class			H			
Projection class			IP23			
Duty cycle		%	70		80(100%/600A)	80
Dimension (W×D×H)		mm	385X690X810	515×700×830	515×700×920	610×770×935
Weight		Kg	115	186	205	250
Light weight wire feeder (model : AT-24F)	Type		2 roll			
	Wire dia.	mm	0.6~2.0			
	Speed	m/min.	1.5~15			

※ The specification can be changed without notice to be upgraded.



Inverter CO₂/MAG/MIG Welder

Total Welding Solution
AUTOWEL
(주)오토웰

인버터 CO₂/MAG/MIG 용접기

Inverter CO₂/MAG/MIG Welder installed IGBT power module is for high-speed welding, auto welding, etc.

IGBT 반도체 파워모듈을 이용한 인버터 CO₂/MAG/MIG 용접기로 고속용접 및 자동용접 등 다양한 적용.

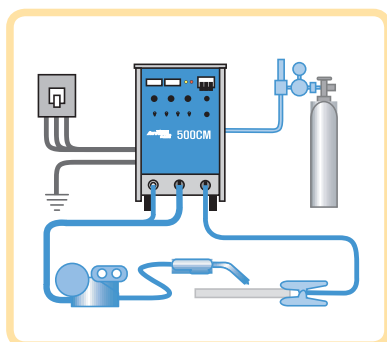
FEATURE

특징

- Rated input voltage range : $\pm 10\%$
- Using long extension welding cable up to 50m
- Adjust crater voltage and current
- Adjust welding penetration, bead height and width
- Selection of wire type and diameter
- Warning and stop when over current
- Warning and stop when over temperature, and re-operate
- Auto stop when over $\pm 10\%$ of rated input voltage
- 정격입력전압 : $\pm 10\%$
- 용접케이블 50m 연장사용
- 크레이터 전압 전류 조절
- 용입깊이, 비드높이 및 폭 조절
- 용접와이어 종류 및 직경 선택
- 과전류 보호기능
- 과열 보호회로 내장
- 정격입력전압이 $\pm 10\%$ 이상일 때 자동정지 기능

CONNECTION

접속도



SPECIFICATIONS

Description		Unit	NICE-200CM	NICE-350CM	NICE-500CM	NICE-650CM
Rated input electricity		V, Hz	1P 220	1P/3P (380V)220/415/440 50/60		
Rated input power		KVA	8	16	26.5	30
Output current range	Crater	A	50~200	50~350	60~500	70~650
	Welding	A	50~200	50~350	60~500	70~650
Load voltage range	Crater	V	16~32	15~36	16~42	16~46
	Welding	V	16~32	15~36	16~42	16~46
Insulation class				H		
Protection class				IP21		
Duty cycle		%		60		
Dimension (W×D×H)		mm	230X460X320	370×730×600		405×830×635
Weight		Kg	20	49	56	66

※ The specification can be changed without notice to be upgraded.



Inverter Pulse MIG Welder installed IGBT power module is for high-speed welding, auto welding, etc.

FEATURE 특징

- Rated input voltage range : $\pm 10\%$
- Using long extension welding cable up to 50m
- Adjust crater voltage and current
- Adjust welding penetration, bead height and width
- Selection of wire type and diameter
- Warning and stop when over current
- Warning and stop when over temperature, and re-operate
- Auto stop when over $\pm 10\%$ of rated input voltage
- Adjust Base voltage
- Adjust pulse voltage
- Adjust pulse frequency
- Selection of Aluminum/Stainless/Mild steel

IGBT 반도체 파워모듈을 이용한 인버터 펄스 MIG 용접기로 고속용접 및 자동용접 등 다양한 적용

- 정격입력전압 : $\pm 10\%$
- 용접케이블 50m 연장사용
- 크레이터 전압 전류 조절
- 용입깊이, 비드높이 및 폭 조절
- 용접와이어 종류 및 직경 선택
- 과전류 보호기능
- 과열 보호회로 내장
- 정격입력전압이 $\pm 10\%$ 이상일 때 자동정지 기능
- 기준 전압 조절기능
- 펄스 전압 조절기능
- 펄스 주파수 조절기능
- 알루미늄/스텐/철 용접 선택기능



SPECIFICATIONS

Description		Unit	NICE-350PM	NICE-500PM
Rated input electricity		V, Hz	1P/3P (380V)220/415/440 50/60	
Rated input power		KVA	16	26.5
Output current range	Crater	A	50~350	60~500
	Welding	A		60~500
Load voltage range	Crater	V	14~34	16~40
	Welding	V	14~34	16~40
Pulse voltage range		A	-5~+5	
Pulse frequency range		Hz	2~500 ms	
Insulation class			H	
Protection class			IP21	
Duty cycle		%	60	
Dimension (W×D×H)		mm	370×730×600	
Weight		Kg	50	58

※ The specification can be changed without notice to be upgraded.



Inverter DC ARC Welder

Total Welding Solution

AUTOWEL
(주)오토웰

인버터 DC ARC 용접기

FEATURE

특징

- IGBT type control
- Electric Shock Protection is built in
- Built-in overheat protecting circuit
- Easy start and uniform bead with high response time by high frequency transformation
- Hot start(adjustment of starting welding current)
- Improved output with high efficiency by micom control from existing 85% to 90%
- Small size, light weight
- Guarantee stable durability in allowed input voltage from AC 140~260V by applying SMPS(switching modulation power supply)
- IGBT 타입 제어
- 전격방지회로 내장
- 과열보호회로 내장
- 고속주파수 변환에 의해 응답속도가 빠르기 때문에 스타트가 쉽고 용접시 발생하는 기포현상이 대폭 감소되고, 균일한 Bead가 형성됨.
- 핫 스타트(시작용접전류조절) 기능
- 마이컴 제어로 고효율의 출력증가(기존 85% → 90%)
- 소형, 경량화
- SMPS 적용으로 허용입력전압 (AC 140 ~ 260V) 내에서 안정된 내구성 보장

PATENT



SPECIFICATIONS

Description	Unit	Finewel-160D	Finewel-180D	Finewel-200D	Finewel-250D	Finewel-350D	Finewel-500D	Finewel-600D	Finewel-3.2AL
Rated input power	KVA	5	6	7	10	12	18	21	6
Rate input volt.	V	220V, 1P				3P (380)220/415/440			220V, 1P
Input frequency	Hz	50/60							
Rated output current	A	150	180	200	250	300	400	500	150
Max. open-circuit volt.	V	75			80	82	85		120
Load voltage	V	26	27	28	30	32	36	38	30
Duty cycle	%	60							
Insulation class		F					H		F
Protection class		IP21							
Dimension (W×D×H)	mm	140×410×200	170×460×240		225×465×330		370×730×600	405×830×635	170×460×240
Weight	Kg	7	9	10	17	18	50	60	11
Input cable size	SQ	4		6	10		16		4
Holder cable size	SQ	16			25	35	50	70	16

※ The specification can be changed without notice to be upgraded.



Thyristor DC ARC Welder

Thyristor DC ARC 용접기

Total Welding Solution
AUTOWEL
(주)오토웰

Suitable for unfavorable work place such as power plant and plant construction field contaminated around dust particle.

발전소, 플랜트 건설현장, 먼지가 많은 열악한 산업현장에서 사용하기에 적당.

FEATURE 특징

- High quality welding for stainless steel, copper, nickel alloy, etc.
- Excellent ARC start with low current 5A or 100m long torch cable
- Wide range of output current adjustment and soft welding bead formation
- Low internal loss by high performance silicon Thyristor rectifier element circuit, and semi-permanent life time
- Remote controller (Option)
- Full knowledge of welding process through output current and voltage indicators
- 스테인레스, 동, 니켈합금 등에 고품질 용접실현
- 저전류 최소 5A 및 100m 원거리 토치케이블에서 양호한 ARC Start
- 출력전류의 조정범위가 넓으며 부드러운 용접 비드 형성
- 고성능 Thyristor 정류소자의 정류회로로 내부손실이 적고 수명이 반 영구적
- 원격제어장치 기능 부가 가능 (Option)
- 출력전류 및 전압 Meter 부착으로 용접을 정확히 숙지



ARC Welding Holder Set
아크 용접 홀더 세트



SPECIFICATIONS

Description	Unit	DRAGON-250D	DRAGON-300D	DRAGON-400D	DRAGON-500D	DRAGON-650D
Rated input voltage	V, Hz	3P 380 (220/415/440) 50/60				
Rated input power	KVA	17.5	21	30	39	52
Output current range	A	5~250	5~300	5~400	5~500	5~650
No load voltage	V	70		75	78	80
Insulation class		H				
Protection class		IP23				
Duty cycle	%	70				
Dimension (W×D×H)	mm	370X730X600	405X830X635	385X690X810	515X700X830	515X700X920
Weight	Kg	70	90	110	180	200

※ The specification can be changed without notice to be upgraded.



Inverter DC TIG/MMA Welder

인버터 DC TIG/MMA 용접기

Total Welding Solution
AUTOWEL
(주)오토웰

Small size, light weight, input cable of 1P 220V and suitable for construction in business trip.

소형, 경량이고 입력전압이 단상 220V로 출장공사에 적합함.

FEATURE 특징

- DC TIG, DC ARC Welding
- Crater off/single/repeat function
- High frequency start and operating
- After-flow gas time adjustment (1S, 3S, 5S = 200ST, 300ST)

- 직류 TIG, 직류 ARC 용접
- 크레이터 무/유/반복 기능
- 고주파 스타트
- 후기가스시간 선택 (1S, 3S, 5S = 200ST, 300ST)



PULSE

SPECIFICATIONS

Description		Unit	NICE-200ST	NICE-300ST
Rated input electricity		V, Hz	1P 220V 50/60	
Rated input power	TIG	KVA	5.8	6.8
	MMA	KVA	5	6
Output current range	TIG	A	10~180	10~260
	MMA	A	10~140	10~180
No load voltage		V	70	
Load voltage		V	18	21
Insulation class			H	
Protection class			IP21	
Duty cycle		%	60	
Gas pre flow		sec	0.2	
Dimension (W×D×H)		mm	155×480×250	255×465×330
Weight		Kg	11	16

※ The specification can be changed without notice to be upgraded.



Inverter DC Pulse TIG/MMA Welder

Total Welding Solution
AUTOWEL
(주)오토웰

인버터 DC 펄스 TIG/MMA 용접기

Suitable for welding metals like stainless steel, mild steel, copper, nickel, titanium, etc. Possible to weld thick plates for a long time in plan construction field, heavy industry, automation line. Possible to weld thin plate with high speed by decreasing thermal deformation of metal with pulse function

스텐레스, 연강, 동, 니켈, 티타늄 등의 금속을 용접하는데 적합함. 플랜트 현장, 중공업, 자동화 라인의 후판 금속을 장시간 용접이 가능하고 펄스기능을 이용하여 금속의 열 변형을 감소시켜 고속박판용접이 가능함.

FEATURE 특징

- DC TIG, TIG ARC SPOT and DC ARC Welding
- Crater off/single/repeat function
- High frequency start and operating
- After-flow gas time adjustment
- ARC-spot time adjustment (350DT~600DT)
- Crater current value adjustment (500DT/600DT)
- Pulse function (350DT~600DT)
- Remote function (500DT~600DT)

- 직류 TIG, TIG ARC SPOT, 직류 ARC 용접
- 크레이터 무/유/반복 기능
- 고주파 스타트
- 후기 가스 시간조정
- 스폿 시간 조정 (350DT~600DT)
- 크레이터 전류 값 조정 (500DT~600DT)
- 펄스 기능 (350DT~600DT)
- 리모트 기능 (500DT~600DT)



Water Cooler
용접기 수냉각장치



SPECIFICATIONS

Description		Unit	NICE-350DT	NICE-500DT	NICE-600DT
Rated input electricity		V, Hz	3P (380V)220/415/440 50/60		
Rated input power		KVA	10.5	18	21
Output current range	TIG	A	10~320	10~500	10~600
	MMA	A	10~220	10~400	10~500
No load voltage		V	70	75	
Load voltage		V	22	24	26
Insulation class			H		
Protection class			IP21		
Duty cycle		%	60		
Gas pre flow		sec	0.2		
Pulse current		A	10~350	10~500	10~600
Up-slope time		sec	Linked down time 0.5~2.5		
Down-slope time		sec	0.1~5		
Pulse frequency		Hz	0.5~500		
Pulse width		%	NA	15~85	
Gas after flow		sec	1~12		
ARC spot		sec	0.5~5		
Dimension (W×D×H)		mm	275×470×395	370X730X600	405X830X635
Weight		Kg	22	47	67

※ The specification can be changed without notice to be upgraded.



Inverter AC/DC Pulse TIG/MMA Welder

Total Welding Solution
AUTOWEL
(주)오토웰

인버터 AC/DC 펄스 TIG/MMA 용접기

AC/DC Pulse TIG/MMA Welder can weld metals like stainless steel, mild steel, copper alloy, nickel alloy, titanium and low alloy steel by DC TIG function. And it can weld metals like aluminum, magnesium and brass by AC TIG function.

AC/DC 펄스 TIG/MMA 용접기는 스테인레스, 연강, 동합금, 니켈합금, 티타늄, 저합금강 등의 금속을 DC TIG 기능으로 용접이 가능하며 알루미늄, 마그네슘, 황동 등의 금속을 AC TIG 기능으로 용접이 가능함.

FEATURE

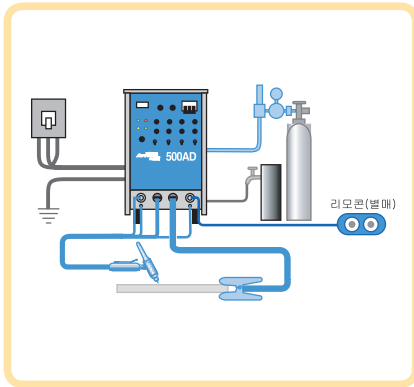
특징

- Crater off/single/repeat function
- High frequency start and operating
- Pulse width/frequency/after-flow-time adjustment
- Up/down slope time adjustment
- Start/crater/pulse current adjustment
- All kinds of metal can be welded

- 크레이터 무/유/반복 선택 기능
- 고주파 스타트
- 펄스 폭 주파수 후기가스시간 조절
- 업 다운 슬롭 시간조절
- 시작/크레이터/펄스 전류값 조절
- 모든 종류의 금속을 용접

CONNECTION

접속도



SPECIFICATIONS

Description		Unit	NICE-350AD	NICE-500AD
Rated input voltage		V	1/3P (380) 220/415/440 50/60	
Rated input power		KVA	11.5	19
Output current range	AC TIG	A	10~330	10~500
	DC TIG	A	10~330	10~500
	MMA	A	10~250	10~350
Rated load voltage		V	22	26
Duty cycle		%	60	
Insulation class			H	
Protection class			IP21	
Max. no-load voltage		V	65	72
Initial crater current range		A	10~330	10~500
Pulse current range		A	10~330	10~500
Current down/up slope range		sec	0.1~5	
Pulse frequency	Low range	Hz	0.5~25	
	High range	Hz	10~500	
Gas flow time range	Initial	sec	0.1 (Adjusted by internal set value)	
	After-flow	sec	3~25	
Pulse width range		%	15~85	
AC cleaning range		%	± 10~50	
Dimension (W×D×H)		mm	370×730×600	
Weight		Kg	48	55

※ The specification can be changed without notice to be upgraded.



Saturable Reactor DC TIG Welder

Total Welding Solution
AUTOWEL
(주)오토웰

가포화 DC TIG 용접기

Suitable for unfavorable work place such as power plant and plant construction field contaminated around dust particle.

발전소, 플랜트 건설현장, 먼지가 많은 열악한 산업현장에서 사용하기에 적당.

FEATURE 특징

- High quality welding for stainless steel, copper, nickel alloy, etc.
- Excellent ARC start with low current 5A or 100m long torch cable
- Wide range of output current adjustment and soft welding bead formation
- Low internal loss by high performance silicon rectifier element circuit, and semi-permanent life time
- Remote controller (Option)
- Full knowledge of welding process through output current and voltage indicators
- Crator off/single/repeat function, Manual welding function
- Gas flow check and After-flow gas time adjustment
- 스테인레스, 동, 니켈합금 등에 고품질 용접실현
- 저전류 최소 5A 및 100m 원거리 토치케이블에서 양호한 ARC Start
- 출력전류의 조정범위가 넓으며 부드러운 용접비드 형성
- 고성능 Silicon 정류소자의 정류회로로 내부손실이 적고 수명이 반 영구적
- 원격제어장치 기능 부가 가능 (Option)
- 출력전류 및 전압 Meter 부착으로 용접을 정확히 숙지
- 크레이터 유/무/반복 기능, 수용접 기능
- Gas 체크 및 후기가스 시간조정 기능



SPECIFICATIONS

Description		Unit	DRAGON-500DT	DRAGON-800DT
Rated input voltage		V, Hz	3-phase (380V)/220/415/440 50/60	
Rated input power	TIG	KVA	37.5	64
	ARC	KVA	30	48
Output current range	TIG	A	10~500	10~800
	ARC	A	10~400	10~600
No load voltage		V	75	80
Load voltage		V	24	28
Insulation class			H	
Protection class			IP23	
Duty cycle		%	70	
Gas after flow		sec	0~30	
Dimension (W×D×H)		mm	515×785×860	610×920×935
Weight		Kg	250	350

※ The specification can be changed without notice to be upgraded.



플라즈마 용접기

Autowel Plasma ARC Welder NICE PAW series are a digital control type and very precision welder in order to weld all kinds of metal, and overlay welding, and incorporate with auto welding system.

오토웰 플라즈마 용접기 NICE PAW 계열은 디지털 제어 방식으로 매우 정밀한 용접기로서, 모든종류의 금속을 용접할 수 있고 육성용접 및 자동용접 시스템에 최적.

FEATURE 특징

- Digitalized controller completely
- Easy handling as per the touch panel and user-guide operation
- 100% duty cycle, and good durability and insulation as per the easy and composed design
- Easy interface for automatic system
- 40 different welding parameters can be stored
- Safety function via detection and warning for gas pressure, cooling water, overheat and so on .
- 완전 디지털 제어방식
- 터치판넬 방식 및 지시형 조작으로 매우 편리함
- 100% 사용률 및 여유있는 설계로 절연성 내구성이 우수
- 자동화 장치에 연동이 편리한 인터페이스 내장
- 용접조건을 저장하여 사용 (40가지)
- 안전장치로 가스압력, 냉각수, 과열 등을 감지 및 경고



SPECIFICATIONS

Description	Unit	NICE-50PAW	NICE-100PAW	NICE-200PAW	NICE-300PAW	NICE-500PAW
Rate input voltage	V	3P (380V)220/415/440				
Rate input power	KVA	3	10	15	20	35
Rate output current	A	50	100	200	300	500
Duty cycle	%	100				
Welding current	A	0.5~50	1~100	3~200	5~300	5~500
Welding voltage	V	20~40			25~45	
Pilot current	A	1~10	1~20	10~50	10~70	
Up slope current	A	0.5~50	1~100	3~200	5~300	5~500
Down slope current	A	50~0.5	100~1	200~3	300~5	500~5
Up/down slope time	sec	0.1~99				
Pulse current	A	0.5~50	1~100	3~200	5~300	5~500
Pulse frequency	Hz	1~500				
Pulse width	%	1~99				
Pilot gas (ℓ/min, 3Kg/cm ²)		0.1~1.0	0.1~2.0	0.3~3.0	0.3~5.0	0.5~5.0
Shielding gas (ℓ/min, 3Kg/cm ²)		2.0~20				2.5~25
Dimension (W×D×H)	mm	580×380×640				
Weight	Kg	35	38	45	56	68

※ The specification can be changed without notice to be upgraded.



Orbital Auto Welding System (TIG/PLASMA)

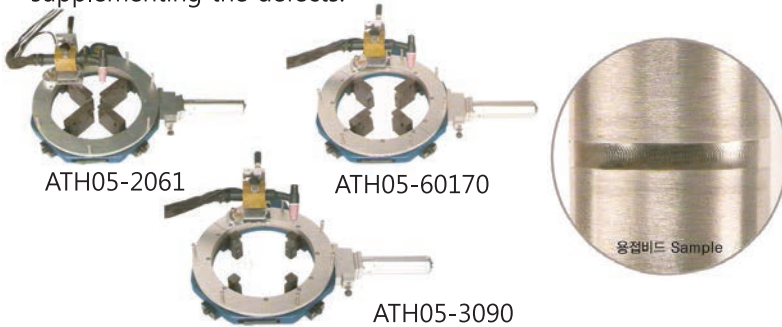
Total Welding Solution
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(주)오도웰

원주 자동 용접 장치 (TIG/PLASMA)

FEATURE

※ Orbital Welding Head

This is an equipment which installs the head on the fixed pipe, then the auto welding is done while the welding torch is traveling on it, and the reason why we had applied this head to TIG auto welder is to use all weldable metals. It's a product, developed for mass production by supplementing the defects.



※ 오비탈 용접헤드

고정된 파이프에 헤드를 설치해놓고 용접 토치가 그 위를 주행하면서 자동 용접되도록 한 장치. 용접할 수 있는 모든 금속을 적용하기 위하여 단점을 보완, 대량생산 품목에도 무리가 없도록 개발.

SPECIFICATIONS

Description	Unit	ATH05-2061	ATH05-3090	ATH05-60170
Rotation speed	rpm	0.5~10		
Wire speed	rpm	0.5~10		
Torch cooling		Supply cooling water to electrode		
Tube diameter range	mm	20~61	30~90	60~170
Weight	Kg	7	10	14

※ The specification can be changed without notice to be upgraded.

※ Multi Purpose TIG Welding Machine

- Excellent price competitive power as the product, developed by domestic patent
- High accurate welding
- With simple work, any beginner can use easily.
- Various pulse functions
- Prompt before/after service
- Combined use of AC/DC (Optionally)



ATM05-50300

※ 다목적형 TIG 용접장치

- 국내특허개발품으로 뛰어난 가격 경쟁력
- 고정밀도 용접
- 조작이 간편하여 초보자도 쉽게 사용가능
- 다양한 펄스기능
- 신속한 사전 / 사후 서비스
- AC/DC 겸용 (선택사항)

SPECIFICATIONS

Description	Unit	ATM05-50300
Tube diameter range	mm	50~300
Input voltage	V	220 / 380
Rotation speed	rpm	0.5~10
Wire speed	rpm	0.5~10
Torch cooling		Supply cooling water to electrode
Weight	Kg	250

※ The specification can be changed without notice to be upgraded.

※ Vertical, Horizontal Common Use Auto TIG Welding Machine

- Patent system applied
- Excellent competitive power of price as the product developed by domestic patent
- Digital display function that the setting-up and the realization are visible at eye.
- Control of wire distribution
- Excellent cooling function
- Possible to weld in a free welding posture
- With easy work, anyone can weld.
- Pulse selecting function
- Used in the welding of carbon steel pipe, stainless steel, nickel alloy, copper, copper alloy, aluminum
- No precise welding slag, spatter

※ 수직, 수평 겸용 자동 TIG 용접기 (ATM05-4090VH)

- 특허시스템 적용, 뛰어난 냉각기능, 와이어 송급 조절
- 국내 특허개발품으로 뛰어난 가격 경쟁력
- 설정과 실행을 한눈에 볼 수 있는 디지털 디스플레이 기능
- 쉬운 조작법으로 아무나 용접가능, 펄스 선택 가능
- 자유로운 용접자세로 용접가능
- 정밀용접 슬래그, 스파터 없음
- 탄소강관, 스테인레스강, 니켈합금, 동, 동합금, 알루미늄 용접에 사용



Vertical Use
수직 사용시



Horizontal Use
수평 사용시



Inverter Plasma Cutter

Total Welding Solution
AUTOWEL
(주)오토웰

인버터 플라스마 절단기

Air Compressor Built-in (컴프레서 내장형)



- Low noise & low vibration compressor built-in
- Air flow volume 120LPM
- Cutting metal without saperated compressor

- 저소음 저진동 컴프레서 채용
- 풍량 120LPM
- 별도의 컴프레서 없이 절단



- Compact Size
- Light weight for hand-carry
- 컴팩트 사이즈
- 출장으로 후대용이



Plasma Torch
플라스마 토치

SPECIFICATIONS

Description		Unit	NICE-70SP	NICE-80DP	NICE-100DP	NICE-130DP	NICE-150DP	Air Compressor Built-in	
								NICE-40CP	NICE-70CP
Rated output current	3ph	A	NA	75	100	120	140	NA	NA
	1ph	A	60		80	100	120	40	60
Rated input voltage		V	1P 220	1P/3P (380V)220/415/440				1P 220	
Rated frequency rate		Hz	50/60						
Rated input power		KVA	10		24	28	33	7	10
Optimal cutting capacity		mm	10	15	20	25	35	6	8
Max. cutting capacity		mm	15	18	25	35	45	8	12
Max. open circuit voltage		V	280		300	320	330	260	280
Load voltage		V	120		130	140	150	100	120
Rated air pressure		Kgf/cm ²	4		5	6		2	3
Duty cycle		%	40	60				40	
Insulation class			F		H			F	
Protection class			IP21						
Dimension (W×D×H)		mm	230X450X300	270×530×390	370×730×600		405X830X635	230×465×330	295×480×310
Weight		Kg	18	24	49	52	60	20	26

※ The specification can be changed without notice to be upgraded.



Inverter Plasma Cutter

Total Welding Solution
AUTOWEL
(주)오토웰

인버터 플라즈마 절단기

Autowel DP series easily generate Plasma Jet via ARC and air pressure, and cut all kind of metals clearly and rapidly. Autowel 40CP and 70CP (Compressor built-in type) are a well proven portable type.

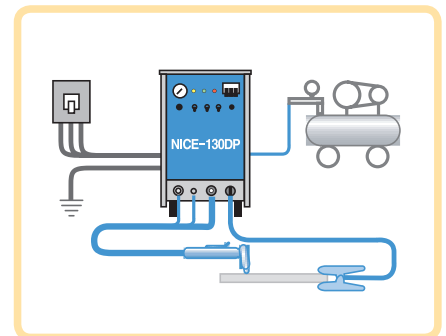
FEATURE 특징

- Improvement of cutting quality with stable constant current
- Hi-speed cutting without thermal distortion
- The components are continuously updated for better quality and easy maintenance
- Warning and stop against over current and temp, and low volt and air pressure
- Interception from the high frequency noise caused by torch and output terminal
- Easy operation for beginners

오토웰 DP시리즈는 아크와 압축공기로 플라즈마 제트를 발생시켜 모든 종류의 금속을 신속히 깨끗하게 절단. 오토웰 40CP와 70CP는 콤프레서 내장형으로 이동이 편리, 현장에 최적.

- 안정된 정전류로 절단 품질 향상
- 열변형 없이 고속 절단
- 과전류 과열 저전압 공기압 이상시 경고 및 자동멈춤
- 토치 및 출력단자에서 야기된 고주파 노이즈를 차단하는 기능
- 초보자도 쉽게 적응 할 수 있는 조작기능
- 접촉/비접촉 절단 기능
- 자기유지 기능

CONNECTION 접속도





ARC Stud (DRAGON/Stud Series)

Total Welding Solution
AUTOWEL
(주)오토웰

아크 스터드

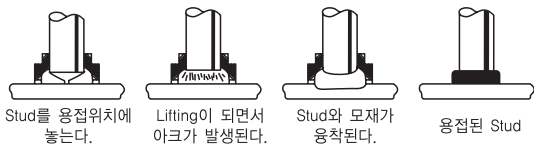
Stud Welder Using the welding way in a moment by making large-capacity ARC electric currents during 0.01~1.5 sec. it can always get stable and perfect welding consequences by regular welding electric current.

It is mainly used in public works, construction, heavy industry, shipbuilding, auto industry widely.

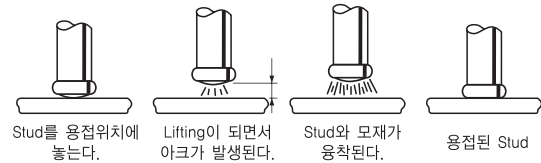
대용량의 아크 전류를 0.01SEC~1.5SEC동안 발생시켜 순간적으로 용착시키는 용접방식이며 언제나 일정한 용접전류로 안정되고 완벽한 용접결과를 얻을 수 있음. 주로 토목, 건설, 중공업, 조선, 자동차 분야에서 널리 사용.

FEATURE 특징

- Wide range of input voltage: $\pm 15\%$
- Sufficient heat capacity and durability
- Operator friendly welding Gun
- Hi-efficiency welder as per hi-speed and hi-quality
- Warning for over load and temperatures
- 광대역 압력 전압: $\pm 15\%$
- 풍부한 열적용량 및 내구성 확보
- 사용자 친화적 용접건
- 고속용접 및 고품질 비드로 고효율 용접
- 과부하 및 과열 경고 및 정지



Drawn ARC Process(DA Type)



Short Cycle Process(SC Type)

SPECIFICATIONS

Description	Unit	DRAGON-500S	DRAGON-850S	DRAGON-1500S	DRAGON-2500S
Rated input electricity	V	Selected among 220/380/440V			
Rated input power	KVA	20	35	70	180
Range of current	A	100~500	100~850	100~1500	100~2500
Welding time	sec	0.1~1.0	0.1 ~1.0	0.1~1.0	0.1~1.4
Welding Method		Drawn Arc(D/A), Short Cycle(S/C)			
Welding Diameter	mm	3~8	3~12	3~16	3~25
Duty cycle	%	25% (Max. Dia.)			
Insulation class		H			
Protection class		IP23			
Weight	Kg	25	70	200	450
Dimension (W x D x H)	mm	215x380x280	325x370x550	520x750x770	700x780x890
Gun application		AT-700C	AT-700C(S/C) AT-900D(D/A)	AT-900D(D/A) AT-900S(S/C)	AT-HD

The specification can be changed without notice to be upgraded.



CD Stud Welder

스터드 용접기

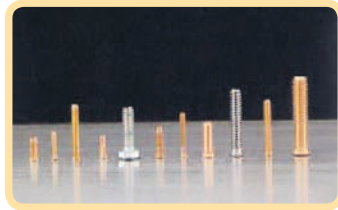
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FEATURE

특징

- Capacitor Discharge Processor
- Steplessly adjustable charging voltage
- Charging time : max 2.0secs
- Digital weld voltage readout
- Hi & Low selection switch
- Incorporated with CNC auto weld
- Consistent performance and long life
- 캐파시티 방전형
- Charging Voltage 조정
- 충전시간 : 최대 2초
- CNC 자동화 용접 가능
- 용접전압 Digital 표시
- Hi/Low 선택 기능
- 일관된 작업 및 내구성 우수

※ Protection class IP21 & Insulation class H



Model	Stud range max. dia(mm)	Welding capacitor(μF)	Dimension (mm)	Weight (Kg)	Input voltage (V)	Input freq. (Hz)
NICE-1000S	8	132,000	305×600×245	26	1Ø, 220V	50/60
NICE-1300S	10	198,000	305×600×245	28	1Ø, 220V	50/60

※ The specification can be changed without notice to be upgraded.



AC ARC Welder

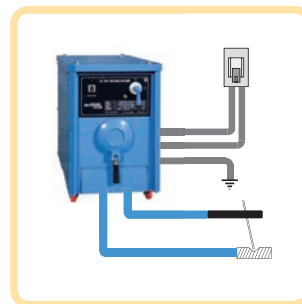
교류 ARC 용접기

Total Welding Solution
AUTOWEL
(주)오토웰

AC ARC Welder is thermostable, immersible, and resists moisture. Wide control range of electric current, the less tickover and semi-permanent life are guaranteed. It is economic because of low maintenance expenses.

교류 ARC 용접기는 내열, 내수, 내습성이 있음. 넓은 전류조정범위, 적은 무부하 손실, 반영구적인 수명이 보장. 저렴한 유지비로 경제적.

CONNECTION 접속도



STANDARD WELDING CURRENT TABLE

Description	Unit	AT-120	AT-180	AT-240	AT-360	AT-480	AT-600	AT-720
Rated capacity	KVA	10	15	20	30	40	50	60
	KW	5	7.5	10	15	20	25	30
Rated input voltage	V, Hz	1P (380)220/415/440 50/60						
Rated output electric current	A	120	180	240	360	480	600	720
No load voltage	V	65	80				88	
Load voltage	V	26	29	32	36	40	45	
Duty cycle	%	30	40		50		60	
Insulation class		H						
Protection class		IP23						
Dimension (W×D×H)	mm	300×245×355	350×490×530		430×600×600			480×600×650
Weight	Kg	30	50	60	85	100	120	160

※ The specification can be changed without notice to be upgraded.

Multi Operator Station SMAW/TIG/Gouging Welder

Total Welding Solution

AUTOWEL
(주)오토웰



멀티 오퍼레이터 스테이션 아크/티그/가우징 용접기

Inverter DC Type TIG/SMAW/Gouging welding machine using IGBT semiconductor power module is optimized for manual welding.

FEATURE

- Wide and continuous current control adjustment
- Each module can be connected for either DC straight or reverse polarity.
- Can be paralleled for higher output
- Housed in a rugged steel enclosure and powder paint finish for increased durability
- Remote/Standard current control receptacle
- Improved duty cycle by using forced-draft cooling fan
- High frequency start and operating (TIG)
- After-flow gas time adjustment (TIG)
- Crater off/single function (TIG)
- Each equipment is operated as SMAW/TIG/Gouging.
- Volume adjust current each in detail.
- Digital current and voltage meter can check output.
- Power switch eliminates unnecessary power consumption.
- Switch that can turn on and off 6 welding machines is within the station cabinet.

APPLICATIONS

- Production lines
- Sheet metal shops
- Shipyards
- General contractors
- Pipe welding
- Professional welding
- Field metal fabrication
- Chemical plants
- Field or in-plant maintenance
- Pipe and structural fabrication
- Training facilities
- Rental fleets
- 생산라인
- 스틸 판매점
- 조선소
- 일반 토건업체
- 파이프 용접
- 전문용접
- 화학공장
- 현장이나 공장 내 유지보수
- 파이프와 구조제작
- 교육기관
- 임대업체

PROCESSES

- DC shielded metal ARC (Stick)
- Air carbon ARC cutting (CAC-A)
- DC gas tungsten ARC (TIG) welding
- DC 실드 메탈 아크(막대)
- 에어탄소아크절단(CAC-A)
- DC 가스 텅스텐 아크(TIG) 용접

IGBT 반도체 전력모듈을 사용하는 인버터 DC 타입 TIG/SMAW/가우징 용접기는 수동용접에 최적

- 폭넓고 지속적인 전류조절
- 각 모듈은 DC 정극성이나 역극성에 연결될 수 있음
- 더 높은 출력에 대응 가능
- 지속성을 증가시키기 위해 러기드 스틸 인클로저와
- 파우더 페인트 마감으로 덮임
- 원격/기준 전류조절 콘센트
- 강제냉각송풍기를 사용함으로써 사용률 향상
- 고주파시작과 작동(TIG)
- 후기가스시간조절(TIG)
- 크레이터 정지 / 단일 기능(TIG)
- 각 장비는 SMAW/TIG/가우징으로 자동됨
- 볼륨은 각각 세부적으로 전류를 조절함
- 디지털 전류전압메타는 출력 확인 가능함
- 전원스위치는 불필요한 전력소모를 줄임
- 6대의 용접기를 켜고 끌 수 있는 스위치가 스테이션
- 선반 안에 있음



SPECIFICATIONS

Description		Unit	NICE-250*6	NICE-250*8	NICE-400*6	NICE-400*8
Rated input electricity		V, Hz	3P 380V 50/60			
Rated input power	TIG	A	40	55	66	88
	MMA	A	60	80	108	144
Output current range	TIG	A	10~250*6	10~250*8	10~400*6	10~400*8
	MMA	A	10~250*6	10~250*8	10~400*6	10~400*8
No load voltage		V	75		78	
Insulation class			H			
Protection class			IP23			
Duty cycle		%	50			
Gas pre flow		sec	0.2			
Gas after flow		sec	0.5~10			
Down slope time		sec	0.1~5			
Dimension(W*D*H)(About)		mm	1500*400*1200	1800*400*1200	2000*700*1700	2500*700*1700
Weight(About)		Kg	200	250	450	600

※ The specification can be changed without notice to be upgraded.



Multi Operator Station DC MMA Welder

Total Welding Solution
AUTOWEL
(주)오토웰

멀티 오퍼레이터 스테이션 DC MMA 용접기

Suitable for unfavorable work place such as power plant and plant construction field contaminated around dust particle.

발전소, 플랜트 건설현장, 먼지가 많은 열악한 산업현장에서 사용하기에 적당.

FEATURE 특징

- Due to built-in Constant Current Circuit, there are no changes of output current even under a situation of altering power supply voltage and the length of arc.
- Wide range of output current adjustment and soft welding bead formation
- Low internal loss by high performance silicon Thyristor rectifier element circuit, and semi-permanent life time
- Remote controller (Option)
- Full knowledge of welding process through output current and voltage indicators
- 정전류 회로가 내장되어 있어 전원전압, 아크길이의 변화 등에도 출력전류가 안 변함
- H종 절연을 채택하여 내열성 및 내구성 양호
- 출력전류의 조정범위가 넓으며 부드러운 용접 비드 형성
- 고성능 Thyristor 정류소자의 정류회로로 내부손실이 적고 수명이 반 영구적
- 원격제어장치 기능 부가 가능 (Option)
- 출력전류 및 전압 Meter 부착으로 용접을 정확히 숙지

APPLICATIONS

- Production lines, sheet metal shops
- Shipyards, general contractors
- General contractors, pipe welding
- Pipe welding, chemical plants
- Professional welding
- Field metal fabrication
- Field or in-plant maintenance
- Pipe and structural fabrication
- Training facilities, rental fleets
- 생산라인, 스틸 판매점
- 조선소, 일반 토건업체
- 파이프 용접, 화학공장
- 전문용접
- 현장이나 공장 내 유지보수
- 파이프와 구조제작
- 교육기관, 임대업체



SPECIFICATIONS

Description	Unit	DRAGON-250D*6	DRAGON-250D*8	DRAGON-400D*6	DRAGON-400D*8
Rated input voltage	V, Hz	3P 380 (220/415/440) 50/60			
Rated input power	KVA	60	80	104	138
Output current range	A	5~250*6	5~250*8	5~400*6	5~400*8
Open circuit voltage	V	70		75	
Insulation class		H			
Protection class		IP23			
Duty cycle	%	70			
Dimension (W×D×H)	mm	1500X800X900	2000X800X900	1600X750X1100	2100X750X1100
Weight (About)	Kg	550	700	800	1000

※ The specification can be changed without notice to be upgraded.



Portable Spot

포터블 스포트

Total Welding Solution
AUTOWEL
(주)오토웰

Portable Welder is for shrinking Welding, Carbon shrinking welding, Balcony stainless steel pipe cap welding, panel beating

가열작업/카본작업, 발코니, 난간대, 링작업, 자동차판금용접에 최적.

FEATURE 특징

- Largest power by small-size and light weight
- Wide adjustment of welding time and voltage
- High tension steel sheet case design
- One side spot welding
- Option: Slide hammer and Washer pulling welding

- 소형, 경량으로 최대파워
- 용접시간과 전압의 광범위 조정
- 고장력 강판 외함 설계
- 단면 용접 작업
- 옵션: 자동함마, 와셔(링) 작업(슬라이드 함마 이용)



SPECIFICATIONS

Description	Unit	AT-4500PS	AT-20000PS
Rated input voltage	V	1Ø,220V(±10%)	
Rated input power	KVA	6	12
Max. rated output current	A	1200	3200
Duty cycle	%	18	
Welding time	sec	0.1~2.0	
Output voltage range	V	1~8	1~10
Rated Frequency	Hz	50/60	
Torch cable	m	2.0	
Earth cable	m	1.8	
Dimension (WDXH)	mm	420X350X130	840X350X915
Weight	Kg	17.5	55

※ The specification can be changed without notice to be upgraded.



Auto Resistance Welder

자동 저항 용접기

Total Welding Solution
AUTOWEL
(주)오토웰

※ Custom-made welding machines



Relay Magnet Normal Closed Contact Auto Welder
릴레이 마그네트 접점 자동 용접기



Butt | 버트 용접기



저항 용접기

**Projection Welder**
프로젝션 용접기

FEATURE 특징

- Good conformity by pressure equipment of Ram Guide Type
- Removal of trouble from bad contact point by using SCR to open/close circuit
- Ram Guide Type의 가압기구에 의한 양호한 적응성
- 주 개폐회로에 SCR을 사용하여 접점불량에 의한 Trouble 제거

SPECIFICATIONS

Model	Input voltage (V, Hz)	Rated capacity (KVA)	Duty cycle	Max. short circuit current (A)	Working height (mm)	Pocket depth x gap (mm)	Welding capacity (mm)
AT-50R	1P 220/380/440 50/60	50	7%	18000	900	500X200	1.6
AT-75R		75		22000			2.6
AT-100R		100		26000			3.6
AT-150R		150		40000			5.2

**Condenser Spot** | 콘덴서 스팟 용접기

FEATURE 특징

- High efficient and economic because of generation of output of huge capacity with 10% input compared with ac welding machine
- Short charging and discharging time to condenser and conservation of uniform charging voltage
- 교류식 용접기에 비해 1/10의 입력으로 대용량의 출력이 발생되어 고효율적이고 경제적인
- 콘덴서에 충, 방전되는 시간이 짧고 일률적인 충전전압을 유지함

SPECIFICATIONS

Model	Input voltage (V, Hz)	Rated capacity (KVA)	Output power (W/S)	Duty cycle (%)	Condenser capacity (μF)	Max. charge voltage (V)	Welding capacity (mm)
AT-1CS	1P 220/380/440 50/60	1	500	7	12000	DC 315	0.4
AT-2CS		2	800		18000		0.5
AT-3CS		3	1500		30000		1.0
AT-5CS		5	2300		48000		1.2
AT-10CS		10	4500		96000		1.8
AT-15CS		15	7400		150000		2.4

FEATURE 특징

- Displys of optimum efficiency to container that needs watertight, airtight and oiltight like fuel tank, drum cylinder, pipe and radiator for transformer by doing continuos resistance welding with roller electrode
- 롤러전극을 사용하여 연속으로 저항용접을 하여 연료탱크, 드럼원통, 파이프, 변압기용 라디에이터 등 수밀, 기밀, 유밀을 요하는 용기에 최적의 성능을 발휘함

SPECIFICATIONS

Model	Input voltage (V, Hz)	Rated capacity (KVA)	Duty cycle (%)	Max. short circuit current (A)	Welding capacity (mm)
AT-75SR	1P 220/380/440 50/60	75	7	14000	0.6
AT-100SR		100		16000	1.2
AT-150SR		150		22000	1.6
AT-200SR		200		25000	2.0
AT-350SR		350		35000	2.6

**Seam** | 시임(봉합) 용접기

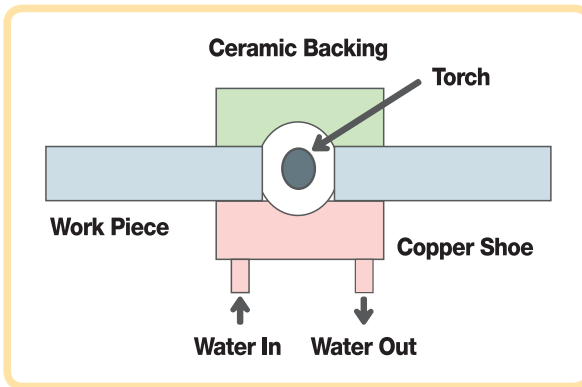
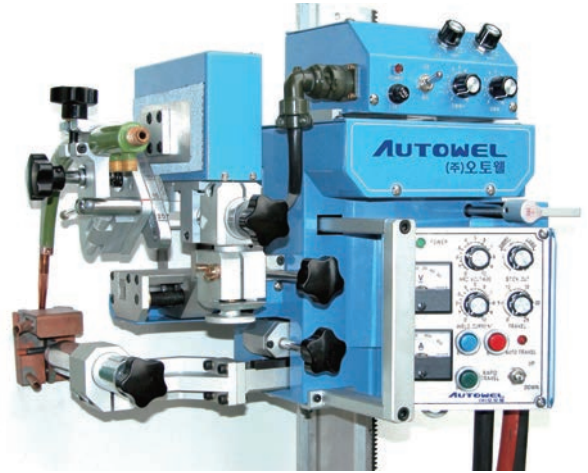
Mini Seg-ARC Auto Welding Carriage (EGW) | 미니 EGW 용접 캐리지

FEATURE

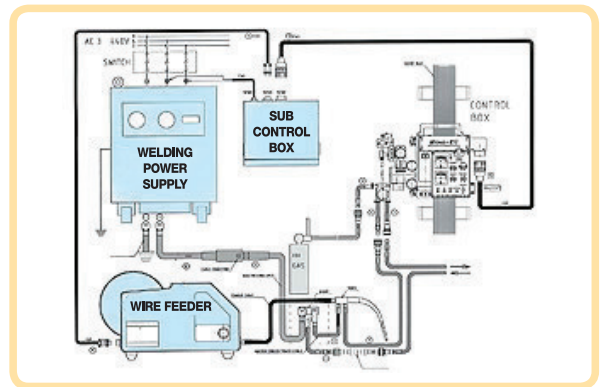
특징

- Perfect electro-gas welding
- Equipped with auto welding speed controller
- Weaver attachable (option)
- A single body carriage & control box

- 완벽한 전기 가스 용접
- 자동용접 속도조절장치 구비
- 위버 부착형
- 단일 몸체 캐리지와 콘트롤 상자



Cross Sectional View of the Welded Part



System Diagram

SPECIFICATIONS

CARRIAGE			
Travel speed	Automatic: 0~300mm/min, High speed: 500mm/min	Travel mechanism	Rail, rack-pinion, motor drive
Motor & Gear box	DC servo motor, 30W, 3000rpm. 1/18	Clutch	Manual lever clutch
Torch adjust	±15mm each of U-D, L-R, Torch angle adjust up-down ±10°	Copper shoe adjust	Left-right ±20mm, pressure adjust max 19Kgf
Dimension (W×L×H)	400×310×285	Weight	15Kg
Operating Parameter	Ampere meter, volt-meter, start/stop, wire inching, current adjuster, voltage adjuster, speed control, stick-out adjuster, rapid travel(up/down), lamp(main power, automatic operation)		
TORCH		COPPER SHOE	
Water cooling, curved type, special coating – Good insulation		54(W)×20(D)×66(L), Size no 24, 28, 32, 36	
RAIL			
Length & Weight	0.5m/4Kg, 1.0m/8Kg, 1.5m/12Kg	Material	Cast AL alloy
Mount to work	Use Permanent Magnet	Quantity of Magnet	2EA(0.5m), 4EA(1.0m), 6EA(1.5m)
SUB CONTROL BOX			
Dimension (W×L×H)	250×200×300	Weight	7Kg
Input voit & Operating parameter	AC440V, Single phase, power on/off, lamp		
CONSIST OF (STANDARD)			
Carriage, Torch, copper shoe, rail 1.5m 1 unit, wire conduit cable 3m, power cable(100SQ) 45m, control cable 16 cores, 3 cores 45m			
WEAVER (OPTIONS)			
Stroke	50mm	Control Method	Electric motor control

※ The specification can be changed without notice to be upgraded.

Mini Auto Carriage | 미니 오토 캐리지

(No Rail Type)



AT-HM802

Parts	Items	Description	Note
Body	Material	AL6061	
	Travel pattern	4-rubber wheel friction	Magnetic type
	Driving motor	- AC220V motor 6W - Reduction ratio 1/250	
	Travel speed	0~1,000mm/min	
	Dimension	167(W)x235.5(H)x265(L) mm 145(W)x159.5(H)x200(L) mm	Lower value is the minimum size.
Slide	Weight	3.9Kg	Excluding welding torch
	Vertically	0~30mm	
	Horizontally	0~40mm	
	Working angle	45° ± 10°	
	Travel angle	± 3°	

Mini Two Torches Carriage | 미니 투 토치 캐리지

(No Rail Type)



AT-DT804

Parts	Items	Description	Note
Body	Material	AL6061	
	Travel pattern	4-rubber wheel friction	Magnetic type
	Driving motor	- AC220V motor - Reduction ratio 1/240	
	Travel speed	0~1,000mm/min	
	Dimension	200(W)x500(H)x450(L)mm	
Slide	Weight	9.0Kg	
	Vertically & Horizontally	Torch 1: 50mm Torch 2: 30mm	fine vertical adjustment and height of members fine horizontal adjustment
	Working angle	± 45°	
	Travel angle	± 3°	

All Position Weaving Carriage | 전자세 위빙 캐리지

(Rail Type)



AT-MPW904

Parts	Items	Description	Note
Body	Material	AL6061	
	Travel pattern	Bevel gear & 4-wheel chain drive	
	Driving motor	- AC220V motor - Reduction ratio 1/240	
	Travel speed	0~1,000mm/min	
	Dimension	412(W)x265.5(H)x357.5(L)mm	
Slide	Weight	7.1Kg	
	Vertically	± 50°	fine vertical adjustment and height of members
	Horizontally	0~50mm	fine horizontal adjustment
	Working angle	± 45°	Various weaving pattern
	Travel angle	± 10°	Various function

Mini Weaving Carriage | 미니 위빙 캐리지

(No Rail Type)



AT-HM802W

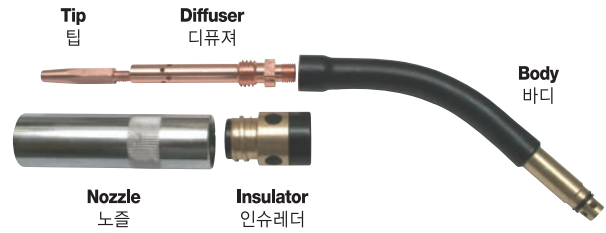
Parts	Items	Description	Note
Body	Material	AL6061	
	Travel pattern	4-rubber wheel friction	Magnetic type
	Driving motor	- AC220V motor - Reduction ratio 1/721	
	Travel speed	0~1,000mm/min	
	Dimension	240(W)x262(H)x265(L)mm	
Slide	Weight	5.4Kg	
	Vertically	± 50°	fine vertical adjustment and height of members
	Horizontally	0~50mm	fine horizontal adjustment
	Working angle	± 45°	Various weaving pattern
	Travel angle	± 10°	Various function

※ The specification can be changed without notice to be upgraded.

CO₂/MAG/MIG Welding Torch Parts



CO₂ Torch Ass'y | CO₂ 토치 Ass'y



Body Ass'y | 바디 Ass'y



Auto Carriage Torch | 오토캐리지 토치



Auto Torch | 자동토치



Spring Liner | 스프링 라이너

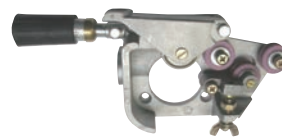
CO₂/MAG/MIG Welder Parts



Wire Feeder
와이어 피더



Single Cable
싱글 케이블



2 Roll Bracket
2롤 브라켓



4 Roll Bracket
4롤 브라켓



Reel Shaft
릴 샤프트



Adapter
어댑터

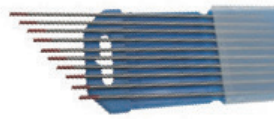


Feeder Roller
피더 롤러



CO₂ Regulator
CO₂ 게이지

Tig Welder Parts



Tungsten Rod
텅스텐로드

Nozzle
노즐



Collet Body
콜릿 바디



Collet Chuck
콜릿 척



Head
헤드



Cap
캡



Head Ass'y
헤드 Ass'y



Air Cooling Torch
공냉 토치



Water Cooling Torch
수냉토치



Tungsten Grinder
텅스텐 연마기



Water Cooler
용접기 수냉각장치



Positioner
턴테이블



Argon Regulator
알곤 게이지

Plasma Cutting Parts



Guide Ring
가이드 링



Shield Cap
실드 캡



Nozzle
노즐



Electrode
전극

Plasma Head
플라즈마 헤드



Plasma Torch
플라즈마 토치



Compass
콤파스

Submerged ARC Welder Parts



Sub Tip
서브 Tip



Sub Nut
서브 너트



Nozzle Adapter
노즐 아답타



Extension Nozzle
익스텐션 노즐



Sub Roller
서브 로라

Gouging Machine / MMA Parts



Gouging Holder A'ssy
가우징 홀더 어셈블리



Earth Clamp(300A)
어스집게(300A)



ARC Holder
아크 홀더



ARC Welding Holder Set
아크 용접 홀더 세트



Gouging Head
가우징 헤드



Earth Clamp(500A)
어스집게(500A)



Earth Clamp(1500A)
어스집게(1500A)



Welding Helmet
용접면

Welding Rod Dry Oven & Flux Recovery



Welding Rod Dry Oven (Portable 5K/10K)
용접봉 건조기 (휴대용 5K/10K)



Welding Rod Dry Oven (50K/100K/200K/300K)
용접봉 건조기 (5K/10K/200K/300K)



Flux Recovery (AT-5FR)
플럭스 회수기 (AT-5FR)



Inverter

Inverter Main Transformer + Reactor

Description	Unit	CO ₂		TIG	
		500CM	650CM	500DT	600DT
Main transformer					
Core size		EE 118	EE 168	EE 118	EE 168
Weight	Kg	4	7	4	7
Reactor	Unit	500CM	650CM	500DT	600DT
Dimension (W×D×H)	mm	40×220×50	60×260×60	40×170×50	60×260×60
Weight	Kg	6	10	6	13

※ The specification can be changed without notice to be upgraded.

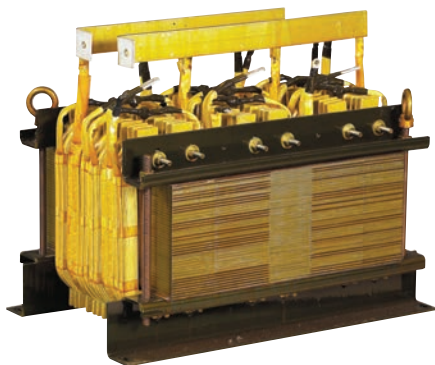


CO₂/MIG/MAG

SCR CO₂/MAG/MIG Main Transformer + Reactor + Choke

Main transformer	Unit	350A	500A	600A	800A
Duty cycle	%	70	70	100	70
Dimension (W×D×H)	mm	375×210×300	450×270×320	450×270×350	450×295×420
Weight	Kg	60	78	105	130
Reactor + Choke	Unit	350A	500A	600A	800A
Dimension (W×D×H)	mm	350×120×310	435×130×340	435×130×340	450×140×350
Weight	Kg	17	30	38	45

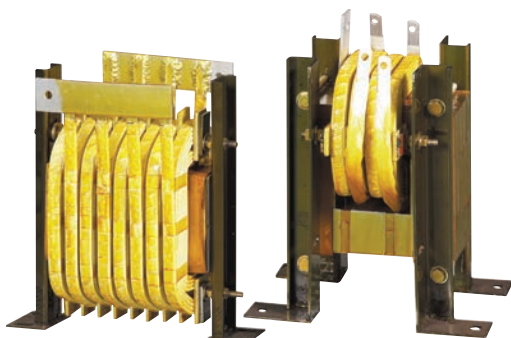
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SCR SAW/Gouging Main Transformer

Main transformer	Unit	1200A	1500A	2000A
Duty cycle	%	80	80	80
Dimension (W×D×H)	mm	550×300×560	680×430×560	680×430×600
Weight	Kg	210	310	360

※ The specification can be changed without notice to be upgraded.



SAW

SCR SAW/Gouging Reactor + Choke

Reactor	Unit	1500A	2000A
Dimension (W×D×H)	mm	360×290×440	360×310×440
Weight	Kg	50	50
Choke	Unit	1500A	2000A
Dimension (W×D×H)	mm	375×200×400	375×200×430
Weight	Kg	35	40
Reactor + Choke	Unit	1000A	
Dimension (W×D×H)	mm	460×150×360	
Weight	Kg	58	

※ The specification can be changed without notice to be upgraded.



Total Welding Solution
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 (주)오트웰

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 한국생산기술연구원 Partner of Korea Institute of Industrial Technology	 koita 한국산업기술진흥원 R&D Center	 특허청 KOREAN INTELLECTUAL PROPERTY OFFICE Patent of AI Inverter Welder & Remote Control for TIG Welder