

HD AUTO 600M+



600A Thyristor Welder: High Performance and Reliability



EQUIPMENT

HD AUTO 600M+ ensures stable, high-quality welds across materials from thin sheets to thick metals. Designed for heavy industries, shipbuilding, and construction, it offers consistent performance with minimal maintenance and features built-in protections against overload, overvoltage, and overcurrent.

Advanced current control allows precise arc adjustments, producing clean, strong welds with minimal spatter. Ideal for both heavy-duty and precision tasks, this reliable machine meets the demands of challenging applications with ease.

The robust design of this system enables extended operation for long hours, ensuring durability and reliability in demand tasks are effortlessly achieved with precise current and arc control, allowing for enhanced accuracy and efficiency.

Industries:



Stability



Powerful output



Durability



Easy to use



Versatility



Easy repair

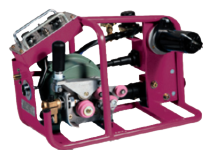
Standard Accessories Configuration



MIG Torch
50SQ * 5M * 500A



Welding cable
(Up to 50m)
Power source
to wire feeder



2 Roll wire feeder
(Optional 4roll
wire feeder)



Earth Cable
70SQ, 5M

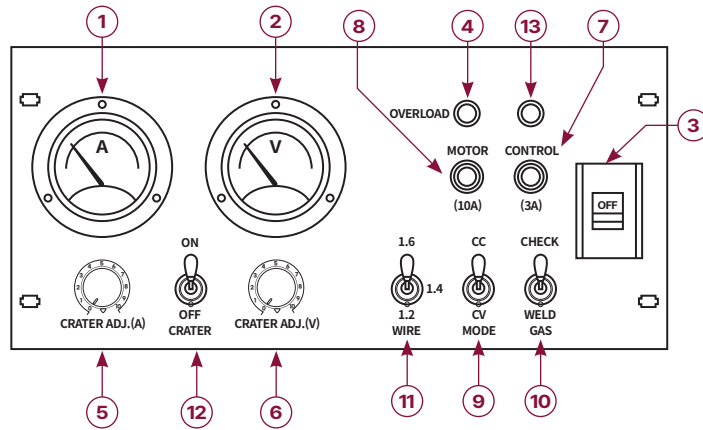


Gas Hose 3M



CO2 Regulator
110V or 220V

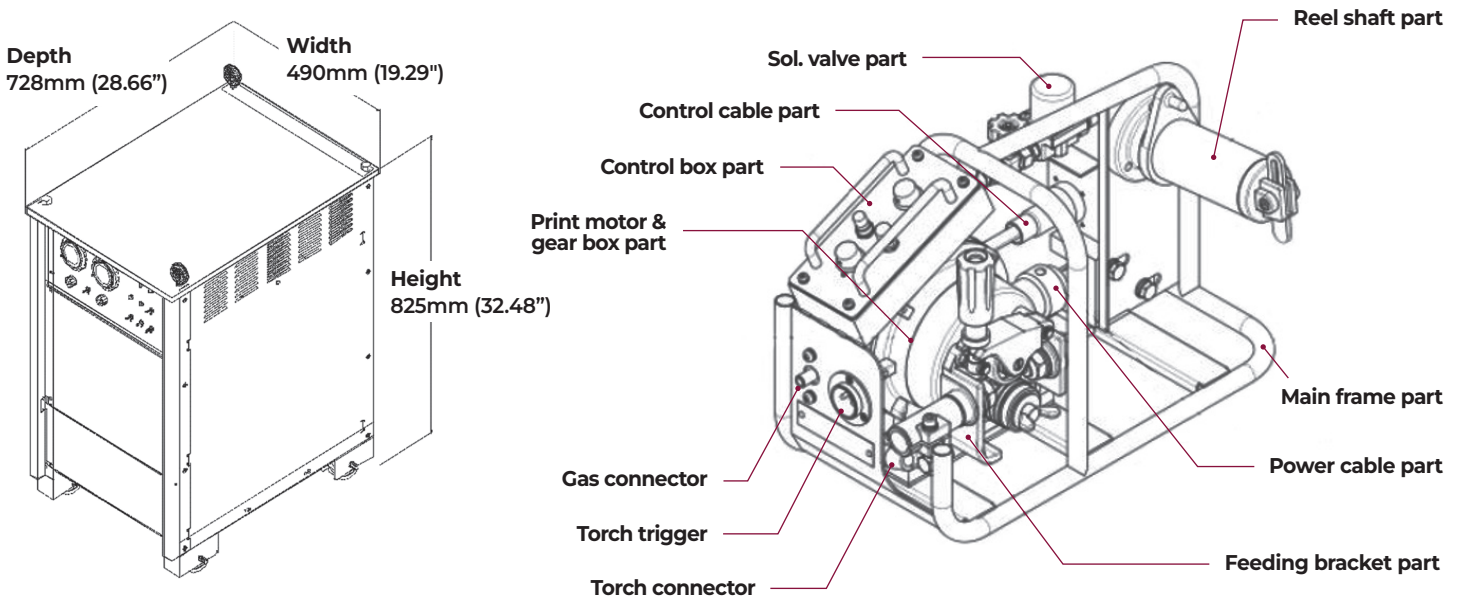
Introduction



HD AUTO 600M+ is the perfect partner for professionals, combining exceptional performance, safety, and durability. From large-scale industrial applications to precise welding tasks, it provides professionals across the globe with exceptional versatility and performance.

No.	Item	Description
1	Ampere Meter	Welding Current Display
2	Voltage Meter	Welding Load & No-load Voltage Display
3	Power Switch(N.F.B)	Power ON/OFF
4	Overload Lamp	Overload Display
5	Crater ADJ.(A)	Crater Current Control
6	Crater ADJ.(V)	Crater Voltage Control
7	Control Fuse(3A)	Protecting Control Power
8	Motor Fuse(10A)	Protecting Wire Feeder Motor Power
9	Welding Mode Select Switch	Selecting CO2 or GOUGING Mode
10	Gas Check Switch	Gas Check Test
11	Wire Select Switch	Selecting Wire Diameter (1.2 - 1.4 - 1.6mm)
12	Crater Select Switch	Selecting Crater ON/OFF
13	Power Lamp	Displaying Power ON/OFF State

Product Diagram



Specifications

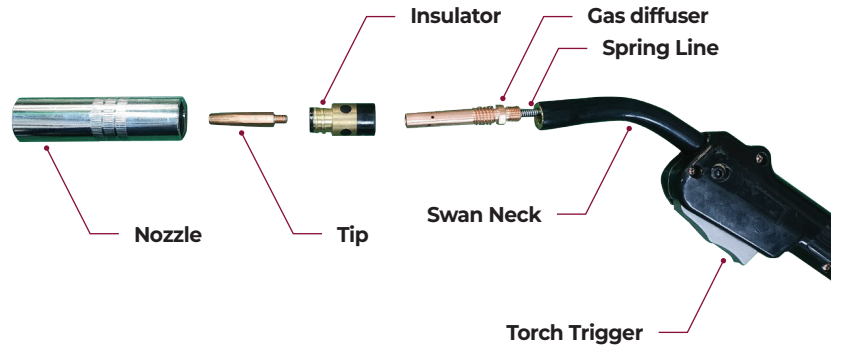
Model	HD AUTO 600S+	HD AUTO 600M+
Type	CV(MIG/MAG)	CV(MIG/MAG), CC(Gouging)
Weight	215Kg (474.01 lb)	220Kg (485.02 lb)
Rated Input Power	40kVA	
Input Voltage	3P, 220V, 380V, 440V ±10%	
Frequency	50/60Hz	
Rated Welding Current	600A	
Rated Welding Voltage	50VDC	
Output Current Range	60A~600A	
Output Voltage Range	15~50VDC	
Max. Open-Circuit Voltage DC	80V	
Duty Cycle	100%	
Crater Current Range	60A~600A	
Crater Voltage Range	15~50VDC	
Dimension (W * D * H)	490*728*825mm (19.29" × 28.66" × 32.48" in)	

Torch Information

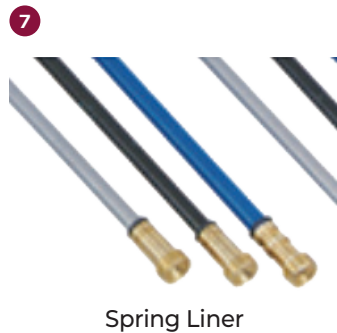
Powerful Performance:
Tackle any task effortlessly with the robust output of 500A!

Precision Welding:
Experience flawless results with precise welding using CO2 gas.

Durability:
Built to last, ensuring consistent performance even after prolonged use.



Consumable



Order Information

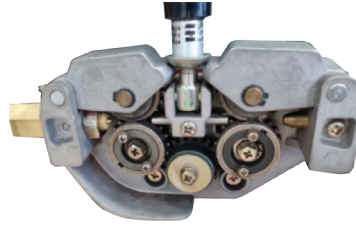
No.	Torch Consumable	Order Code
1	CO2 500A MIG * Torch 5M	P35001457
2	CO2 500A MIG Torch * Nozzle	P30000293
3	CO2 500A MIG Torch * Tip (1.2mm / 0.0472")	P30000287
	CO2 500A MIG Torch * Tip (1.4mm / 0.0551")	P30000288
	CO2 500A MIG Torch * Tip (1.6mm / 0.063")	P30000289
4	CO2 500A MIG Torch * Diffuser	P30000290
5	CO2 500A MIG Torch Insulator	P30000299
6	CO2 500A MIG * Flexible Torch Body	P30002981
7	Spring Liner (1.2-1.6mm/0.0472"-0.063")	P30003324
	CO2 500A MIG Torch * Torch Body	P30000792
	CO2 500A MIG * Flexible Torch 5M	P30000296

Wire Feeder And Spare Parts



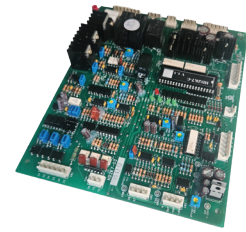
2 Roll Print Motor

Lightweight design for easy portability and effortless use anywhere, anytime. Simple installation and operation ensure accessibility for beginners while maximizing work efficiency.



4 Roll Print Motor

Stable wire feeding enables continuous welding, boosting productivity. The professional 4-roll system ensures unmatched precision for flawless results.



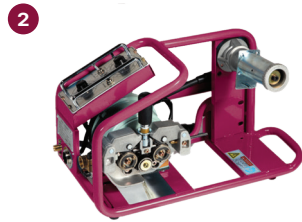
Main PCB Board

Consistent performance even in extreme environments, ensuring reliable quality to perfectly support the projects.

Components



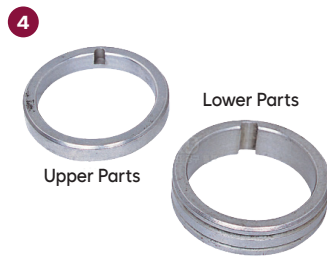
2 Roll Wire Feeder



4 Roll Wire Feeder



2 Roll Ceramic Roller



4 Roll Steel Roller

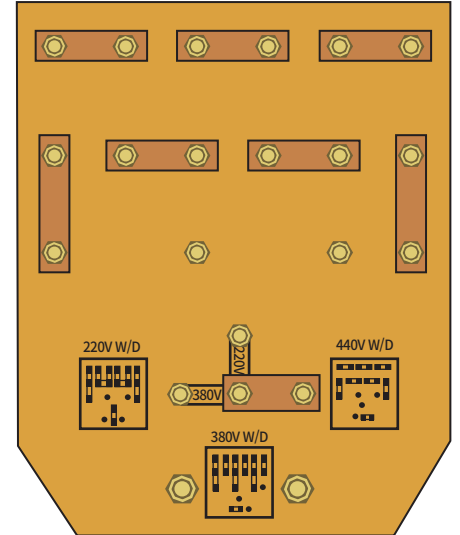
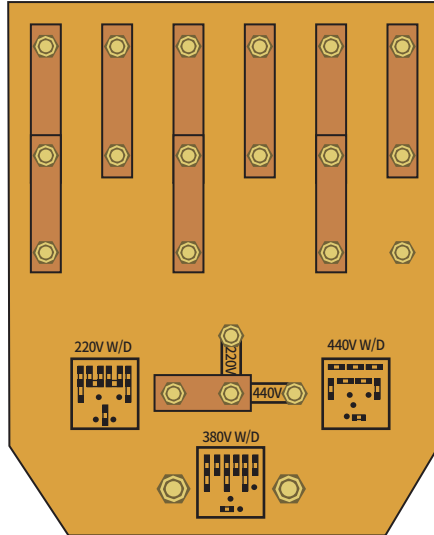
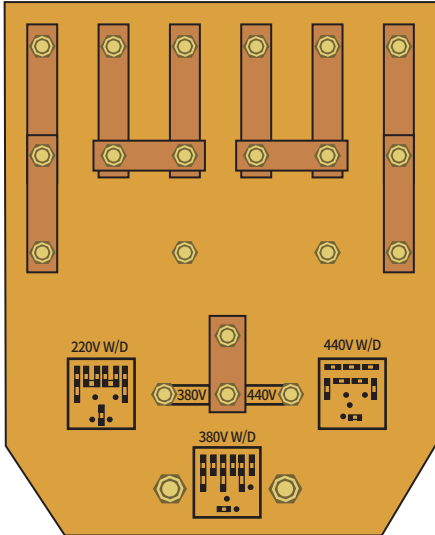


Euro Torch Connector

Order Information

No.	Feeder Consumable	Order Code
1	2 Roll Wire Feeder	P30002274
2	4 Roll Wire Feeder	P30000967
3	2 Roll Roller * V Ceramic 1.2 & 1.4 mm (0.0472" & 0.0551")	P30000250
	2 Roll Roller * V Ceramic 1.4 & 1.6 mm (0.0551" & 0.063")	P30001697
	2 Roll Roller * V Ceramic 1.2 & 1.6 mm (0.0472" & 0.063")	P30000897
4	4 Roll Roller * V Steel 1.2 & 1.4 mm (0.0472" & 0.0551")	P30000251
	4 Roll Roller * V Steel 1.4 & 1.6 mm (0.0551" & 0.063")	P30002911
	4 Roll Roller * V Steel 1.2 & 1.6 mm (0.0472" & 0.063")	P30001671
5	Wire Feeder Euro Mount	P35000157
Spare Components		Order Code
	SCR(Thyristor)	P40005187
	Snubber PCB	P45000243
	Main PCB (2K7-03)	P45000791
	Fan Motor	P45000616
	Impeller For Fan	P40003454
	Solenoid Valve (Built In P/S)	P40005706
	Magnetic Contactor	P40004843

Wiring Diagram For Input Voltage



* W/D: WIRING DIAGRAM

HD AUTO 600M+ is compatible with 220V, 380V, and 440V. It accommodates various voltage specifications, providing a reliable solution for power issues.

Wooden Box Packaging



The wooden box packaging offers reliable protection for valuable products. Made from sturdy wood, it resists shocks and pressure, while being crafted from eco-friendly materials to minimize environmental impact. Perfect delivery is guaranteed, ensuring safe transportation to the destination.

Compatible Carriage



HS5A

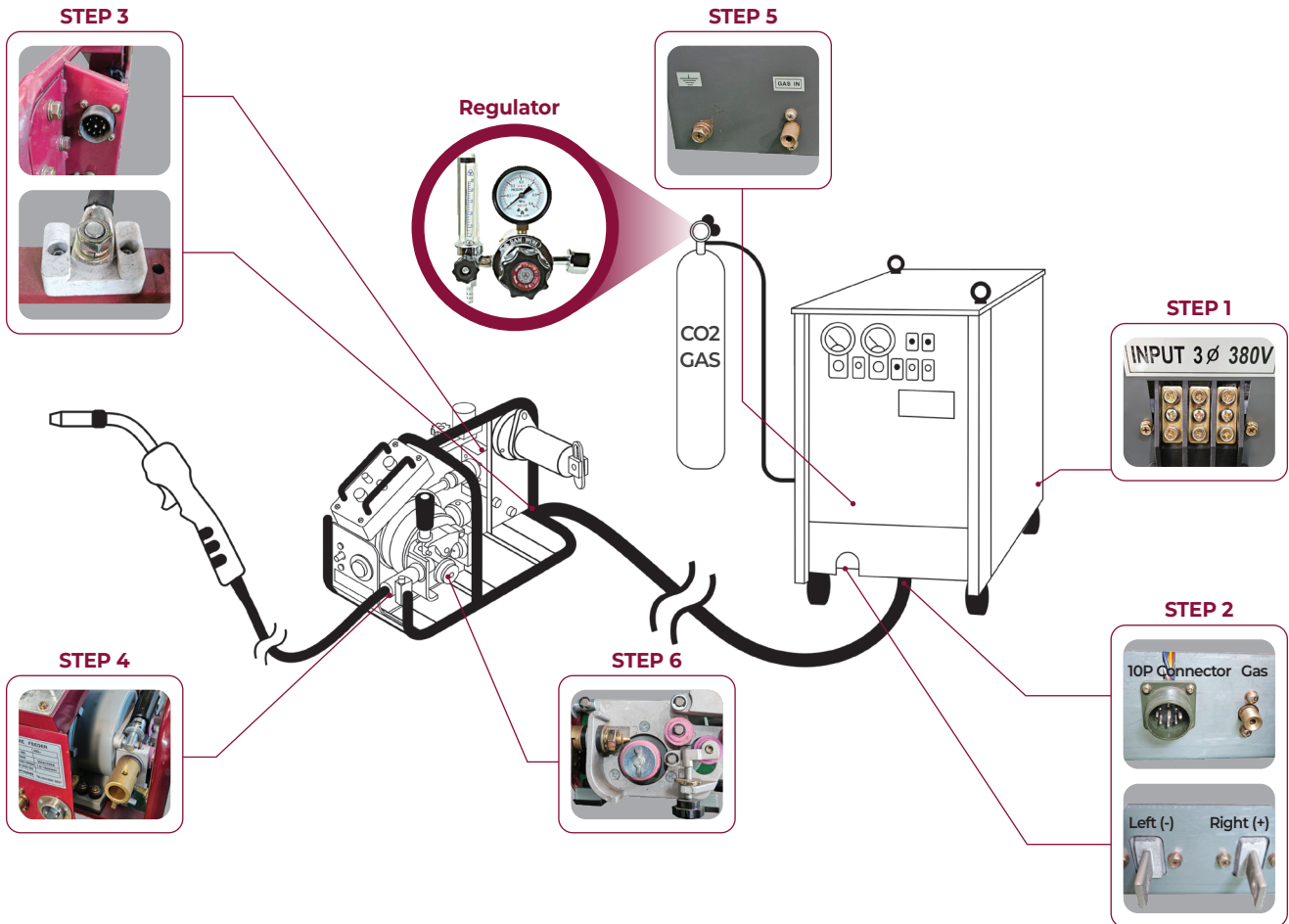
- Horizontal fillet automatic welding carriage
- Easily attachable and detachable with magnetic lever



HC51B

- Fillet switch and continuous dual side welder
- 2 torches allow for double-sided welding

Installation Guide



STEP 1: Power Input Connection

Properly connect the rear power input cable to each corresponding terminal. Secure the ground (earth) cable to the bottom of the case.

STEP 2: Front Panel Connections

Lift the front cover and connect the connectors underneath to the welding cables. If the wire feeder gas hose connector differs, verify the welding cable connection before proceeding.

* Left (-): Ground(earth) cable connection
 Right (+): Welding cable(polarity cable) connection
 9PIN MS, GAS: Ensure proper connections

STEP 3: Wire Feeder - Welding Cable Connection

Connect the wire feeder to the welding cable. Attach the polarity cable to the welding cable. Connect PIN and GAS sequentially.

STEP 4: Torch - Wire Feeder Connection

Securely connect the torch terminal to the wire feeder. Attach the torch trigger switch and gas hose.

STEP 5: Gas Cylinder & Power Supply

Connect the regulator to the gas cylinder. Attach the gas hose to both the back of the welder and the regulator. The 110V power supply is located at the rear of the welder.

For 220V operation, use a separate power outlet.

STEP 6: Load the Welding Wire

Insert the welding wire into the reel shaft and feed it through the wire feeder.

SF-71

Flux cored wire for mild steel compatible with HD AUTO 600M+



- AWS A5.20 E71T-1C
- EN ISO 17632-A T42 2 P C1 1

SF-71 is a flux-cored wire designed for excellent weldability in manual and semiautomatic applications. With a smooth and stable arc, it ensures reliable performance in all positions. Its fast-freezing slag enhances control, making welding more efficient and precise.

Designed for optimal performance with 100% CO₂ shielding gas, SF-71 ensures minimal spatter and clean welds, significantly reducing post-weld cleanup. With a typical diffusible hydrogen content of 6.1ml/100g weld metal (measured via gas chromatography), it offers reliability and precision, making it an ideal choice for structural fabrication, shipbuilding, and heavy equipment manufacturing.

Typical Mechanical Properties of All-Weld Metal

YS MPa(lbs/in ²)	TS MPa(lbs/in ²)	EL (%)
548 (79,000)	582(84,500)	28.0

Typical Chemical Composition of All-Weld Metal (%)

C	Si	Mn	P	S
0.04	0.49	1.29	0.010	0.009

Typical Welding Conditions

Shielding Gas	Welding Position	Current (A)		
		1.2mm (0.045in)	1.4mm (0.052in)	1.6mm (1/16in)
100% CO ₂	F & HF	120~300	150~350	150~360
	V-Up & OH	120~260	180~280	180~280
	V-Down	200~300	220~320	250~320

Packaging

Diameter mm (in)	Spool kg (lbs)	Pac kg (lbs)
1.0 (0.040)	5 (11) 15 (33) 20 (44)	100 (221) 200 (441) 250 (551)
1.2 (0.045)		
1.4 (0.052)		
1.6 (1/16)		