MIG-350HD/500HD

Quick Specs

Processes:
MIG,
Flux-Cored,
Pulse MIG,
MMA(Stick)

Applications:
Metal fabrication workshops
Shipyards and offshore industry
Chemical and process industry
Steel structure workshops

Input Power: 400V,3-Phase
Amperage Range:
350HD:10-350A/500HD:10-500A
Rated Output at 40°C (104°F):
350HD:350A at 31.5V @60% Duty Cycle
500HD: 500A at 39V @60% Duty Cycle
Weight: 85KG

For MIG and Stick Welding

The total solution of industrial MIG/MAG welding

MIG-350HD/500HD is a synergic, pulsed MIG /MAG welding machine, suitable for Carbon steels and Stainless Steels. Air or water cooled packages combine with innovative distance wire feeding and remote control options to deliver outstanding welding performance. Heavy duty welding powers and modular designs makes the machine very strong and reliable. It's the perfect solution of the industrial welding jobs.

Specialist Features

Precision Arc Performance:

- **Multi-Process capable -** Welds MIG, flux-cored, stick and pulsed MIG.
- **Synergic control –** Set weld procedures with one control, simple and easy to operate.
- **Synergic MIG** provides communication between power source, feeder and gun. As wire speed increases or decreases, the arc voltage also increases or decreases to maintain a constant welding arc.
- **All position carbon steel welding with Pulse MIG process:** use the cheaper CO2 gas but get a similar Ar/CO2 MAG welding performance.
- **Featured Wave-form control system:** Maintains a stable, smooth arc for short arc welding on steel. Improved penetration on thicker aluminum sections.
- **Dynamic control** with a push of a button.
- **Fast, precise, clean arc ignition and arc ending.**
- **10 channels memory capacity.**

Outstanding Quality:

- Newly designed using the latest power electronic technology for improved reliability.
- CE Certified.
- One-Year Warranty on parts.

Technical specifications

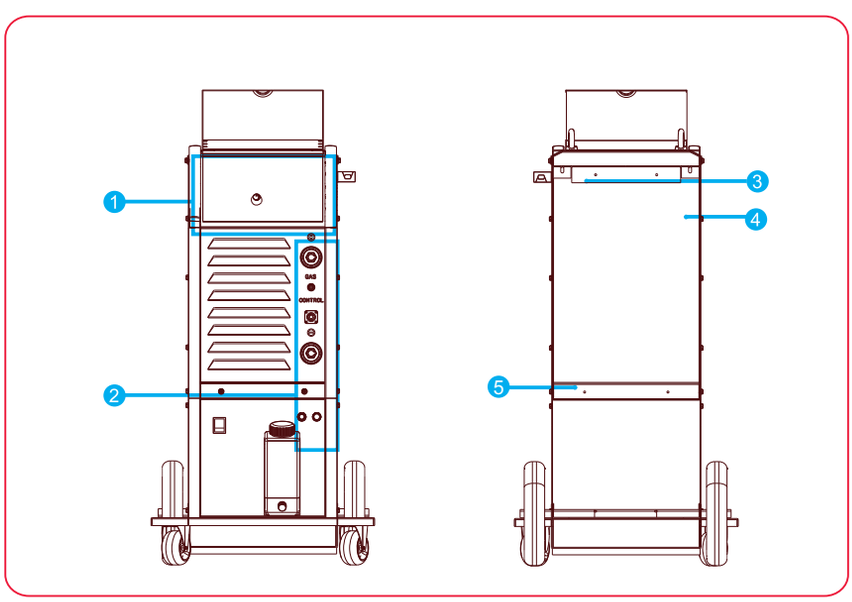
Item No	MIG-350HD	MIG-500HD
Rated Input Voltage	3PH ~ 400V ±15%	3PH ~ 400V ±15%
Max. Load Power Capacity	15.26KVA	26.99KVA
Rated Duty Cycle(40˚C) 60%	MIG: 350A/31.5V	MIG: 500A/39V
	MMA: 350A/34V	MMA: 500A/40V
100%	MIG: 300A/29V	MIG: 350A/31.5V
	MMA:300A/32V	MMA:350A/34V
Welding Current/Voltage Range	MIG: 10A/14.5V~350A/31.5V	MIG: 10A/14.5V~500A/39V
	MMA:10A/20.4V~350A/34V	MMA:10A/20.4V~500A/40V
Open Circuit Voltage	70V~80V	70V~80V
Power Factor	0.85	0.85
Efficiency	85%	85%
Pre-Gas Time	Preset	Preset
Flow-Gas Time	Preset	Preset
Wire-feed Mechanism	4 Rollers	4 Rollers
Wire-feed Speed Range	0~25m/ min	0~25m/ min
Wire Spool Capacity	300mm (15kg)	300mm (15kg)
Filler Wires ? (mm) Fe, Ss:	0.6~1.6 mm	0.6~1.6 mm
Dimension (LxWxH)	960x420x1400mm	960x420x1400mm
Weight (KG)	85KG	85KG

Water-cooling Unit: WC-100	
Operating Voltage	230V 50/60Hz
Rated Power	260W
Cooling Power	1.5KW(1L/MIN)
Maximum Pressure	0.3MPA/60HZ
Recommended Cooling Liquid	20%~40% ethanol/water
Tank Volume	6.5L

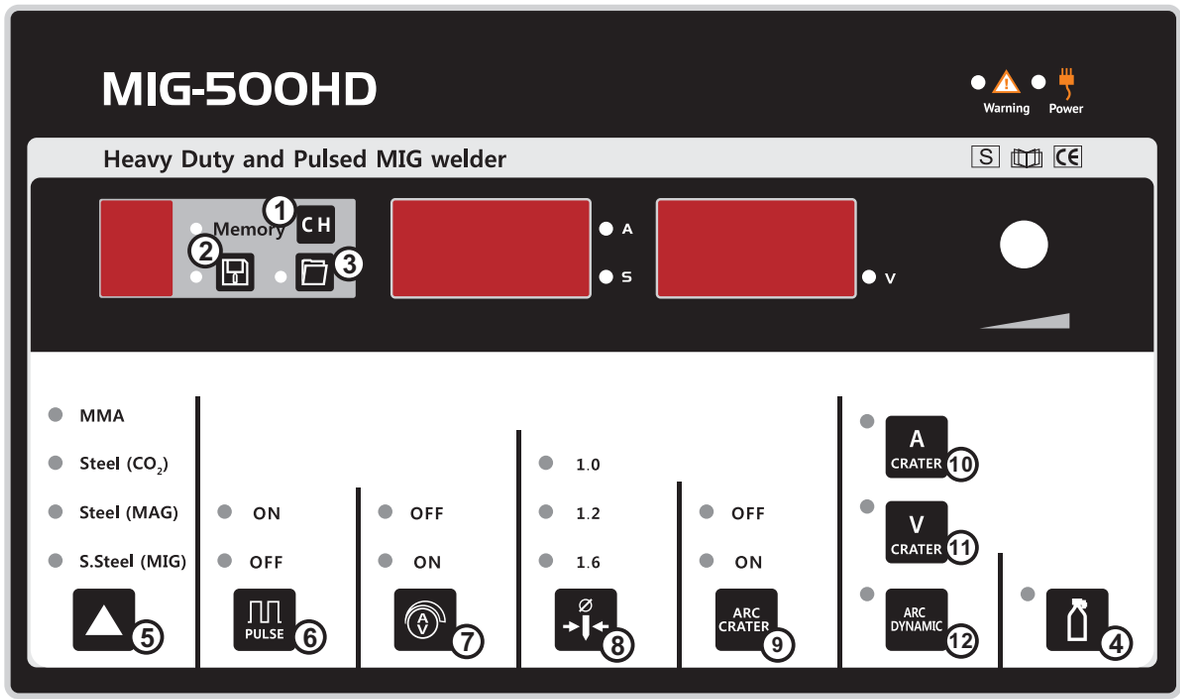
Panel & Connections

Panel & Connections

1.Control Panel
2.Output connectors
3.Power Switch
4.Groung/Earth connector
5.Connecting nipple M16X1.5, shielding gas cinnection



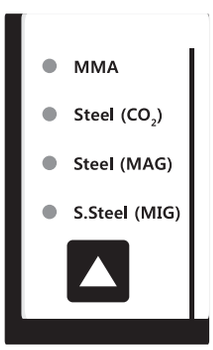
General View of Control Panel



Control Panel Descriptions

1.SELECT the Memory channel
2.OPEN the parameter of selected memory channel
3.STORE the setting to Memory channel
4.Push to Check Gas
5.Welding Process
MMA,
MAG(CO2)for Carbon steels
MAG(CO2/Ar) for Carbon steels
MIG (Argon) for Stainless steels
6.Pulse MIG:ON/OFF
7.Synergic function ON/OFF
8.Synergic setting (select wire diameter)
9.Arc Crater: ON/OFF
10. Select to adjust the Arc Crater Current
11. Select to adjust the Arc Crater Voltage
12. Arc Dynamic controls

Synergic control

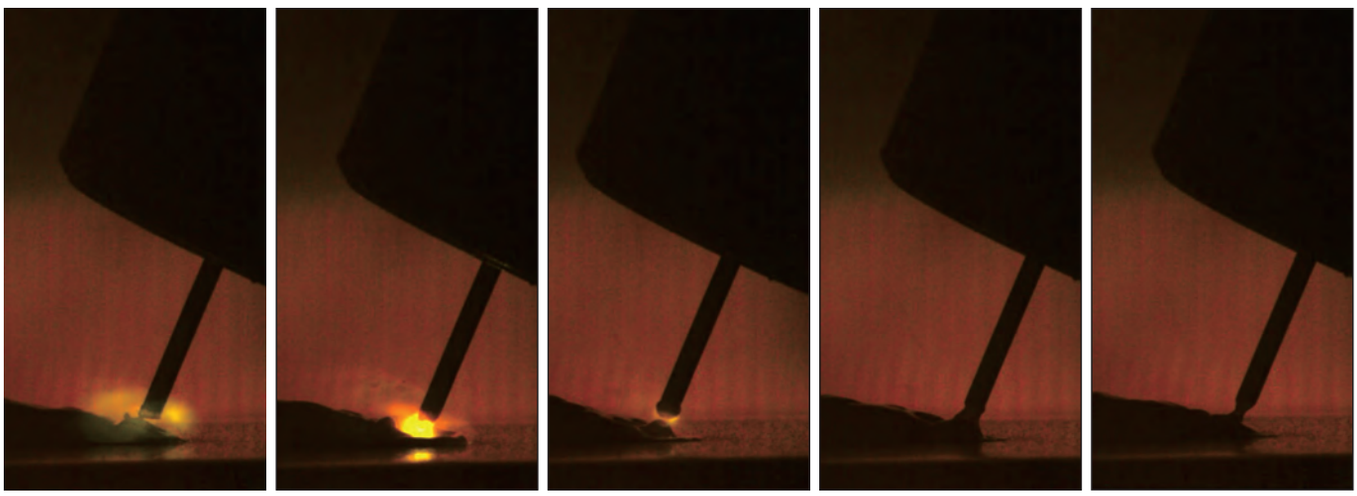


Select the base materials and shield gas
MAG(CO2)for Carbon steels
MAG(CO2/Ar) for Carbon steels
MIG (Argon) for Stainless steels

Dia.of Welding Wire

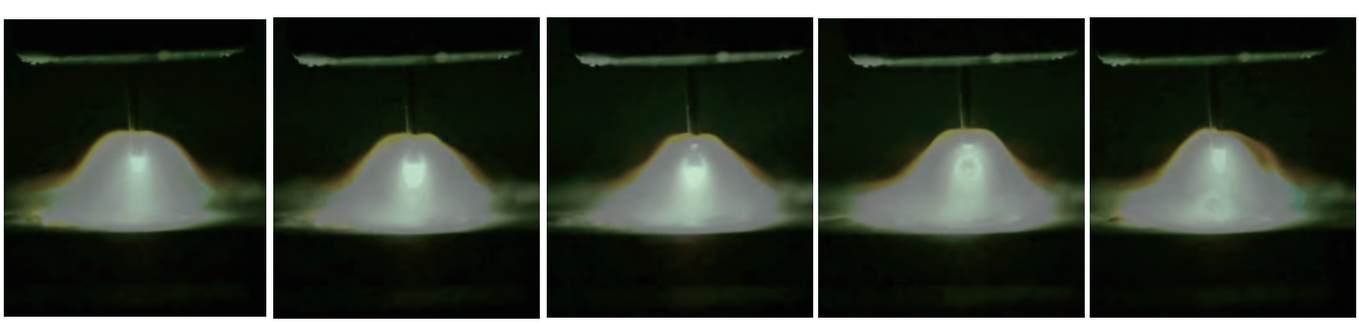
Synergic MIG
Synergic pulsed welding mode offers the simplicity of single-knob control. The machine will select the correct pulse power based on the wire feed speed (WFS) set by the operator.

Classical MIG/MAG

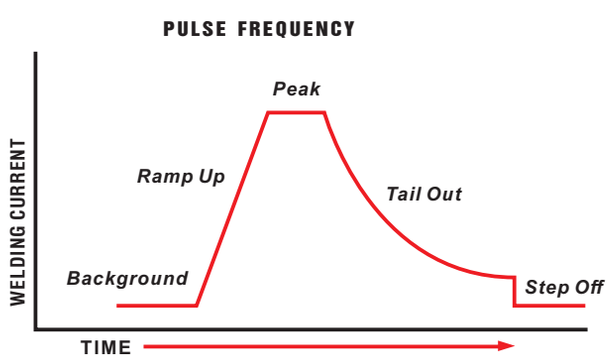


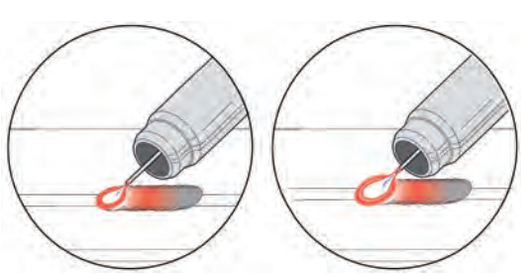
In classic mode, MIG / MAG welding is carried out in inert gas with automatic wire feed.
With this mode, a high welding speed and excellent quality are offered without any extra costs in the processing of ferrous metals, as well as various steels.

Pulse MIG



Pulsed MIG varies weld current between peak (high heat) and background (low heat) current to provide better control of heat input, which minimizes warping and burn through on thin materials. Pulsed MIG also enables flat, horizontal, vertical up, or overhead welding without a slag system. Optimized GMAW-P waveforms are readily available to use on aluminum, carbon steel, high strength low alloy steel, stainless steel, and nickel alloys.



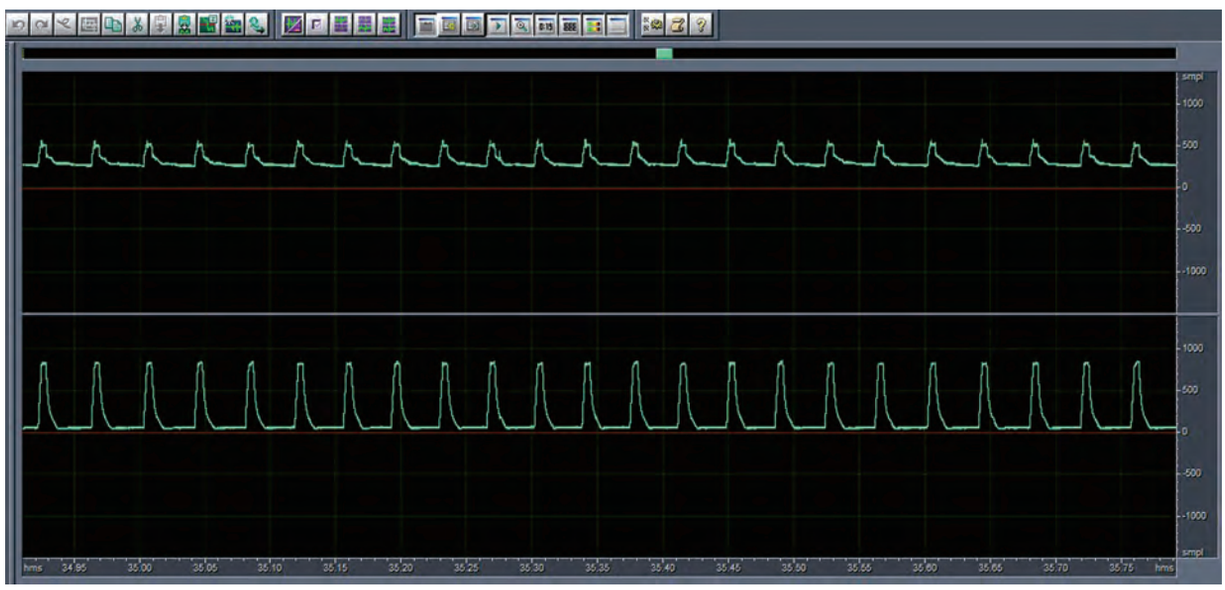


Low Heat
(Background)

High Heat
(Peak)

The advantage of Wave-form Control System

Fe,Pulsed



Fe, no Pulsed

The latest technology of Waveform Control System with pulsed MIG control mode, can perfectly control the output of welding power and get the precision Arc performance. The wire melting droplet transfer cycle is very clear, the welding beam is very clean and very few spatters during welding.

Accessories

For Standard accessories

MIG torch: MIG-501D
PTEE liner

Earth clamp with cable 3M

For Optional accessories

Co_2 gas regular with heater

Argon gas regular

Trolley:WT-150

Consumables

For MIG torch: MIG-501D

Nozzles

ICS0713	Gas nozzle Φ16mm
ICS0740	Gas nozzle Φ14mm
ICS0746	Gas nozzle Φ19mm
ICS0747	Adjusted tapered nozzle Φ15mm
ICS0748	Spot welding gas nozzle Φ20mm

Contact Tips

ICU0005-08	Contact tip Φ0.8mm M8x30 Ecu
ICU0005-10	Contact tip Φ1.0mm M8x30 Ecu
ICU0005-12	Contact tip Φ1.2mm M8x30 Ecu
ICU0005-16	Contact tip Φ1. 6mm M8x30 Ecu
ICU0005-20	Contact tip Φ2.0mm M8x30 Ecu
ICU0005-24	Contact tip Φ2.4mm M8x30 Ecu
ICU0005-58	Contact tip Φ0.8mm M8x30 CuAl
ICU0005-59	Contact tip Φ0.9mm M8x30 CuAl
ICU0005-60	Contact tip Φ1.0mm M8x30 CuAl
ICU0005-62	Contact tip Φ1.2mm M8x30 CuAl
ICU0005-66	Contact tip Φ1. 6mm M8x30 CuAl
ICU0005-70	Contact tip Φ2.0mm M8x30 CuAl
ICU0005-74	Contact tip Φ2.4mm M8x30 CuAl
ICU0005-78	Contact tip Φ0.8mm M8x30 CuCrZr
ICU0005-80	Contact tip Φ1. 0mm M8x30 CuCrZr
ICU0005-82	Contact tip Φ1. 2mm M8x30 CuCrZr

Replacement Lines

IIC0226	Brass terminal Φ3.0X4.5mm 0.35m
IIC0210	Teflon liner Φ3.0X4.5mm 3m Yellow
IIC0580	Steel liner Φ1.2-1.6mm 3m

Others

10-pin connector

Drive Roll

Fe 0.6/0.8 mm
Fe 0.8/0.9 mm
Fe 0.8/1.0 mm
Fe 1.0/1.2 mm
Fe 1.2/1.6 mm
Al 0.6/0.8 mm
Al 0.8/0.9 mm
Al 0.8/1.0 mm
Al 1.0/1.2 mm
Al 1.2/1.6 mm