

# MIG-400DUAL



## Quick Specs



Heavy Industrial Application:  
Metal fabrication workshops  
Shipyards and offshore industry  
Chemical and process industry  
Steel structure workshops

Process:  
MAG(GMAW)  
MIG (GMAW)  
Stick (SMAW)

Input Power: 220-380V, 3-Phase  
Amperage Range: 30-400A  
Rated Output at 40°C (104°F): 400A at 34V @60% Duty Cycle  
Weight: 50KG

## For MIG and Stick Welding

### Heavy duty powers at any volts from 220-440V.

MIG-400DUAL is built with a double control circuits in order to confirm the full welding powers at any voltage with rated duty cycle. Designed based on the universal stability power source, built with a soft-switching system, the machine can be fit with variable line-in volts automatically and reliably. It's the new idea and new technology to built a welding power source.

## Specialist Features

### Precision Arc Performance:

- **Built with a Double-controlled circuits** make the machine fit with variable line-in volts automatically and confirm the full output at any voltage with rated duty cycle.
- **The short-circuiting metal transfer mode** is the low heat input mode of metal transfer for GMAW so that it reduces weldment distortion.
- **Superior MAG Process** – Welds with mixed or CO2 shielding gas for superior quality welding.
- **Arc Force** makes it easier to weld large-drop melting electrode types at low current strengths with a short arc in particular.
- **Professional 4-rolls wire-feeder** provides a stable wire speed.
- Root pass welding process provides a good root formation and reduces the time for cleaning the weld spatter.
- **Intermediate cables up to 100M(75mm<sup>2</sup>) from the wire feeder unit.**
- **Fast, precise, clean arc ignition and arc ending.**



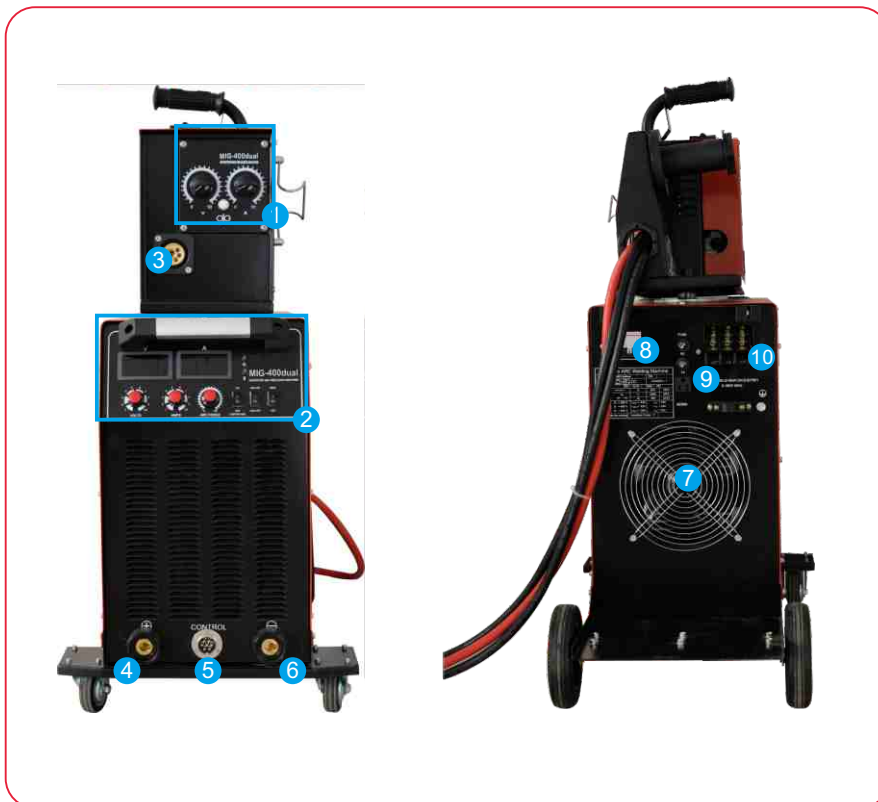
### Outstanding Quality:

- Newly designed using the latest power electronic technology for improved reliability.
- CE Certified.

## Technical specifications

Item No	MIG-400DUAL
Rated Input Voltage	3PH ~ 220~380V +15%
Max. Load Power Capacity	380V: 15.5KVA 220V:13.3KVA
Rated Duty Cycle(40oC)	60%
	MIG: 380V:400A/30V 220V:350A/28V
	MMA: 380V:350A/34V 220V:300A/32V
	100%
	MIG: 380V:350A/28V 220V:300A/26V
	MMA:380V:300A/32V 220V:250A/30V
Welding Current/Voltage Range	MIG: 380V: 30A/15.2V~400A/30V 220V:30A/15.2V~350A/28V MMA:380V: 30A/21.2V~350A/34V 220V:30A/21.2V~300A/32V
Open Circuit Voltage	70V
Power Factor	380V:0.92 220V:0.73
Efficiency	380V:88% 220V:80%
Pre-Gas Time	0-15S
Flow-Gas Time	0-15S
Wire-feed Mechanism	4 Rollers
Wire-feed Speed Range	1.5-15 m/ min
Wire Spool Capacity	300mm (15kg)
Filler Wires Ø (mm) Fe, Ss:	0.6~1.6 mm
Flux Cored:	0.8~1.6 mm
Al:	1.0~1.6 mm
Dimension	800x440X600mm
Weight	50KG

## Panel



### Panel Parameter Values

#### 1. wire-feeder

Current/Wire Speed regulator for MIG welding.  
Voltage regulator for MIG welding.

#### 2. Control Panel

#### 3. MIG torch connector (euro type).

#### 4. Positive "+" output connector.

#### 5. 7-pin multi-purpose control plug.

#### 6. Negative "-" output connector.

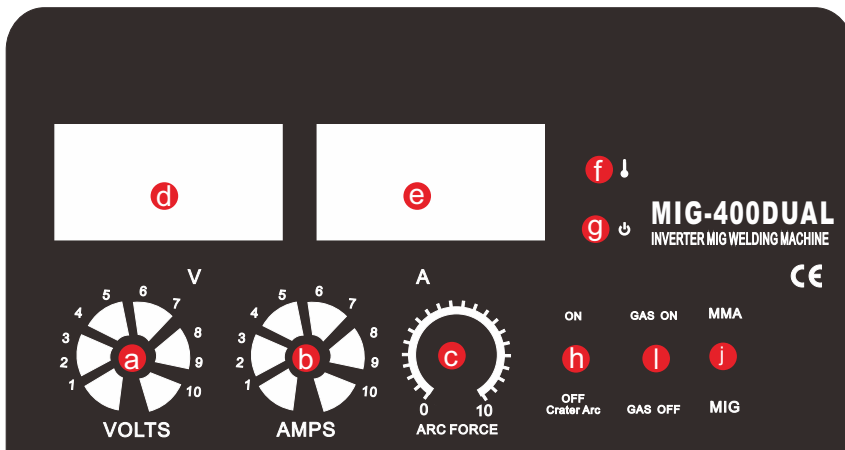
#### 7. Fan.

#### 8. Inlet power cable.

#### 9. 36V CO<sup>2</sup> heating power output socket

#### 10. 3 phase power cable Socket

## General View of Control Panel

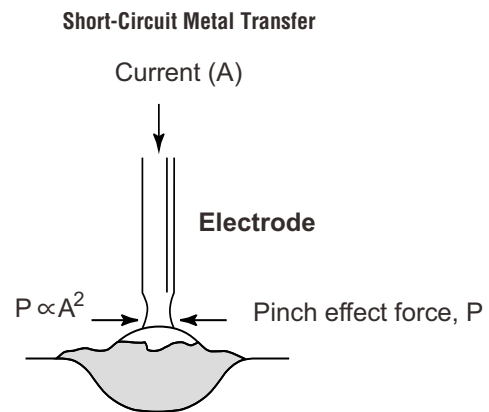


### Control Panel Parameter Values

- (a) Welding Voltage regulator.
- (b) Welding Current regulator.
- (c) Arc Force regulator.
- (d) Power/working pilot lamp.
- (e) Over-load/Over-heat Protection or Damage pilot lamp.
- (f) Voltmeter
- (g) Ammeter.
- (h) Crater ON/OFF mode selection (2T/4T).
- (I) Gas-test ON/OFF selection.
- (j) MMA/MIG welding mode selection.

## The short-circuiting metal transfer mode

The short-circuiting metal transfer mode is the low heat input mode of metal transfer for GMAW and has higher electrode efficiencies, 93% or more. The low heat input reduces weldment distortion and makes it ideal for sheet metal thickness materials.



## Four-Roll Drive System

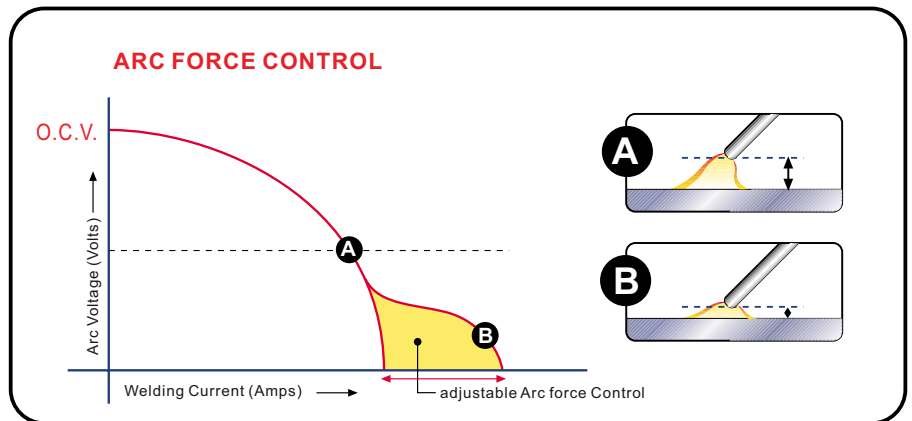


### 4-Rolls wire-feeder with strong feeding motor.

The MIG-400DUAL gives precise, clean welding performance, and also support optional root pass welding process. Our new control technology ensures excellent arc ignition and welding performance, obviously reduce the time for cleaning the weld spatter.

## Arcforce correction (welding characteristics)

During the welding process, arcforce prevents the electrode sticking in the weld pool with increases in current. This makes it easier to weld large-drop melting electrode types at low current strengths with a short arc in particular.



## Root pass welding process

The **MIG-400DUAL** gives precise, clean welding performance, and also support optional root pass welding process. Our new control technology ensures excellent arc ignition and welding performance, obviously reduce the time for cleaning the weld spatter.





## Accessories

### For Standard accessories



**MIG torch: MIG-501D**  
PTEE liner



**Earth clamp with cable 3M**

### For Optional accessories



**Argon/CO2 gas regular with heater**  
Output meter :1-30LPM  
Inlet pressure gauge:280kg/4000psi  
Out thread :M12-1.ORH(M)



**Professional torch:**  
Tbi 9W/ALU water cooled



**Trolley:WT-150**

## Consumables

### For MIG torch: MIG-501D



#### Nozzles

ICS0713	Gas nozzle	Φ 16mm
ICS0740	Gas nozzle	Φ 14mm
ICS0746	Gas nozzle	Φ 19mm
ICS0747	Adjusted tapered nozzle	Φ 15mm
ICS0748	Spot welding gas nozzle	Φ 20mm



#### Contact Tips

ICU0005-08	Contact tip	Φ 0.8mm	M8x30 Ecu
ICU0005-10	Contact tip	Φ 1.0mm	M8x30 Ecu
ICU0005-12	Contact tip	Φ 1.2mm	M8x30 Ecu
ICU0005-16	Contact tip	Φ 1.6mm	M8x30 Ecu
ICU0005-20	Contact tip	Φ 2.0mm	M8x30 Ecu
ICU0005-24	Contact tip	Φ 2.4mm	M8x30 Ecu
ICU0005-58	Contact tip	Φ 0.8mm	M8x30 CuAl
ICU0005-59	Contact tip	Φ 0.9mm	M8x30 CuAl

ICU0005-60	Contact tip	Φ 1.0mm	M8x30 CuAl
ICU0005-62	Contact tip	Φ 1.2mm	M8x30 CuAl
ICU0005-66	Contact tip	Φ 1.6mm	M8x30 CuAl
ICU0005-70	Contact tip	Φ 2.0mm	M8x30 CuAl
ICU0005-74	Contact tip	Φ 2.4mm	M8x30 CuAl
ICU0005-78	Contact tip	Φ 0.8mm	M8x30 CuCrZr
ICU0005-80	Contact tip	Φ 1.0mm	M8x30 CuCrZr
ICU0005-82	Contact tip	Φ 1.2mm	M8x30 CuCrZr



#### Replacement Lines

IIC0226	Brass terminal	Φ 3.0X4.5mm	0.35m
IIC0210	Teflon liner	Φ 3.0X4.5mm	3m Yellow
IIC0580	Steel liner	Φ 1.2-1.6mm	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