

DAIHEN

Pulsed
MAG/
MIG

Fully
Digital

CO₂/
MAG

EP400/500

Pulsed MAG/MIG CO₂/MAG Automatic G.M.A.W. High Quality Pulse Welding Machine

**Number One In OTC's Line Up Of "EP" Series
Welding Machines, Offering Both High Quality
DC Pulse MAG/MIG and CO₂/MAG/MIG Welding**

EP Digital Inverter
Welding Machine
SERIES

- Incredible Arc Stability at Very Low Current Ranges
- Incredible Arc Stability at Very High Welding Speeds
- Incredible Quality Welding Achievable on Stainless Steel
- Instantaneous Arc Start By Capacitor Discharge Method
- Four-Roll Encoder Wire Feeder As Standard Equipment

HIGH POWER FACTOR

- Reduced Electricity Cost due to high power factor & low input current

SYNERGIC CONTROL

- One-knob Synergic Control Provides Appropriate Arc Voltage for the Welding Current selected

EASY OPERATION

- Less Buttons and Digital Setting / Digital Indicator

ASSURED QUALITY

- Cutting Edge "Penetration Control" is one flip of the knob away

PROGRAMMABLE

- Up to 30 welding conditions can be stored



OTC DAIHEN INDIA PVT. LTD.

Steel Stainless Steel CO₂/MAG/MIG

Steel Stainless Steel Pulsed MAG/MIG

[Optional] Aluminium MIG

Welding Power Supply Provides Two Welding Processes

STEEL - STAINLESS STEEL

Pulsed MAG/MIG Welding

Easier to Weld Stainless Steel Plate!

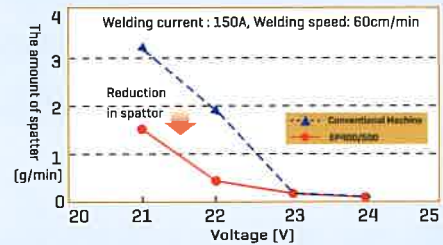
Easily offers High-Quality Stainless Steel Welding, with less generation of undercut.



Current-170A | Voltage-19V | Welding Speed-100 cm/min | Wire Size-1.2mm | Base Metal-1.6 mmt

Generates Less Spatter!

Because of a very low voltage feature. This new welding power supply generates much less spatter, as compared to earlier models. Arc-convergence improves arc stability, when performing high-speed fillet welding.



CO₂/MAG/MIG Welding

Provides High Quality and High Speed Welding of Sheet Metal.

In thin sheet metal welding with CO₂/MAG, Low Heat Input is Possible resulting in High Quality Welding with Minimal Melt-through.



Current: 125A
Voltage: 18V
Welding Speed: 150cm/mm
Wire Size: 1.2mm
Base Metal : 1 mmt

Soft Arc Improves the Efficiency of Semi-Automatic Welding!

Soft arc improves arc stability during high speed welding.

Arc Characteristic Adjustment

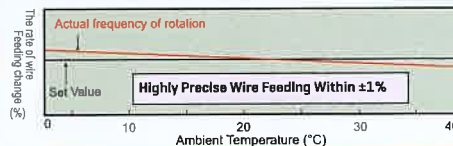
Hard	Soft
<ul style="list-style-type: none"> • Help high travelling speed welding • Stable arc with All position welding • Stable arc even when using a long extension cable 	<ul style="list-style-type: none"> • Reduce spatter generation • Flat bead • High amp welding

Highly Efficient Wire Feeder for EP Series

Wire Feeder Selection Best Suited for Material of Wire

Highly precise wire reeding is not influenced by ambient temperature or extension cables, contributes to the stabilization of Welding Quality.

For Iron
CME-6401



Four-Roll Feeder is Standard. Wire Feeding Ability 1.5 Times Greater than Two-Roll Wire Feeder

The powerful Four-Roll Wire feeding allows greater welding torch flexibility.

For iron 2-Driving
with 2-Driven without type



User-Friendly Design & Operation

Fan Automatic Stop Function

Fan on Demand, After a lapse of Ten Minutes from Arc End Fan, Automatically Stops, thereby saving Electric Power.

Meet Various Welding Needs (EP400/500 Welding Modes)

Wire Type	Welding Process	Wire Diameter	
		EP-400	EP-500
Mild Steel Solid	CO ₂	0.8	-
		0.9	-
		1.0	-
		1.2	1.2
		-	1.4
		-	1.6
	MAG 80% Ar + 20%CO ₂	0.8	-
		0.9	-
		1.0	-
		1.2	1.2
		-	1.4
		-	1.6
	Pulsed MAG 80% Ar + 20%CO ₂	0.9	-
		1.0	-
		1.2	1.2
-	1.4		
-	1.6		

Wire Type	Welding Process	Wire Diameter	
		EP-400	EP-500
Stainless Steel Cored	MIG 98% Ar + 2%CO ₂	0.8	-
		0.9	-
		1.0	-
		1.2	1.2
		-	1.6
		-	-
Mild Steel Cored	PULSED MIG 98% Ar + 2%CO ₂	0.9	-
		1.0	-
		1.2	1.2
		-	1.6
		1.0	-
		1.2	1.2
Stainless Cored	CO ₂	-	1.4
		-	1.6
		0.9	-
		1.2	1.2
		-	1.6
		-	-

Using High-Quality Welding EP400/500

Pulse and Non-Pulse on all materials, such as Steel, Stainless Steel.

Touch Panel Control Layout is Very User Friendly

Digital Meter are Easily read in Dim Areas

Both Current and Voltage are displayed during welding, with the average current and voltage being displayed after welding is terminated additional, Welding Power Supply provide Digital Diagnostic Display or error codes to assist troubleshooting.

Welding Condition Memory Storage Function [99 conditions]

Welding Memory Play Back Function of welding condition can be accessed by or one-touch control to repeat of recall weld conditions.

Function Key

Front Panel Control allows setting of Arc Functions by operator without having to go inside the Welding Power Source.

Choice of the Welding Modes

Setting of weld conditions such as weld-wire type and wire diameter are easily accomplished by the touch panel and reading the LED indications



Operators can Easily Set Conditions with Dial Located on the Front Panel

Precise setting of Amps and Volts can be accurately achieved to 1.0 Amp and 0.1V

Arc Characteristic

Arc type choices selectable via front touch panel control for a variety of applications

A Variety of Functions

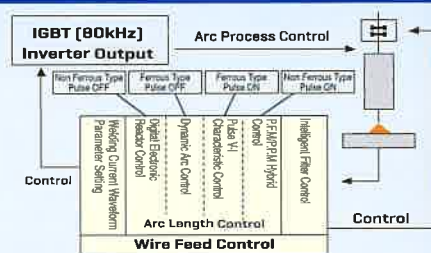
Touch Panel control for user-friendly operation for various functions to achieve high quality welding

USB Memory for Data Management

New Arc Length Control System that Provides Welding Power Source with Multifunction.

Newly Developed T-MAC System that Supports Four Welding Processes. (Tailor Made Arc Control System)

Full and complete digitalization delivers four [4] types of arc length control for every Welding Process operator selects the Welding Process and Consumable on the Front Panel and the Microcomputer automatically selects the ideal arc length control thereby providing the best Weld Quality.



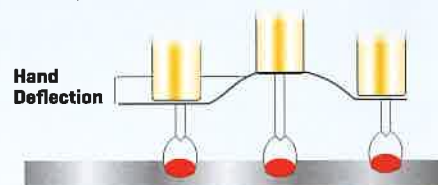
This Digital Inverter Controlled Machine with Micro-Processor Integrated Offers One-knob Synergic Control

One-Knob Synergic Control Provides Appropriate Arc Voltage for the Welding Current Selected

- Inexperienced operators can achieve proper welding conditions without creating rework.
- The machine delivers a built-in preset voltage program to accommodate the amperage. [Wire feed spec]
- Separate control mode [for Amperage & Voltage] is also provided as a standard feature.

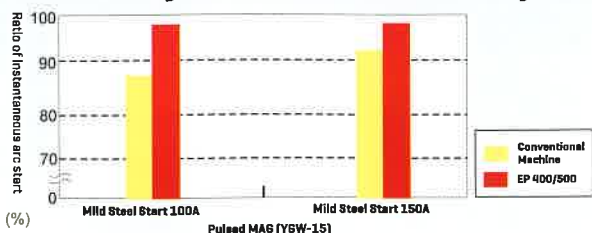
Cutting Edge "Penetration Control" Is One Flip Of The Knob Away

- This "Penetration Control" keeps the depth of penetration at a constant level even when trip-to-work distance varies fro assured quality of welding.



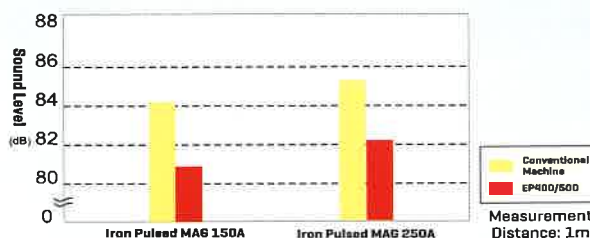
New Digital Turbo Start Substantially Improves Arc Starting.

- By utilizing capacitor discharge method, instantaneous arc-starts are possible regardless of base metal type being welded; thereby further enhancing Semi-Automatic and Automatic Welding Processes.



New Wave Control Reduces Arc Sound Particularly in Pulse Welding. Further Improving the Work Environment

- Reduces Arc Sound in pulse welding. Lightening the burden on operators



STANDARD SCOPE OF SUPPLY

POWER SOURCE	EP-400/500
Wire Feeder	CME-6401
Gas Hose	BKGG-0603 [3M]
Base Metal Cable	BKPT-6002 [2M]
Power Cable	BKPT-6007 [5M]
Control Cable	QK0072C [7M]
Welding Torch	WT500-SD [3M, AIR COOLED]

OPTIONAL

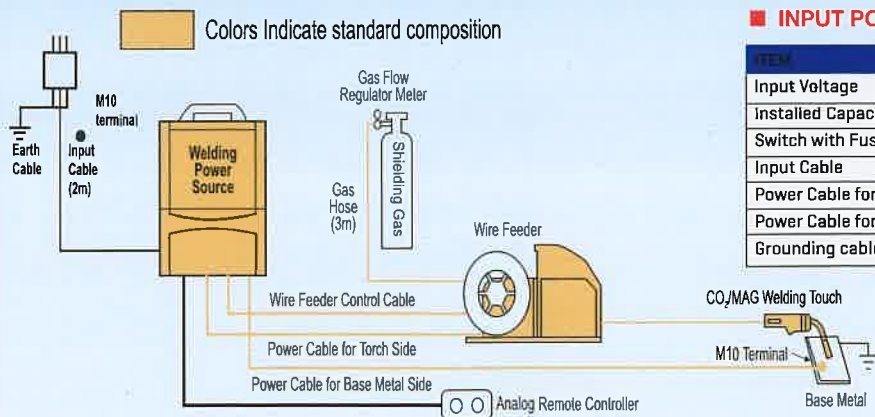
REMOTE CONTROL BOX



Analog Remote Control Box

NAME	PART NUMBERS
Analog Remote Controller [3mm Cable is Attached]	K5416H00
Extension Cable	BKCPJ-0605 [5m]
	BKCPJ-0610 [10m]
	BKCPJ-0615 [15m]
	BKCPJ-0620 [20m]

CONNECTION DIAGRAM



■ INPUT POWER CAPACITY AND CABLE SPECIFICATIONS

ITEM	UNIT	EP500
Input Voltage	V	415±10% 50/60Hz, 3Ph
Installed Capacity	kVA	DC24.2, Pulse20.0
Switch with Fuse	A	More than 50A
Input Cable	mm	More than 10mm ²
Power Cable for Torch Side	mm	More than 70mm ²
Power Cable for Base Metal Side	mm	More than 70mm ²
Grounding cable	mm	More than 10mm ²

STANDARD COMPOSITION AND SPECIFICATIONS

Welding power source name	EP-400	EP-500
Rated Input	DC: 17.0kVA [15.5kW]; pulse: 17.8kVA [16.3kW]	DC: 24.1kVA [22.2kW]; pulse: 20.0kVA [17.0kW]
Rated Input Current	DC: 25.8A pulse: 27.0A	DC: 33.4A pulse: 27.7A
Rated Output Current	DC / Pulse: 400A	DC 500A, pulse: 400A
Rated Load Voltage	DC / pulse: 34V	DC 39V, pulse: 34V
Rated Output Current Range	30~400A	DC: 30 ~ 500A, pulse: 30 ~ 400A
Rated Output Voltage Range	15.5~34V	15.5~39V
Rated Unloaded Voltage	86.2V	87.5V
Rated Duty Cycle	DC / pulse: 60%	DC: 500A 60%, pulse: 400A 80%
Number of Welding Conditions	100	
Insulated Grade	H class	
Efficiency	86%	
Operating Temperature Range	-10~40°C	
Operating Humidity Range	Up to 50% at 40°C, Up to 90% at 20°C	
Storage Temperature Range	-25~55°C	
Storage Humidity Range	Up to 50% at 40°C, Up to 90% at 20°C	
External Dimensions [WxDxH]	400X685X676 [mm]	
Mass	62Kg.	67Kg.
Protection Grade	IP21S	
Static Characteristic	Constant Voltage Characteristic	
Wire Feeder		Optional
Model	CME-6401	CME-6401 CMWE - 6401 [Watercooling]
Applicable Wire Size [mm]	[0.8]/[0.9]/1.0/1.2/[1.4]/[1.6]	[0.8]/[0.9]/1.0/1.2/[1.4]/[1.6]
Wire Feed Speed	0.4-22m/min	0.4-22m/min
Welding Wire Carrying Weight	25kg	
Weight	11kg	11kg
Co₂ MAG Welding Torch WT5000-SD		
Rated Current [A]	500	
Application Wire Size [mm]	[0.8]/[0.9]/1.0/1.2/[1.4]/[1.6]	
Duty Cycle [%]	60	
Cooling Method	Air-Cooled	
Cable Length [m]	3, [4.5], [6]	

In accordance with DAIHEN's policy to make continuing improvements, design and/or specifications are subject to change without notice and without any obligation on the part of manufacturer.

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