

## Electrogas Arc Welding Machine

### high-efficiency vertical automatic welding machine (Electrogas arc welding machine)

This is a high-efficiency one-pass vertical welding method that feeds 1.6mm diameter wire in the direction of the thickness of steel plate. The welding carriage automatically ascends while keeping a given wire extension.

#### FEATURES

1. Can perform single pass vertical welding of plate thickness of 12 to 28mm.
2. Weighs Approx.22kg including weaver and features easy operation to make it ideal for on-site welding.
3. Automatic welding speed control offers uniform welding bead for gap variation.
4. Because surface bead is determined by groove shape of sliding copper plates, can form pretty bead with minimal height.
5. Able to form uniform, pretty back bead using SB-60V solid backing material.

#### Standard Specifications

##### Traveling carriage unit

Input voltage	AC200V±10% 50/60Hz
Traveling method	Rack & pinion
Traveling speed	max.500mm/min
Traveling control	Automatic elevation control by welding current detection
Clutch mechanism	Equipped(when the clutch is released, manual push traveling is possible)
Torch setting adjustment	Vertical adjustment: ±20mm Horizontal: ±30mm Plate thickness direction: ±20mm
Traveling rail	1.5m/each
Coolant constant contact sliding copper plate	Water cooled type
External dimensions(mm)	665(W)×360(L)×365(H)
Weight	Approx.22kg

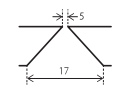
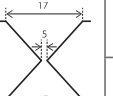
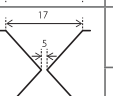
##### Weaving unit

Weaving type	Round trip simple vibration
Amplitude width	0 to 20mm
Stop position	Both ends of the amplitude width
Stopping time	0 or 0.1 to 3sec.

#### RECOMMENDED WELDING MATERIALS

Base metal	Wire		Backing Material	Shield Gas L/min
	Brand Name	Type of Current		
Mild steel. 490MPa high tensile strength steel	EG-1(1.6Φ)	DC (+)	Glass tape +copper plate or SB-60V	CO <sub>2</sub> , 30
Grade E steel	EG-3(1.6Φ)			
590MPa high tensile strength steel	EG-60(1.6Φ)			

#### TYPICAL WELDING CONDITIONS

Plate Thickness mm	Groove Geometry mm	Current A	Voltage V	Speed cm/min	Heat Input kj/cm	Oscillation		
						Width mm	Frequency n/min	
12.7		340	35~37	11~12	60~70	0~1	60~80	
16		380	38~40	11~12	70~80	0~4	60~80	
20		400	40~42	11~12	80~90	4~8	60~80	
25		400	40~42	10~11	90~100	8~12	60~80	
25		BP	340	35~37	12~13	55~65	0~1	60~80
		FP	330	34~36	12~13	55~65	1~3	60~80
36		BP	400	40~42	13~14	70~80	2~6	60~80
		FP	400	40~42	13~14	70~80	6~8	60~80