

Two Electrode Electrogas Arc Welding Machine

High-efficiency vertical automatic welding machine (Electrogas arc welding machine)

This is similar to single-electrode type Electrogas arc welding machine except the two electrodes are disposed across the thickness of steel plate. Flux cored wire and solid wire are used as the electrodes on cap side and root side. Compared with single-electrode method, this method permits much more efficient welding with extra-heavy steel plates ranging from 40 to 80mm in thickness, reduces man-hours, and increases the reliability of welded joints.

FEATURES

1. Vertical position single-pass welding of plates of 40 to 80mm thickness is possible.
2. Higher quality and performance, compared to single-electrode welding, is achieved.
3. Simultaneous weaving of both electrodes in the plate thickness direction stabilizes penetration.
4. Performing welding under automatic elevation control by welding current detection reduces operator monitoring time.
5. Forming uniform and beautiful penetration beads is possible using the fixed back material, SB-60VT.

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)	565(W)×705(L)×405(H)
Weight	Approx.25kg

Weaving unit

Weaving type	Round trip simple vibration
Amplitude width	0 or 2 to 50mm
Stop position	Both ends of the amplitude width
Stopping time	0 or 1 to 5sec.

Option Specifications

Wire feeding rate, digital display

Wire feeding rate	0.0 to 50.0m/min
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EXAMPLES OF WELDING CONDITION

Plate thickness mm	Brand name of wire	Electrode	Current A	Voltage V	Speed cm/min	Heat input kJ/cm	Oscillatory width mm
50	EG-3T	Cap side	390	42	6.8	282	5
	YM-55H	Root side	370	42			
60	EG-3T	Cap side	390	42	6.0	319	15
	YM-55H	Root side	370	42			
70	EG-3T	Cap side	390	42	4.5	426	25
	YM-55H	Root side	370	42			

RECOMMENDED WELDING MATERIALS

Electrode	Wire Brand name	Backing Material	Shield Gas (l/min)
Cap side	EG-3T	SB-60VT	CO ₂ , 35~40
Root side	YM-55H		

