PULSE WELDING
Hi 500P

A new concept premium welding machine using Wide - SAC technology

| Pulse MIG | SPC | SAC | Synergic | W-SAC | MIG MAG |

Package configuration

· Welding machine
· Wire feeder (wire cover type)
· Torch 5m (water-cooled)
· Input cable 5m
· Single cable 10m
· Gas hose 3m
· Earth cable 3m
· Water cooler

Options

· Wire feeder
  (Wire cover type, square box type)
· Water cooler (other type)
· Regulator

Specification	
Rated Input power	400V, 3P, 50/60Hz (±15%)
Rated Output	500A,42V (100%)
Communication	CAN, I/O Contact, Device Net
Welding Method	MAG, MIG, Pulse MIG
Weight	70kg
Dimension	380mm x 610mm x 850mm

### Features

▸ Integration with automation equipment and robot
▸ Low heat input, low spatter welding SAC, SPC. Wider-SAC
▸ Built-in Pulse synergic (Total 40 synergic, 30 pre-configured and 10 add-on)
▸ Built-in pulse welding function for thin plates and shipbuilding (100% MAG welding)
▸ Built-in pulsed submerged arc welding function for panel lines in shipbuilding (specialized low heat input)
▸ Welding scrubber can substitute conventional TIG welding machines
▸ Can choose between MIG wire feeder and regular wire feeder
▸ Built-in Aluminum rear plate welding function (Ar 100%)

PERFORMANCE

Pulsed submerged arc welding

- In comparison to DC submerged arc welding : Increases weld penetration by 35%, Decreases base metal deformation rate by 30%
- For welding thin plate panel lines in shipbuilding (below 6mmt)

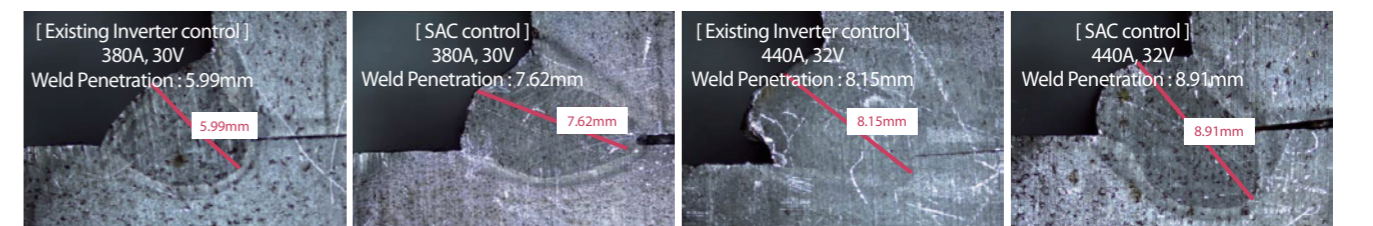[DC, 260A/32V, 640mm/min, 4.3mmt, weld penetration : 1.57mm]
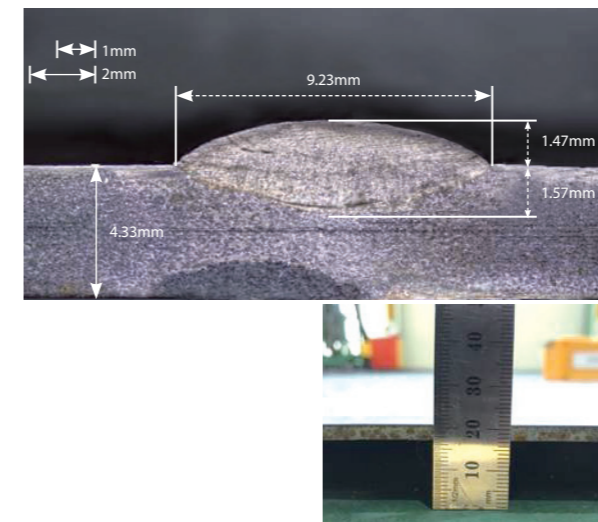
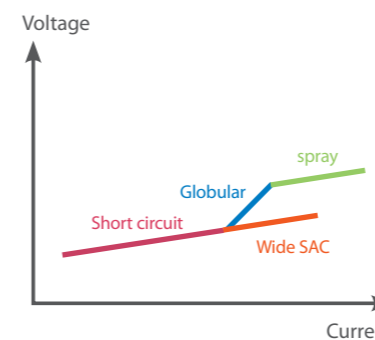[Pulse , 280A/27V, 640mm/min, 4.3mmt, weld penetration : 2.46mm]
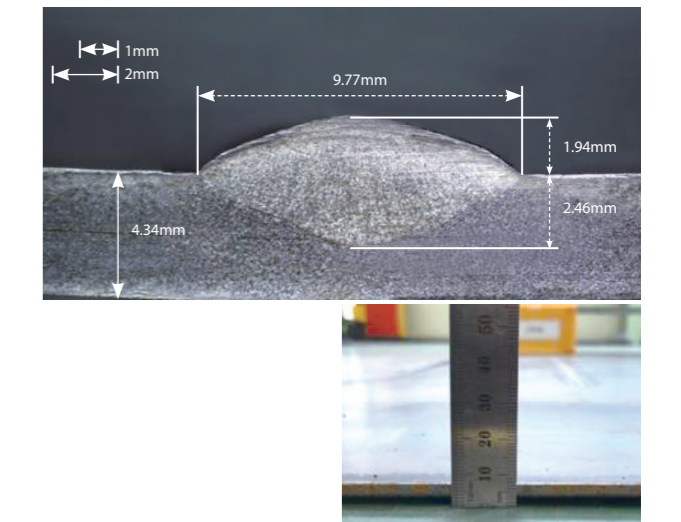
Wide Surface Arc Control (Wide-SAC)

- Forces short circuit control of flux cored/metal-cored wires in globular areas
- Low spatter, high weld penetration (Decreases spatter by 40%, Increases weld penetration by 20%) when compared to existing inverter welding machines
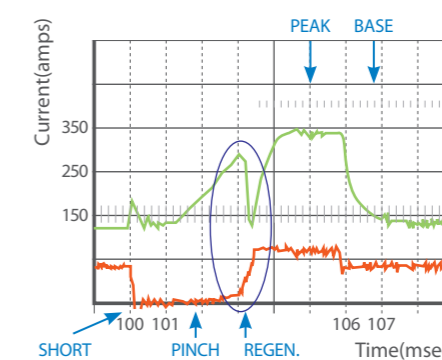
**Comparison of weld penetration**

[Existing Inverter control]
380A, 30V
Weld Penetration : 5.99mm
5.99mm

[SAC control]
380A, 30V
Weld Penetration : 7.62mm
7.62mm

[Existing Inverter control]
440A, 32V
Weld Penetration : 8.15mm
8.15mm

[SAC control]
440A, 32V
Weld Penetration : 8.91mm
8.91mm

[Metal-cored wire dia 1.6mm, 100% CO_2, Welding speed : 1,000mm/min]

[Wide SAC : Wide surface arc control]

[SAC control concept]
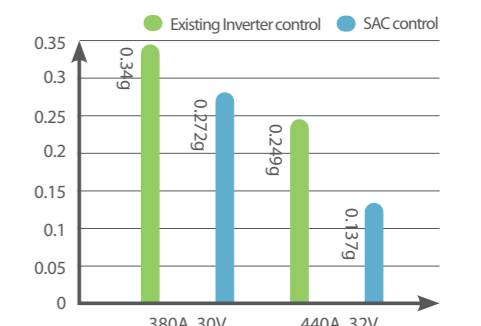
[Comparison of spatter quantity]