

## Applications

Butt and fillet welding of carbon steel for pressure vessels, tubes for nuclear reactors, ships, penstock and aluminum-killed steel for low temperature service.

## Characteristics on Usage

ST-50.3 is a wire for TIG welding with pure Ar gas.

All position welding and steel sheet welding can be performed quite easily.

### Typical Chemical Composition of Wire (%)

C	Si	Mn	Shielding Gas
0.07	0.65	1.15	Ar

### Typical Mechanical Properties of All-Weld Metal

YS MPa(lbs/in <sup>2</sup> )	TS MPa(lbs/in <sup>2</sup> )	EL (%)	CVN-Impact Value J(ft.lbs) -20°C (-4°F)
495 (71,800)	565 (81,950)	26	170 (125)

### Typical Welding Conditions (DC-)

Size mm(in)	Currents A	Gas Flow (ℓ /min.)	Shielding gas
1.2 (.045) ~ 2.0 (5/64)	50 ~ 100	25	Ar
1.6 (1/16) ~ 3.2 (1/8)	100 ~ 200		
2.4 (3/32) ~ 3.2 (1/8)	200 ~ 300		
3.2 (1/8)	300 ~ 400		

### Approval

ABS