

## Applications

- ① Used for high-alloy steel, heat-resistant steel, 9%Ni steel and similar steel with high notch toughness at extra-low temperatures.
- ② Used for welding heat resisting alloys including Inconel 601, Incoloy 800/800H or combination of these with other alloys for furnace equipments, petrochemical plants and power generation plants.

## Characteristics on Usage

- ① SMT-625 is a wire with about 68%Ni+22%Cr+9%Mo+3.5%Nb for strong tough corrosion and heat resistant deposit.
- ② No preheat required and maximum interpass of 250°C(482°F). When welding superaustenitic alloys the interpass temperature should be controlled to a maximum of 100°C(212°F).

## Shielding Gas

Ar, Ar + He

### Typical Chemical Composition of Wire (%)

| C    | Si   | Mn   | P     | S     | Cr   | Ni   | Mo   | Nb+Ta |
|------|------|------|-------|-------|------|------|------|-------|
| 0.02 | 0.20 | 0.03 | 0.006 | 0.001 | 22.0 | 64.0 | 9.00 | 3.60  |

### Typical Mechanical Properties of All-Weld Metal

| TS<br>MPa(lbs/in <sup>2</sup> ) | EL<br>(%) | Temp.<br>°C (°F) | CVN-Impact Value<br>J (ft · lbs) |
|---------------------------------|-----------|------------------|----------------------------------|
| 770 (111,000)                   | 40        | -196 (-321)      | 100 (75)                         |

### Packing

|         |     |          |               |     |     |     |
|---------|-----|----------|---------------|-----|-----|-----|
| SMT-625 | MIG | Size(mm) | 1.0           | 1.2 | 1.4 | 1.6 |
|         |     | Weight   | Spool: 12.5kg |     |     |     |
|         | TIG | Size(mm) |               | 2.0 | 2.4 | 3.2 |
|         |     | Weight   | 5kg*1,000mm   |     |     |     |

### Approval

ABS, GL, LR, DNV, NK, BV, KR