

Stick Electrode for High Tensile Strength Steel

KL-918N

Classification

| | | |
|-----|--------------|-----------------|
| AWS | A 5.5/A 5.5M | E9018-G/E6218-G |
| JIS | Z3211 | E6218-G |
| EN | 18275-A | E55 3 Z B 3 2 |
| GB | T5117 | E6018-G |

Type of coating: Iron powder low hydrogen type

Applications and Features

- (1) Suitable for welding 550~610N/mm² grade steel.
- (2) Contains 1.7%Ni, which provides excellent low temperature impact testing.
- (3) Good X-ray soundness, good mechanical properties and good weldability.
- (4) AC welding is preferred.

Welding position



Welding Instruction

Please refer to Appendix A.

Typical Chemical Composition of Weld Metal (wt%)

| C | Si | Mn | P | S | Ni | Mo |
|------|------|------|-------|-------|------|------|
| 0.07 | 0.52 | 1.10 | 0.010 | 0.006 | 1.72 | 0.16 |

Typical Mechanical Properties of Weld Metal

| Tensile Strength | Yield Strength | Elongation | Charpy V-Notch | |
|-------------------|-------------------|------------|----------------|-----|
| N/mm ² | N/mm ² | % | °C | J |
| 660 | 560 | 31 | 0 | 172 |
| | | | -40 | 120 |

Size and Suggested Operating Range (AC or DC+)

| Diameter (mm) | 3.2 | 4.0 | 5.0 | 6.0 | |
|---------------|------------|--------|---------|---------|---------|
| Current | F/H-Fillet | 90~130 | 130~180 | 180~240 | 230~300 |
| (A) | V-up/OH | 80~120 | 110~160 | 150~200 | - |