

KL-918

Classification

|     |              |                 |
|-----|--------------|-----------------|
| AWS | A 5.5/A 5.5M | E9018-G/E6218-G |
| JIS | Z3211        | E6218-N1M1      |
| 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 620N/mm<sup>2</sup> grade steel.
- (2) Stable arc, good slag removal, good slag fluids, good mechanical properties and crack resistance of weld metal.
- (3) Applicable for pressure vessels/pipe, bridges, ship building and offshore structure.

Welding position



Welding Instruction

Please refer to Appendix A.

Typical Chemical Composition of Weld Metal (wt%)

| C    | Si   | Mn   | P     | S     | Ni   | Mo   |
|------|------|------|-------|-------|------|------|
| 0.08 | 0.55 | 1.30 | 0.012 | 0.008 | 0.52 | 0.25 |

Typical Mechanical Properties of Weld Metal

| Tensile Strength  | Yield Strength    | Elongation | Charpy V-Notch |     |
|-------------------|-------------------|------------|----------------|-----|
| N/mm <sup>2</sup> | N/mm <sup>2</sup> | %          | ℃              | J   |
| 650               | 540               | 29         | 0              | 169 |
|                   |                   |            | -29            | 95  |

Size and Suggested Operating Range (AC or DC+)

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