

K-NGS11

For 490MPa high tensile steel (self-shielded, multi-pass)

Classifications

| | |
|---------------------|-------------------|
| EN ISO 17632-A:2016 | : T 42 Z Y NO 1 |
| EN ISO 17632-B:2016 | : T 49 Z T11-1NOA |
| JIS Z 3313-2009: | : T 49 T7-1 N A |
| AWS A5.20-2005 | : E71T-11 |
| AWS A5.36-2016 | : E71T11-AZ-CS3 |
| KS D 7104-2012 | : YFL-S50GB |

Description

- For 490MPa high tensile steel and self-shielded wire to facilitate outdoor conditions
- Typical applications include general fabrication and structural work requiring no impact properties (ASTM A36 Gr. All; A109 Gr. All; A283 Gr. A, B, C, D; A284 Gr. C, D; A285 Gr. A, B, C; A288 Gr. 1; A372 type I; A500 Gr. All; A501 Gr. All)
- For single and multi-pass welding in all positions
- It has good arc stability, low spatter generation, high efficiency, good bead shape and easy slag removal
- The welding polarity is DCEN (wire negative)

Welding positions



Polarity

- DCEN (DC-)

Typical chemical composition of all-weld metal (%)

| Shielding Gas | C | Si | Mn | P | S | Al |
|---------------|------|------|------|-------|-------|------|
| None | 0.10 | 0.10 | 0.55 | 0.015 | 0.006 | 1.21 |

Typical mechanical properties of all-weld metal

| | Yield Strength (MPa) | Tensile Strength (MPa) | Elongation (%) | Remarks |
|----------------|----------------------|------------------------|----------------|---------|
| AWS A5.20 | Min. 390 | 490-670 | Min. 20 | |
| EN ISO 17632-B | Min. 390 | 490-670 | Min. 18 | |
| Example | 500 | 530 | 23 | |

Notes on usage and welding condition

- Self shielded FCW generates more fumes than titania type FCW
Ventilation system to be used in small and confined spaces
- To prevent crack at low temperatures, preheat and maintain Interpass temperatures at 100-200 °C

Package

| | |
|---------------|-------------------|
| Diameter (mm) | 0.9, 1.2, 1.6 |
| Spool (kg) | 4.5, 12.5, 15, 20 |
| Coil (kg) | 20, 25 |

Operating data

| Diameter | (mm) | 0.9 | 1.2 | 1.6 |
|--------------|-----------|--------|---------|---------|
| Amperage (A) | F (PA/1G) | 80-120 | 120-180 | 240-280 |
| Voltage (V) | | 18-22 | 21-23 | 22-24 |