

GMAW Solid Wire for High Tensile Strength Steel

KM-58Z

Classification

| | |
|------------------|-----------------|
| AWS A5.18/A5.18M | ER70S-G/ER49S-G |
| JIS Z3312 | YGW11 |
| EN ISO 14341-A | G42 0 C1 Z |
| GB T8110 | ER50-G |

Shielding Gas: 100%CO₂

Applications and Features

- (1) KM-58Z is a non-copper coated wire for welding 490N/mm² grade steel.
- (2) Ti addition in the wire reduces droplet size, stabilizes the arc and decreases spatter at high current.
- (3) Suitable for high-current welding of thick plate butt joints, fillet welding and horizontal welding.
- (4) deal for welding steel structure, ship-building, bridge and machinery.

Welding Position



Welding Instruction

Please refer to Appendix B.

Typical Chemical Composition of Wire (wt%)

| C | Si | Mn | P | S | Ti |
|------|------|------|-------|-------|------|
| 0.07 | 0.81 | 1.54 | 0.014 | 0.014 | 0.20 |

Typical Mechanical Properties of Weld Metal

| Tensile Strength | Yield Strength | Elongation | Charpy V-Notch | |
|-------------------|-------------------|------------|----------------|----|
| N/mm ² | N/mm ² | % | °C | J |
| 579 | 511 | 28 | 0 | 99 |

Size and Suggested Operating Range (DC+)

| Diameter (mm) | | 1.2 | 1.4 | 1.6 |
|---------------|------|---------|---------|---------|
| Current (A) | F/HF | 250~350 | 250~450 | 300~500 |
| | H | 130~230 | 150~250 | 150~300 |