CSM-80K2

For $550N/\text{mm}^2$ class high strength steel and low temperature steel

AWS A5.29 E80T1-K2C KS D 7104 YFL-C506M JIS Z3313 T556T15-0CA-N3-H5

Applications

Butt, fillet welding of 550N/mm² class high strength steel and low temperature steel of structure such as ships, bridges, buildings and storage tanks etc.

Characteristics

- (1) CSM-80K2 is a metal type flux cored wire for flat & horizontal fillet welding with CO₂ gas shielding.
- (2) Its deposition rate is 10~30% higher compared with a solid wire.
- (3) It provides excellent impact value at low temperatures down to -60°C.

Notes on usage

- (1) The optimum flow of CO₂ for shielding is 20~25ℓ/min.
- (2) The distance between tip & base metal is to be 15~25mm.
- (3) Protect the weld with a screen to prevent blowholes caused by wind where the wind velocity is 2m/sec and more.
- (4) Thick heavy plate should be welded under proper preheating & interpass temperature.

Typical chemical composition of weld metal (%)

(Shielding gas: 100%CO2)

| С | Mn | Si | Р | S | Ni |
|------|------|------|-------|-------|------|
| 0.05 | 1.45 | 0.45 | 0.012 | 0.011 | 1.50 |

Typical mechanical properties of weld metal

(Shielding gas : 100%CO2)

| YP | TS | EL | IV (J) | |
|-------------------------|------------|------|--------|------|
| N/mm ² (MPa) | N/mm²(MPa) | % | -30℃ | -60℃ |
| 550 | 625 | 27.0 | 85 | 58 |

Size & recommended current range (DC+)

| Dia.mm (in) | | 1.2 (0.045) | 1.4 (0.052) | 1.6 (0.062) |
|-------------|---------|-------------|-------------|-------------|
| Amp. | F & H-F | 180~340 | 200~360 | 200~400 |

Approval : DNV, LR