

MC-60

For 60kgf/mm² class high tensile strength steel

AWS A5.18 ER80S-G
KS D 7025 YGW21
JIS Z3312 YGW21

Applications

Butt and fillet MAG welding of structures using 60kgf/mm² class high tensile strength steel such as civil construction equipments, steel frames, bridges and pressure vessels.

Characteristics

- (1) shows excellent usability which is equal to the solid wire for mild steels and 50kgf/mm² high tensile steels.
- (2) As the deposition rate is very high and the penetration is deep, high efficiency welding is obtained.
- (3) The arc stability is good and spatter loss is low. So, welding job is easy.
- (4) The deposition efficiency is high because of no slag formation, the welding time is saved.

Notes on usage

Preheating at 100~150°C is required when a plate is thick and restraint is high.

Typical chemical composition of weld metal (%)

(Shield Gas : 100%CO₂)

| C | Mn | Si | P | S | Mo |
|------|------|------|-------|-------|------|
| 0.07 | 1.35 | 0.49 | 0.009 | 0.010 | 0.25 |

Typical mechanical properties of weld metal

(Shield Gas : 100%CO₂)

| YP N/mm ² (kgf/mm ²) | TS N/mm ² (kgf/mm ²) | EL % | IV J (kgf-m) |
|--|--|---------|--------------|
| | | | -30°C |
| 590(60) | 670(68) | 26 | 90(9.2) |

Size & recommended current range (DC+)

| Dia. (mm) | 1.2 | 1.6 |
|-----------|---------|---------|
| Amp. | 100-360 | 170-550 |