

TM-70

JIS Z 3313 YFW-A50DM
AWS A5.18 E70C-3M/ 6M
EN758 T 42 0 M M 3

Characteristics and Applications:

TM-70 is a metallic flux cored wire designed to be used with Ar/CO₂ for mild steel and 490N/mm² high tensile steel, its deposition rate is 10-30% higher than a solid wire. Multi-layer welding can be performed without removing slag. It is suitable for the multi-layer welding of thick plate welding in such applications as: steel structure, bridges, shipbuilding, vehicles, storage tanks, etc.

Notes on Usage:

1. Use DC(+) polarity.
2. When larger diameters (1.6mm or higher) are used, higher power supply of welder is recommended.
3. Trailer Shield is required to ensure the weld pool completely shielded by 75~80%Ar-25~20% CO₂ gas until solidification is complete and no porosity problem.
4. Inter-pass temperature should be under 150°C while in multiple-pass welding.
5. Keep dry while in storage and delivery.

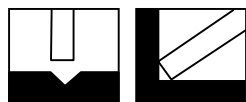
Typical chemical composition of weld metal (wt%)

| C | Mn | Si | P | S |
|------|------|------|-------|-------|
| 0.04 | 1.50 | 0.63 | 0.012 | 0.010 |

Typical mechanical properties of weld metal

| YS (MPa) | TS (MPa) | EL % | CVN J | |
|----------|----------|------|-------|-------|
| | | | -20°C | -30°C |
| 545 | 595 | 28 | 57 | 45 |

Welding position



Sizes and recommended current range (DC <+>)

| Diameter (mm) | φ 1.2mm | φ 1.6mm |
|------------------|---------|---------|
| Parameters | | |
| Voltage(Volt) | 28-36 | 28-36 |
| Current(Amp) | 200-320 | 250-400 |
| Stick out(mm) | 15-25 | 15-25 |
| Flow rate(l/min) | 15-25 | 20-25 |

*The information contained or otherwise referenced herein is presented only as "typical" without guarantee or warranty, and Tien Tai Electrode Co., Ltd. expressly disclaims any liability incurred from any reliance thereon. Typical data is obtained when welded and tested in accordance with AWS specification. Other tests and procedures may produce different results. No data is to be construed as recommendation for any welding condition or technique not controlled by Tien Tai Electrode Co., Ltd.