

TIG F57HP

Classification

AWS A5.18 : ER70S-6

ISO 636-A : W 46 4 3Si1

Description & Applications

Copper coated TIG rod to weld low alloyed standard construction / boiler steels like S235-S355, P235-P355 and S255N-S420N.

Main applications: Used in piping for root pass for root pass for high quality level of welding with specific control.

Base material:

Construction steels for general use, Tube steels, Ship steels:

| EN | Ship steels | ASTM |
|-------------|-----------------|-----------------------|
| S185 – S355 | Quality A and B | A285 grade C |
| P235 – P355 | | A442 grade 55, 60 |
| L210 - L360 | | A414 grade C, D, E, F |
| | | A515 grade 55, 60, 65 |

Typical Chemical Composition (%)

| | С | Si | Mn | Cr | Ni | Мо | Cu | Al | Ti+Zr | V | Р | S |
|------|------|------|------|------|------|-------|------|------|-------|-------|-------|-------|
| Min | 0.06 | 0.80 | 1.40 | | | | | | | | | |
| Max | 0.14 | 1.00 | 1.60 | 0.15 | 0.15 | 0.15 | 0.35 | 0.02 | 0.15 | 0.03 | 0.025 | 0.025 |
| Type | 0.08 | 0.80 | 1.45 | 0.04 | 0.04 | 0.005 | 0.15 | 0.01 | 0.004 | 0.001 | 0.015 | 0.012 |

All Weld Metal Mechanical Properties

| | R _e (MPa) | R_{m} (MPa) | A ₅ (%) | KV (| (J) |
|------|----------------------|---------------|--------------------|-------------------------|------------|
| Min | 460 | 530 | 22 | -40°C | >47 |
| Max | | 680 | | | |
| | | | | +20°C | 160 |
| Type | 480 | 580 | 28 | -20°C | 160 120 |
| , | | | | +20°C -20°C -40°C | 70 |

Welding Current & Instructions

| Welding mode | Shielding Gas | | | |
|--------------|--|--|--|--|
| TIG = - | ISO 14175: I1 (Ar) 6-12 l/min Back shielding : I1 (Ar) / N1 (Nitrogen) 3-6 l/min | | | |

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