

MIG/MAG Cored Wires High-strength steels

FLUXOFIL 42 is a seamless copper coated basic flux cored wire for the welding of high-strength fine grain structural steels with minimum yield strength of 690 MPa. Operating features include low spatter loss, easy slag removal and uniform bead appearance.

| Classification | |
|----------------|------------------------------------|
| EN ISO | 18276-A: T 69 6 Mn2NiCrMo B C 2 H5 |
| EN ISO | 18276-A: T 69 6 Mn2NiCrMo B M 2 H5 |
| EN ISO | 18276-B: T786T5-1 CA-N4C1M2-UH5 |
| EN ISO | 18276-B: T786T5-1 MA-N4C1M2-UH5 |
| AWS | A5.29: E110T5-K4C-H4 |
| AWS | A5.29: E110T5-K4M-H4 |

| Approvals | Grade |
|-----------|-------------|
| ABS | 3YQ690SA |
| ABS | 4YQ690SA H5 |
| BV | 3Y69 MS H5 |
| BV | 4Y69 MS H5 |
| DB | ● |
| DNV | IIY69MS H5 |
| DNV | IVY69MS H5 |
| TÜV | ● |

CE

Chemical analysis (Typical values in %)

| C | Mn | Si | P | S | Cr | Ni | Mo |
|------|-----|-----|------|------|-----|-----|-----|
| 0.06 | 1.5 | 0.3 | 0.01 | 0.01 | 0.4 | 2.3 | 0.4 |

All-weld metal Mechanical Properties

| Heat Treatment | Yield Strength (MPa) | Tensile Strength (MPa) | Elongation A5 (%) | Impact Energy ISO - V (J) | | |
|----------------|----------------------|------------------------|-------------------|---------------------------|--------|--------|
| | | | | -20 °C | -40 °C | -60 °C |
| As Welded | ≥ 690 | 780-890 | ≥ 17 | ≥ 80 | ≥ 80 | ≥ 60 |
| 580 °C x 2 h | ≥ 670 | 760-840 | ≥ 17 | ≥ 60 | ≥ 47 | |

Gas test: 82% Ar+18% CO2

Shielding Gas - EN ISO 14175 : C1, M21

Materials

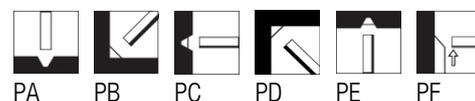
S620, S690, HY 100

Storage

Keep dry and avoid condensation

Current condition and welding position

DC+



Packaging data

| Packaging Type | B300 |
|-----------------------|------|
| Diam(mm) / weight(kg) | 16 |
| 1.2 | ● |
| 1.6 | ● |