

**MIG (GMAW) wires  
for mild and low alloyed steel**

**FLIESS**  
SINCE 1915

**ED-FK 1**

| Classification DIN EN ISO      | Classification AWS             |
|--------------------------------|--------------------------------|
| 16834-A G 69 4 M24 Mn3Ni1CrMo  | A5.28 ER100S-G, A5.28 ER110S-G |
| Approvals                      | Material No.                   |
| TÜV 03691.05, CE, DB 42.045.04 | -                              |

**Characteristics and application**

MIG/GMAW wire for welding high strength low alloy steels. Used for many structural and construction applications including: mobile cranes, cement pumps, pipelines, tankers and containers.

**Base materials**

For high strength fine-grained steels with yield strength up to 690MPa (100ksi).

S500Q-S690Q, S500QL-S690QL, P500Q-P690Q, P500QL1-P690QL1

ASTM: A514. HY80, HY100, Q1(N)

**Typical analysis in %**

| C    | Si   | Mn   | Cr   | Ni   | Mo   | V    |
|------|------|------|------|------|------|------|
| 0,09 | 0,52 | 1,57 | 0,30 | 1,40 | 0,25 | 0,09 |

**Typical heat treatment**

Welding procedure, including preheat temperature, interpass temperature and PWHT, will be dependent on the base material being welded and any applicable design codes.

**Mechanical properties of the pure weld metal**

| Yield strength<br>in Mpa | Tensile strength<br>in Mpa | Elongation<br>in % | Charpy-V-Value<br>(ISO-V) in J |
|--------------------------|----------------------------|--------------------|--------------------------------|
| ≥ 690                    | ≥ 790                      | 4d/5d: ≥ 16        | RT ≥ 80<br>-40°C ≥ 47          |