

Classifications

| EN ISO 18275-A | AWS A5.5 | AWS A5.5M |
|----------------------|----------|-----------|
| E 69 3 Mn2NiMo B 4 5 | E12018-G | E8318-G |

Characteristics and typical fields of application

Basic electrode for vertical-down welding of large diameter pipelines and for structural work. Suitable for filler and cover pass welding in pipeline construction. Deposit is extremely crack resistant, and features high toughness and a very low hydrogen content. Deposition rate is 80 – 100% higher than for vertical up welding. This stick electrode is optimised for best striking properties and for avoiding start porosity. With its excellent welding properties the electrode offers easy handling also under difficult conditions.

Base Materials

EN: L690
API Spec. 5 L: X100

Typical analysis of all-weld metal

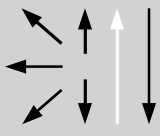
| | C | Si | Mn | Ni | Mo |
|-------|------|-----|------|------|------|
| wt.-% | 0.07 | 0.4 | 1.85 | 2.25 | 0.35 |

Mechanical properties of all-weld metal – typical values (min. values)

| Condition | Yield strength R _{eH} | Tensile strength R _m | Elongation A (L ₀ =5d ₀) | Impact work ISO-V KV J | | |
|-----------|-----------------------------------|------------------------------------|--|---------------------------|-----------|------------------|
| | MPa | MPa | % | +20°C | -20°C | -30°C |
| u | 815 (≥ 740) | 870 (830 – 960) | 18 (≥ 17) | 80 | 60 | 50 (≥ 47) |

u untreated, as welded

Operating data

|  | Polarity: | Redrying if necessary: | Electrode identification: | ∅ mm | L mm | Amps A |
|---|-----------|------------------------|---------------------------|--|------------|------------|
| | | DC (+) | 300 – 350°C / min. 2 h | FOX BVD 120 12018-G E 69 3 Mn2NiMo B | 3.2 4.0 | 350 350 |

Recommended interpass temperature >120°C