

Classification

EN ISO 3581-A

E 25 4 B 2 2

Characteristics and typical fields of application

Basic electrode core wire alloyed for welding heat resistant steels. For furnaces requiring elevated resistance to reducing and oxidizing sulphurous gases as well as for final passes of weld joints in heat resistant, ferritic CrSiAl steels. Scaling resistant up to +1100 °C.

Base materials

Ferritic-austenitic
1.4821 X20CrNiSi25-4, 1.4823 GX40CrNiSi27-4

Ferritic-perlitic
1.4713 X10CrAl7, 1.4724 X10CrAl13, 1.4742 X10CrAl18, 1.4762 X10CrAl25, 1.4710 X30CrSi6,
1.4740 G-X40CrSi17

AISI 327, ASTM A297HC

Typical analysis of all-weld metal (wt.-%)

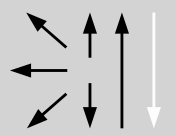
| | C | Si | Mn | Cr | Ni |
|-------|------|-----|-----|------|-----|
| wt.-% | 0.10 | 0.5 | 1.2 | 25.0 | 5.4 |

Mechanical properties of all-weld metal

| Condition | Yield strength $R_{p0.2}$ | Tensile strength R_m | Elongation A ($L_0=5d_0$) | Impact work ISO-V KV J |
|-----------|------------------------------|---------------------------|--------------------------------|---------------------------|
| | MPa | MPa | % | +20 °C |
| u | 520 (≥ 400) | 680 (≥ 600) | 22 (≥ 15) | 45 |

u untreated, as welded

Operating data

|  | Polarity: DC (+) | Electrode identification: FOX FA E 25 4 B | ø (mm) | L mm | Amps A |
|---|------------------------------|---|---------------|-------------|---------------|
| | | | 2.5 | 300 | 50 – 75 |
| | | | 3.2 | 350 | 80 – 105 |
| | | | 4.0 | 350 | 100 – 130 |

Preheating and interpass temperatures 200 – 400 °C, depending on the relevant base metal and material thickness.

Approvals

SEPROZ