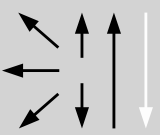


| Classification | | | | | | |
|---|----------------------------------|---|--|------------------|-------------|---------------|
| EN ISO 3581-A | EN ISO 3581-B | AWS A5.4 | | | | |
| E 13 B 2 2 | ES410-15 | E410-15 (mod.) | | | | |
| Characteristics and typical fields of application | | | | | | |
| <p>Basic electrode core wire alloyed low-hydrogen with good operating characteristics in all positions except vertical-down. Mainly used for surfacing on sealing faces of gas, water and steam valves to meet stainless and wear resistant overlays for instance. In the machined condition, at least a two layer build up should remain.</p> <p>Joint welding of similar, stainless and heat resistant chromium steels provides matching colour of weld metal with very good ability to polishing.</p> <p>Retention of hardness up to +450 °C, scaling resistant up to +900 °C.</p> <p>Preheating and interpass temperature 200 – 300 °C, post weld heat treatment at 700 – 750 °C depending on the weld job.</p> | | | | | | |
| Base materials | | | | | | |
| <p>Surfacings: all weldable backing materials, unalloyed and low-alloyed</p> <p>Joint welds: corrosion resistant Cr-steels as well as other similar-alloyed steels with C-contents ≤ 0.20% (repair welding); heat resistant Cr-steels of similar chemical composition. Be careful with dilution and welding technology.</p> <p>1.4006 X12Cr13, 1.4021 X20Cr13 AISI 410, 420</p> | | | | | | |
| Typical analysis of all-weld metal (wt.-%) | | | | | | |
| | C | Si | Mn | Cr | | |
| wt.-% | 0.08 | 0.7 | 0.8 | 13.5 | | |
| Mechanical properties of all-weld metal | | | | | | |
| Condition | Yield strength R _{p0,2} | Tensile strength R _m | Elongation A (L ₀ =5d ₀) | Brinell-hardness | | |
| | MPa | MPa | % | HB | | |
| u | | | | 350 | | |
| a | 530 (≥ 450) | 700 (≥ 640) | 17 (≥ 15) | 210 | | |
| u | untreated, as welded | | a annealed, 750 °C/2 h/furnace | | | |
| <p>The hardness of the deposit is greatly influenced by the degree of dilution with the base metal (depending on the relevant welding conditions) and by its chemical composition. As a general rule it can be observed that the higher the degree of dilution and the C-content of the base metal, the higher the deposit hardness.</p> | | | | | | |
| Operating data | | | | | | |
|  | Polarity: DC (+) | Redrying if necessary: 120-200°C, min. 2 h | Electrode identification: FOX KE 6013 E 38 0 RC | ø (mm) | L mm | Amps A |
| | | | | 2.5 | 300 | 60 – 80 |
| | | | | 3.2 | 350 | 80 – 100 |
| | | | | 4.0 | 350 | 110 – 130 |
| Approvals | | | | | | |
| SEPROZ | | | | | | |