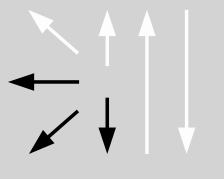


| Classifications | | | | | | | | |
|--|------------------------------|---|------------------|--|---------------------------|---------------------|----------------------|------------|
| SAW solid wire: | | | | | | SAW flux: | | |
| EN ISO 18274 | | | AWS A5.14 | | | EN ISO 14174 | | |
| S Ni 6082 (NiCr20Mn3Nb) | | | ERNiCr-3 | | | SA FB 2 AC | | |
| Characteristics and typical fields of application | | | | | | | | |
| <p>For SAW wire flux combination welding of Ni base alloy metals and special metals if the use of wire electrodes with high Ni content is requested. The weld metals show excellent mechanical properties with high hot cracking resistance. It is applicable for chemical apparatus construction on high temperature metals as well as in low temperature sections up to -196 °C. BB 444 is an agglomerated fluoride basic welding flux with high basic slag characteristics. For information regarding this sub- arc flux see our detailed data sheet.</p> | | | | | | | | |
| Base materials | | | | | | | | |
| <p>2.4816 Ni Cr 15 Fe, 2.4817 LC-NiCr 15 Fe, Alloy 600, Alloy 600 L, UNS N06600, ASTM B168 Nickel and nickel alloys, low-temperature steels up to 5% Ni-steels, unalloyed and alloyed, high-temperature, creep resisting, high-alloy Cr- and CrNiMo-steels particularly for joint welding of dissimilar steels, and nickel to steel combinations; also recommended for Alloy 800</p> | | | | | | | | |
| Typical analysis of the wire and of all-weld metal (wt.-%) | | | | | | | | |
| | C | Si | Mn | Cr | Ni | Nb | Ti | Fe |
| SAW wire wt.-% | 0.015 | 0.15 | 3.1 | 20.5 | Bal. | 2.6 | + | ≤ 1.0 |
| all-weld metal % | 0.020 | 0.25 | 3.0 | 20.0 | Bal. | 2.4 | + | ≤ 1.0 |
| 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 | | -196 °C | |
| u | ≥ 380 | ≥ 580 | | ≥ 35 | ≥ 80 | | ≥ 80 | |
| u untreated, as welded | | | | | | | | |
| Operating data | | | | | | | | |
|  | | Polarity: DC (+) / DC (-) / AC | | Redrying of sub arc flux: 400 – 450 °C/2 h | | | ø (mm) 2.4 | |
| Preheat and interpass temp. as required by the base metal. | | | | | | | | |
| Approvals | | | | | | | | |
| Wire/flux combination: TÜV (10552.), CE | | | | | | | | |