

## Classifications

| EN ISO 3581-A | EN ISO 3581-B | AWS A5.4 |
|---------------|---------------|----------|
| E 19 9 Nb B   | ES347-15      | E347-15  |

## Characteristics and typical fields of application

Basic electrode core wire alloyed for the use of high temperature CrNi austenitic steel for service temperatures exceeding +400 °C. Specially designed for the base metal AISI 347H. Controlled ferrite content of 3-8 FN. The deposit is less susceptible to embrittlement and is scaling resistant. Excellent weld ability in all position except vertical down.

## Base materials

Similar alloyed creep resistant steels  
AISI 347H, AISI 321H

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

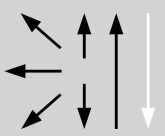
|       | C    | Si  | Mn  | Cr   | Ni   | Nb    |  | FN  |
|-------|------|-----|-----|------|------|-------|--|-----|
| wt.-% | 0.05 | 0.3 | 1.3 | 19.0 | 10.2 | ≥ 8xC |  | 3-8 |

## Mechanical properties of all-weld metal

| Condition | Yield strength<br>R <sub>p0,2</sub> | Tensile strength<br>R <sub>m</sub> | Elongation<br>A (L <sub>0</sub> =5d <sub>0</sub> ) | Impact work<br>ISO-V KV J |
|-----------|-------------------------------------|------------------------------------|--|---------------------------|
|           | MPa                                 | MPa                                | %  | +20 °C                    |
| u         | <b>470</b> (≥ 350)                  | <b>630</b> (≥ 550)                 | <b>36</b> (≥ 25)                                   | <b>95</b> (≥ 32)          |

u untreated, as welded

## Operating data

|  | Polarity:<br>DC (+) | Electrode<br>identification:<br>FOX E 347 H-15<br>E 19 9 Nb B | ∅ (mm) | L mm | Amps A    |
|---|---------------------|---|--------|------|-----------|
|   |                     |   | 2.5    | 300  | 50 – 80   |
|   |                     |   | 3.2    | 350  | 75 – 110  |
|   |                     |   | 4.0    | 350  | 110 – 145 |