RECORD EST 690 Q5

Flux for Electroslag strip cladding, nickel base alloys

Classifications

EN ISO 14174

ES A FB 2B

Characteristics and typical fields of application

RECORD EST 690 Q5 is a fluoride-basic agglomerated flux specifically designed for electroslag strip cladding.
When used in combination with the nickel-chromium alloy strip electrode SOUDOTAPE 690 Q5, it meets the weld deposit requirements for both NiCrFe-7 and NiCrFe-14 as per ASME Section II C SFA 5.39.
Achieves desired composition NiCr30Fe9Nb from the second layer of the weld overlay.
Hot Cracking Resistance: Special formulation ensures improved resistance to hot cracking.
Ease of Use: Provides very easy slag removal and excellent wetting, ensuring perfect bead overlap.
Metallurgical Stability: Alloy 690 exhibits a high degree of metallurgical stability, avoiding the formation of embrittling phases even during prolonged exposure to elevated temperatures.
Corrosion Resistance: Excellent resistance to many corrosive aqueous media and high-temperature environments.
Widely used for steam generator tubes and reactor components due to its high resistance to stress corrosion cracking (SCC) in high-purity water and ability to withstand the extreme conditions found in nuclear reactors.

RECORD EST 690 Q5, when paired with SOUDOTAPE 690 Q5, provides a robust solution for high-quality weld deposits in demanding applications. Its superior hot cracking resistance, ease of slag removal, and excellent corrosion resistance make it an ideal choice for critical components in nuclear power plants and other high-temperature environments.

Flux properties

Polarity	DC +
Basicity index (Boniszewski)	6.3
Grain size (EN ISO 14174)	0.25 – 1 mm (18 x 60 Mesh ASTM)
Apparent density	0.85
Flux consumption	0.8 (kg fused flux / kg strip)
Redrying	1 to 2 hours at 350 +/- 50°C

Typical strips to combine

Process	Name	ASME II C SFA 5.14	EN ISO 18274
ESW	SOUDOTAPE 690 Q5	EQNiCrFe-14	B Ni 6043 (NiCr30Fe9Nb2)

All information provided is based upon careful investigation and intensive research.
However, we do not assume any liability for correctness and information is subject to change without notice.