

## **AK E318-16**

AWS A5.4 E318-16 EN 3581-A:E (19123)NbR 12

**Description:** AK-E318-16 is a rutile-type coating containing niobium-stabilized Cr19Ni12Mo2Nb stainless steel electrode. AC and DC dual-use, can perform all-position welding. The welding process performance is excellent, and the deposited metal has better resistance to intergranular corrosion than A202 and A207.

**Application:** It is suitable for welding urea synthesis towers, vinylon equipment and other parts that are in contact with strong corrosive media, such as 06Cr17Ni12Mo2Ti, 06Cr17Ni12MoNb and other stainless steel structures.

## **Typical Chemical Compostion(%):**

	С	Si	Mn	S	Р	Ni	Мо	Cr	Cu
Requirement	0.08	1.00	0.5-2.5	0.03	0.03	11.0-14.0	2.0-3.0	17.0-20.0	0.75
Actual Result	0.04	0.67	1.10	0.010	0.025	12.1	2.44	18.85	0.10

## **Typical Mechanical Properties:**

	Tensile strength (MPa)	Yield Stress ( MPa)	Elongation (%)	Impact Values (J)
Requirement	≥ 550		≥20	
Actual Result	610		31	

## **Recommended welding parameters:**

Diameter/r	nm	2.5	3.2	4.0	
Welding current/A	F/H	60-80	80-120	100-150	
	V/ OH	40-70	60-100	80-130	