

AK E385-16

Description: AK-E385-16 is an ultra-low carbon Cr20Ni25Mo4.5Cu stainless steel electrode with rutile coating. It can be used for both AC and DC, and can be welded in all positions. The carbon content of the deposited metal is extremely low, and it has excellent corrosion resistance.

Application: It is suitable for welding and manufacturing towers, tanks, pipelines and storage and transportation containers of various strong acids. It has good pitting corrosion resistance to various strong acids and hot acids.

Typical Chemical Composition(%):

| | C | Si | Mn | S | P | Ni | Mo | Cr | Cu |
|----------------------|-------|------|---------|-------|-------|-----------|---------|-----------|---------|
| Requirement | 0.03 | 0.90 | 1.0-2.5 | 0.02 | 0.03 | 24.0-26.0 | 4.2-5.2 | 19.5-21.5 | 1.2-2.0 |
| Actual Result | 0.026 | 0.53 | 1.45 | 0.010 | 0.018 | 24.35 | 4.51 | 20.18 | 1.27 |

Typical Mechanical Properties:

| | Tensile strength (MPa) | Yield Stress (MPa) | Elongation (%) | Impact Values (J) |
|----------------------|------------------------|---------------------|----------------|-------------------|
| Requirement | ≥ 520 | | ≥28 | |
| Actual Result | 605 | | 36.7 | |

Recommended welding parameters:

| Diameter/mm | | 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 |