

AK ER430LNb

Description: ER430LNb is a low-carbon ferritic stainless wire with about 18% chromium and niobium stabilization, developed for welding similar and matching steels. The low-carbon design helps improve weld quality, while the alloy offers good corrosion resistance, thermal-fatigue resistance, and stable performance in exhaust-grade stainless applications.

Application Scenario: ER430LNb is commonly used in automotive exhaust systems, mufflers, tubing, and ferritic stainless assemblies exposed to cyclic heat. It is a strong choice for production welding where corrosion resistance, heat resistance, and consistent fabrication results are required.

Typical Chemical Composition(%):

| | C | Cr | Ni | Mo | Mn | Si | P | S | Cu |
|----------------------|------|-----------|------|------|------|------|-------|-------|------|
| Requirement | 0.03 | 15.5-17.0 | 0.60 | 0.75 | 0.60 | 0.50 | 0.030 | 0.030 | 0.75 |
| Actual Result | 0.01 | 15.95 | 0.20 | 0.50 | 0.20 | 0.30 | 0.010 | 0.010 | 0.50 |

Typical Mechanical Properties:

| | Tensile strength (MPa) | Yield Stress (MPa) | Elongation (%) | Impact Values (J) |
|----------------------|------------------------|---------------------|----------------|-------------------|
| Requirement | --- | | --- | |
| Actual Result | 590 | | 28 | |