

# Stainless Steel Manual Eelctrode



| Classification | Product Name | AWS Specificaliton | ENISO Specificaliton | Grade No. | Dimension (ø mm)    | Typical mechanical properties of weld metal |                      |             |                     |
|----------------|--------------|--------------------|----------------------|-----------|---------------------|---------------------------------------------|----------------------|-------------|---------------------|
|                |              |                    |                      |           |                     | Yield Strength Mpa                          | Tensile Strength Mpa | Elongation% | Impact ValueJ J(°C) |
|                | KE316LT      | E316L-16           | E(19 12 3 L)R 1 2    | A002      | 2.0,2.6,3.2,4.0,5.0 | -                                           | 570                  | 38          | 33 (-196)           |
|                | KE2209       | E2209-16           | E(22 9 3 N L) R 3 2  | -         | 2.0,2.6,3.2,4.0,5.0 | -                                           | 835                  | 26          | 40 (-40)            |
|                | KE2594       | E2594-16           | -                    | -         | 2.0,2.6,3.2,4.0,5.0 | -                                           | 915                  | 23          | -                   |

| Typical mechanical composition of weld metal (wt%) |      |      |       |       |      |              | Applications                                                                                                                                                     |
|----------------------------------------------------|------|------|-------|-------|------|--------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| C                                                  | Mn   | Si   | Cr    | Ni    | Mo   | Others       |                                                                                                                                                                  |
| 0.032                                              | 1.53 | 0.65 | 17.60 | 13.80 | 2.20 | cu0.11       | For Low C-18Cr-12Ni-2Mo steel. Meeting the impact value requirements of -196oC. Aplicable in low temperature storage tanks, LNG, petrochemical industry and etc. |
| 0.032                                              | 0.75 | 0.65 | 22.80 | 9.20  | 3.10 | N0.14        | For 22Cr-9Ni-3Mo-N steel, duplex stainless steel, suitable for the welding of 00Cr22Ni5Mo3N(SUS2205), applicable for the petrochemical industry.                 |
| 0.031                                              | 0.90 | 0.74 | 25.2  | 9.20  | 4.00 | CU0.10 N0.26 | Applicable for 25%Cr duplex stainless steel, such as 2507                                                                                                        |