

CLASSIFICATION

EN 1600 : E 23 12 LR 12 Werkstoff-Nr : 1.4332
AWS A5.4 : E309L-16

GENERAL DESCRIPTION

LSN-309L is a low carbon rutile coated electrode. It gives a filler metal of the Cr-Ni type. Weld beads are highly resistant to oxidation at operating temperatures up to 1000°C. It can be used in all positions. The weld metal has a high resistance to cracking. Ferrite content is 12 %.

APPROVALS

CE, GOST, SEPRO, TSE

| ABS | BV | DNV | GL | RINA |
|----------|------|---------|------|------|
| E309L-16 | 309L | NV 309L | 4332 | 309L |

CHEMICAL COMPOSITION (W%), TYPICAL, ALL WELD METAL

| C | Si | Mn | Cr | Ni |
|------|------|------|-------|-------|
| 0.03 | 0.80 | 0.70 | 23.00 | 13.00 |

MECHANICAL PROPERTIES, TYPICAL, ALL WELD METAL

| | |
|-------------------|--------------------------------|
| Yield Strength | : 460 N/mm ² |
| Tensile Strength | : 590 N/mm ² |
| Elongation (L=5d) | : 40 % |
| Impact (ISO-V) | : 70 J (+20°C) 35 J (-80°C) |

APPLICATIONS AND MATERIALS TO BE WELDED

LSN-309L is used for welding of Cr and Cr-Ni alloyed steels that are highly resistant to operating conditions up to 1000°C. It is particularly used for joining stainless steels with low and medium alloyed steels and for root pass applications before welding of surface plated steels. It can also be used for cladding of mild steels and to form a buffer layer for hardfacing before welding with LSN-308L.

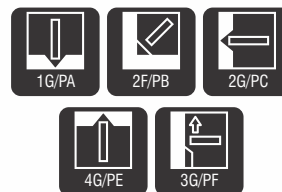
LSN-309L is an ideal electrode especially designed for welding pipes, plates and tanks that are used in chemical, petrochemical, food and paper industries; forged and cast pieces and industrial furnaces that are exposed to high temperatures.

| | EN 10088-1/-2 | W. Nr |
|-----------------------------------|----------------|--------|
| Corrosion Resistant Steels | X2 CrNiN 18 10 | 1.4311 |
| Stainless Steel | X2 CrNi 19 11 | 1.4306 |
| Claddings | X4 CrNi 18 10 | 1.4301 |

WELDING PARAMETERS / PACKING AND DIAMETER INFORMATIONS / WELDING POSITIONS

Current Type and Polarity : AC min 50 V ; DC (+)

| Diameter [mm] | Length [mm] | Current [A] | Electrode Weight [g/100 pcs] | Box Weight [kg] Quantity [pcs/box] | Export Box Box Weight [kg] |
|-----------------|---------------|---------------|--------------------------------|---|---------------------------------|
| 2.50 | 250 | 50 - 80 | 1580 | 1.7 / 105 | 1.5 |
| 3.25 | 300 | 80 - 120 | 3100 | 1.7 / 55 | 2.0 |
| 4.00 | 350 | 120 - 150 | 5490 | 2.2 / 40 | 2.5 |



Liability : All information in this data sheet is based on the best available knowledge, is subject to change without notice and can only be considered as suitable for general guidance.
Fumes : Consult information on Welding Safety Sheet, available upon request.