

**STAINLESS STEEL FILLER METAL
austenitic type**

ER 316LSi SGB

DESCRIPTION and APPLICATIONS

Austenitic stainless steel filler metal suitable for welding parent metals like AISI 316, AISI 316L. Equivalent to ER 316L SGB except for higher Si content. This improves the arc stability, the weld metal fluidity and the melt run appearance. If the dilution by the parent metal produces a low ferrite or fully austenitic weld, the hot cracking sensitivity of the weld is higher than that of a lower Si content weld metal. It guarantees better corrosion resistance than ER 308LSi SGB

| Chemical composition product analysis % by mass (single value means maximum value if not different stated) | | | | | | | | | | | | |
|---|-------------|------------|------|------|--------------|--------------|------------|---|-----|----|---|-------|
| C | Si | Mn | P | S | Cr | Ni | Mo | N | Cu | Nb | W | other |
| 0,03 | 0,65 1,0 | 1,4 2,2 | 0,03 | 0,02 | 18,0 20,0 | 11,0 13,0 | 2,5 3,0 | - | 0,3 | - | - | 0,5 |

| Specifications | Designations | |
|----------------|---|---|
| EN ISO 14343-A | 19 12 3 L Si | |
| AWS A5.9 | ER316LSi | |
| Approvals |  |  |
| MIG | X | X |
| TIG | X | |

| Expected Minimum mechanical properties of all weld metal * | Typical Results |
|--|-----------------|
| Proof strength Rp0,2 [Mpa] | 320 |
| Tensile strength Rm [Mpa] | 510 |
| Elongation [%] | 25 |
| Impact strength KV at -196°C [J] | 50 |

(*) : Room temperature if not different stated

| WELDING FILLER METAL SPECIFIC TO | AVAILABLE DIAMETERS [mm] | | | | | | | |
|----------------------------------|----------------------------|-----|-----|-----|-----|-----|-----|-----|
| | 0,8 | 1,0 | 1,2 | 1,6 | 2,0 | 2,4 | 3,2 | 4,0 |
| MIG, PLASMA, PLASMA MIG, LASER | | | | | | | | |
| TIG | | | | | | | | |

| PACKAGING TYPE | WIRE RANGE DIAMETERS [mm] | INNER PACKAGING DIAMETER [mm] | OUTER PACKAGING DIAMETER [mm] | NUMBER OF PIECES PER PACKAGING | WEIGHT [kg] | WINDING TYPE |
|---|-----------------------------|---------------------------------|---------------------------------|--------------------------------|------------------------|--------------|
|  | K300 | 0,8÷1,6 | 52 | 300 | 60 spools every pallet | 15 |
|  | RODS | 1,0÷4,0 (lenght 1 m) | - | - | - | 5 |