





INOXFILS.A.U. manufactures welding material with an optimal chemical composition and mechanical properties.

The material can be delivered with dull or bright surface, suitable for each client in order to ensure high reliability and good arc stability in all welding processes such as semiautomatic and automatic.

Inoxfil welding wire packages cover all possible needs of the clients.

Range of diameters

| Welding | 0.80 | 1.00 | 1.20 | 1.60 | 2.00 | 2.40 | 3.2 |
|-------------------|-------|------|------|------|------|------|-----|
| MIG/MAG (GMAW) | | | | | | | |
| TIG (GTAW) | | | | | | | |
| SUBMERGED ARC | | | | | | | |
| ELECTRODES | 1.60- | 5.00 | | | | | |

Tensile strength (Rm)

| Welding | Rm N/mm ² | |
|----------------|----------------------|-----------|
| MIG/MAG (GMAW) | TIG (GTAW) | 1000-1700 |
| SUBMERGED ARC | ELECTRODES | 800-1000 |

Packaging

2023

6

| | Product | Packaging | Capaci |
|---------------|-------------------|---|----------|
| | | Plastic /metallic spool SD-300/BS300 | 15 |
| | MIG/MAG (GMAW) | Plastic spool S-200 | 5 |
| | | Blue, Black metallic spools. etc (BS 300) | 15 |
| | | Conical Metallic spool (4X) Wooden Spool (4XM) | 300- 350 |
| | TIC | 50 mm Diameter tubes | 5 |
| | ΠG | Rectangular boxes | 5 |
| | ELECTRODES | Coils | 500-1000 |
| SUBMERGED ARG | | Metallic spool K-415 y K-435 | 25 |

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Welding wire





Welding wire

| AWS: A5.9 | EN 14343-A | ACX | STEEL No | PROPERTIES | |
|-------------|-------------|-----|----------|--|--|
| ER 308L | 19 9 L | 602 | 1.4316 | It is a CrNi type, for submerged arc welding (SAW) and welding with rods (TIG). Its use for stainless steels 18Cr8Ni type is recommended. It is a low carbon wire welding providing good resistance to intergranular corrosion, eliminating the precipitation of chromium carbides. It is often used as small bar for coated electrodes. | |
| ER 308L | 199L | 603 | 1.4316 | It is a CrNi type, for submerged arc welding (SAW) and welding with rods (TIG). Its use for stainless steels 18Cr8Ni type is recommended. It is a low carbon wire welding providing good resistance to intergranular corrosion, eliminating the precipitation of chromium carbides. | |
| ER 308LSi | 19 9 LSi | 605 | 1.4316 | It is a welding wire for MIG/MAG (GMAW) recommended for steels containing approximately 19Cr10Ni, such as AISI 304, 304L. The high silicon content improves arc stability, fluidity and appearance of the weld seam. Resistance of welding to hot crack sensitivity (hot cracking) is better with higher than with lower silicon content. | |
| ER 316L | 19 12 3 L | 652 | 1.4430 | It is a CrNiMo welding wire type, for submerged arc welding (SAW) and welding with rods (TIG), recommended for welding AISI 316, AISI 316L types. Its low carbon eliminates the possibility of the formation of chromium carbides and increases the resistance to intergranular corrosion of the weld. It is often used as small bar for coated electrodes. | |
| ER 316L | 19 12 3 L | 653 | 1.4430 | It is a CrNiMo welding wire type, for submerged arc welding (SAW) and welding with rods (TIG), recommended for welding AISI 316, AISI 316L types. Its low carbon eliminates the possibility of the formation of chromium carbides and increases the resistance to intergranular corrosion of the weld. | |
| ER 316LSi | 19 12 3 LSi | 655 | 1.4430 | It is recommended for MIG/MAG (GMAW) welding of corrosion resistant steels like 18Cr12Ni3Mo and other similar steels such as AISI types 316L. Resistance of welding to hot crack sensitivity (hot cracking) is better with higher than with lower silicon content. The high silicon content improves arc stability, fluidity and appearance of the weld seam. | |
| "ER 307LSi" | 18 8 Mn | 682 | 1.4370 | It is recommended for MIG/MAG (GMAW) welding of dissimilar steels such as 18-8 steel with carbon steel and for joining steels difficult to weld. This type of material is used mainly in the automotive industry in welded joints of exhaust systems. Manganese improves the characteristics of resistance to mechanical friction, provides excellent toughness and high impact strength, abrasion and corrosion resistances. It allows a good finish of the cord without projections. | |
| "ER 430Nb" | | 525 | 1.4511 | It is a welding wire of ferritic structure basically used in the automotive industry for welding exhaust system. Its use is recommended for ferritic stainless steels welding. | |
| ER 309L | "23 12 L" | 709 | (1.4332) | It is commonly used for welding similar alloys, but in some cases it can be used to weld the type 18Cr8Ni to bases of the same or similar metal, where severe conditions of use exist, and corrosion problems may appear, thereby requiring high alloyed weld metal. This type can also be used to weld types 18Cr8Ni with carbon steel or low alloy steels, dissimilar metals. | |
| ER 309LSi | "23 12 LSi" | 732 | (1.4332) | This type of steel is similar to ER 309L but with higher silicon content in chemical composition. The high silicon content improves arc stability, fluidity and appearance of the weld seam. ER 309LSi can be used, as ER 309L, welding types 18Cr8Ni with carbon steel or low alloy steels, dissimilar metals. | |
| ER 2209 | 22 9 3 N L | 609 | (1.4462) | It is a highly alloyed wire with Cr and Mo, specially designed for carrying out welds of similar duplex types. The properties of the duplex types and in particular the Cr and Mo contents of this alloy provide, in the welding seam, excellent high resistance to general, pitting and stress corrosion. | |

| AWS: A5.9 | EN 14343-A | ACX | STEEL No | |
|------------|---------------|------|----------|---|
| "ER 318Si" | 19 12 3 Nb Si | 618 | 1.4576 | It is a stab It is a suit and it is re needed, a |
| ER 310 | 25 20 | 610 | 1.4842 | It is design to resist co up to 100 submerge |
| ER 347Si | 19 9 Nb Si | 647 | 1.4551 | It is stabili /10Ni stab types. It intergranu |
| (ER309LMo) | 23 12 2 L | 710 | 1.4459 | This type addition of The high against pit ER 309L I alloy steel resistance similar to Used as fi as AISI 31 with base of use an welded m According processes |
| ER 3105 | 25 20 | 610S | 1.4845 | ER 310S behaviour It has a g intermitte thermal e magnetic Alloy 310 carbide pr |
| (ER312) | 29 9 | 712 | 1.4337 | The 29 9 with high High resis with a hig |



PROPERTIES

bilized type with Nb, used for MIG welding and welding with rods (TIG) itable wire for welding CrNiMo, and CrNiMo with Ti or Nb materials, recommended in environments where good resistance to corrosion is as for food and chemical industries.

gned for welding similar austenitic refractory types 25Cr/20Ni, is used corrosion and oxidation at high temperatures, it can withstand flacking 100°C and it can be used for MIG welding (GMAW), TIG (GTAW), and yed arc welding (SAW).

lized with Nb and designed for welding austenitic stainless steels 18Cr abilized with Nb or Ti types, that can also be used to weld unstabilized is indicated for places where you need an excellent resistance to nular corrosion, the Nb content gives this property.

e of steel has a chemical composition similar to ER 309L but with the of Mo in environments of 2.00-3.00% approx.

n content of Molybdenum improves the behaviour of the material itting corrosion in chlorinated environments.

Mo is used for dissimilar welding between stainless steels and low els, as well as for overlapping liners, base metal liners to improve their se to corrosion. Used to achieve a liner with a chemical composition of an AISI 316L type.

filler metal for the first liner layer in multi-layers with filler metals such 16L or AISI 317L. In some cases it can be used to weld type 18Cr8Ni es of the same or similar metal where there are severe conditions nd corrosion problems may occur, thus requiring a high alloy in the netal.

ng to its presentation, the material can be applied in different welding es, such as TIG (GTAW) or MIG/MAG (GMAW).

is an austenitic chromium nickel stainless steel. It has a good ur working in high temperatures continuous service up to 1095°C. good oxidation resistance in these conditions and is also used for tent service at temperatures up to 1030°C. It has a low coefficient of expansion. Alloy 310S can be used in cryogenic applications with low c permeability and toughness down to -230°C.

DS is similar to alloy 310 except for lower carbon content to minimize precipitation during welding.

I type has been designed for welding dissimilar alloys, carbon steels Ni stainless steels.

istance to hot cracking. ACX 712 provides a two-phase weld deposit gh percentage of ferrite in an austenitic matrix.