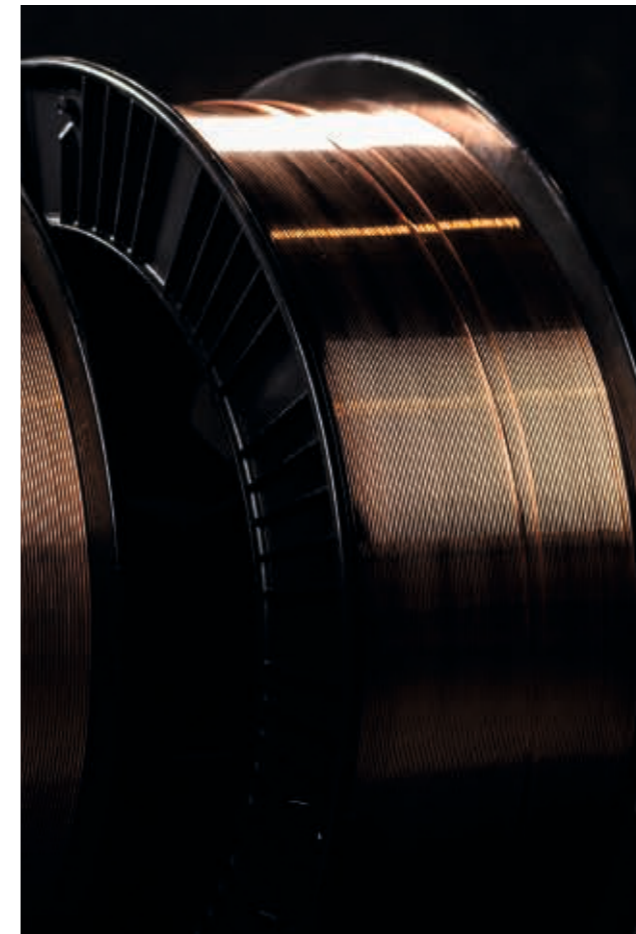
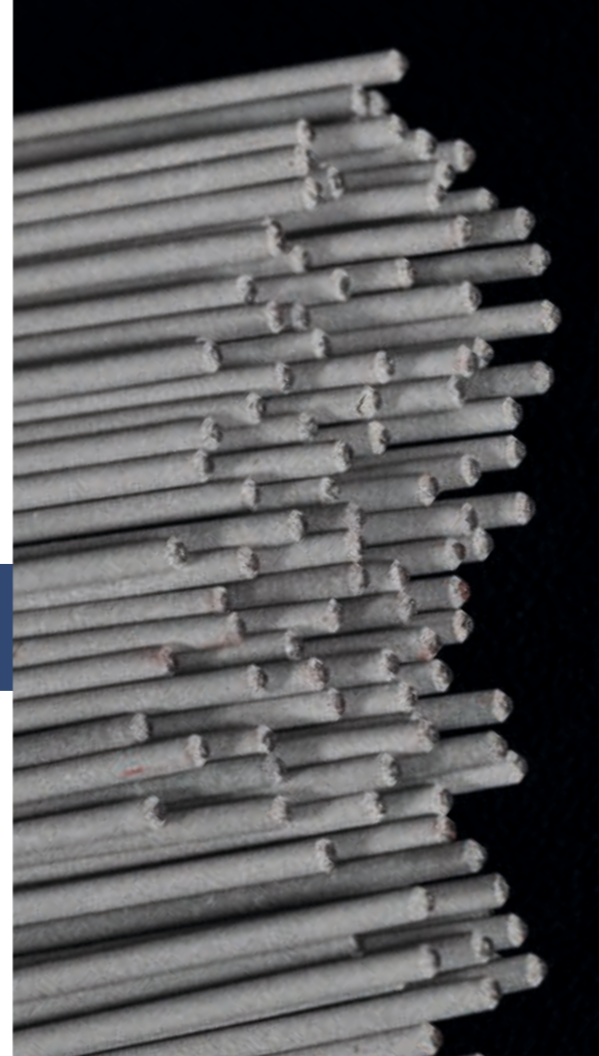


 ERLIKON



 ERLIKON

Welding Consumables



www.erlikon.gr



Welding Excellence in Every Solution

Erlikon, as part of SIDENOR Group, holds a leading position in the Greek market and prioritizes sustainable development in its business practices. Being export-oriented, Erlikon offers its products mainly in the Balkan countries, Central Europe and Cyprus.

The Company was founded in 1978 and is firmly established as Greece's sole welding electrodes and copper-plated wires manufacturer. Since then, Erlikon underwent a series of investments targeting product portfolio expansion, to provide value-added finished goods to a range of demanding applications, ensuring customers' satisfaction.

To date, Erlikon produces a complete range of welding electrodes, wire and flux covering applications in construction, shipbuilding, energy, and chemical industry. Welding, hardfacing and cutting are achieved by various types of electrodes and welding wires that are available for every type of metal, from non-alloyed, low alloyed and stainless steel, to cast iron and aluminium.

Rutile, oxide, and cellulosic electrodes for un-alloyed and low-alloyed steels



FINCORD M

International Standards

- EN ISO 2560-A: E 35 A R 12
- EN 499: E 35 A R 12
- AWS/SFA A5.1: E 6013

Standard Packing and Current

Dimension: Ø 2.00 x 300 mm
 Current (type and amperage): 50 - 60A
 Kg / pack: 3.5
 Packs per carton box: 6
 Kg / carton box: 21

Dimension: Ø 2.50 x 350 mm
 Current (type and amperage): 60 - 90A
 Kg / pack: 4.0
 Packs per carton box: 6
 Kg / carton box: 24

Dimension: Ø 3.25 x 350 mm
 Current (type and amperage): 90 - 140A
 Kg / pack: 4.0
 Packs per carton box: 6
 Kg / carton box: 24

Dimension: Ø 4.00 x 350 mm
 Current (type and amperage): 120 - 180A
 Kg / pack: 4.0
 Packs per carton box: 6
 Kg / carton box: 24

Dimension: Ø 5.00 x 350 mm
 Current (type and amperage): 160 - 230A
 Kg / pack: 4.0
 Packs per carton box: 6
 Kg / carton box: 24

Applications and Characteristics

Rutile medium coated MMA electrode for a wide variety of mild steel fabrication applications. It has exceptional overall operability and welder appeal, resulting in high quality weld deposits. Excellent in the overhead position and for fillet welding in the horizontal-vertical position. Smooth metal transfer, low spatter, and self-releasing slag. Smooth weld bead appearance

Materials of Application

S(P)235 to S(P)355; GP240; GP280

Weld Metal Analysis % (typical values)

- C: 0.08
- Mn: 0.50
- Si: 0.35
- S: <0.02
- P: <0.02

Mechanical Properties of all Weld Metal

(Single values are typical values)

Tensile strength (N/mm²): 440 - 570
 Yield strength (N/mm²): >380
 Elongation A₅ (%): >22
 Impact energy J ISO - V 0°C: >47

Welding Positions

AC, DC-, DC+



Keep dry and avoid condensation.
 Redrying: Generally not required.
 If necessary: 100 - 110°C for 1 hour.

FINCORD M is certified by the following independent bodies: LRS, GL, Tüv Nord.

OVERCORD-S AWS/A 5.1: E 6013

Heavy coated rutile electrode for light section iron and steel fabrications, car body work, boiler construction, sheet metal work etc. Regular bead appearance without spatter, automatic striking and restriking characteristics. Ready deslagging.

REX AWS/A 5.1: E 6012

Rutile-cellulosic type electrode for container, storage vessel applications and rolling stock constructions. Cold running and therefore suitable for light gauge sheet-metal work. Very suitable for external corner beads and filler welding in the vertical down position. Slag in most cases self-releasing.

NAVACITO AWS/A 5.1: E 6013

Rutile medium coated electrode for high quality mild and C-Mn steel fabrications of higher tensile steel grades. Superior type of electrode within the rutile class, gives a forceful positive arc especially needed for vertical up welding on-site where high radiographic standard weld metal must be achieved. Very tolerant to variations of current settings, it can also be used with excellent results in pipe works, even in places where access is limited.

ZELCORD AWS/A 5.1: E 6010

Cellulose coated electrode for vertical down welding with deep penetration. Suitable for welding root, filler and cover passes on high strength steel pipes. Root pass welds must be carried out with negative polarity.

FERROCITO-R AWS/A 5.1: E 7024

Thick rutile coated, high efficiency electrode with 160% weld metal recovery. Suitable for fabrication and vessel construction, filler and capping runs of multilayer weldments. Excellent run out length, low spatter loss, ready deslagging.

ERLIKON-SIDENOR reserves the right to modify its products and the packing of its products without prior notice. The information contained in this document is designed to help the product user. The user should confirm that the chosen product is suitable for the application envisaged. All above data is indicative only.

Basic coating electrodes for un-alloyed, low-alloyed, and special structural steels



SUPERCITO

International Standards

- EN ISO 2560-A: E 42 5 B 42 H10
- EN 499: E 42 5 B 42 H10
- AWS/SFA A5.1: E 7018 H8

Standard Packing and Current

Dimension: Ø 2.50 x 350 mm
 Current (type and amperage): 60 - 90A
 Kg / pack: 3.0
 Packs per carton box: 6
 Kg / carton box: 18

Dimension: Ø 3.25 x 350 mm
 Current (type and amperage): 90 - 140A
 Kg / pack: 3.5
 Packs per carton box: 6
 Kg / carton box: 21

Dimension: Ø 3.25 x 450 mm
 Current (type and amperage): 90 - 140A
 Kg / pack: 4.5
 Packs per carton box: 6
 Kg / carton box: 27

Dimension: Ø 4.00 x 450 mm
 Current (type and amperage): 140 - 190A
 Kg / pack: 4.5
 Packs per carton box: 6
 Kg / carton box: 27

Dimension: Ø 5.00 x 450 mm
 Current (type and amperage): 190 - 250A
 Kg / pack: 4.5
 Packs per carton box: 6
 Kg / carton box: 27

Applications and Characteristics

Low-hydrogen basic coating electrode for producing crack-free welded joints with good toughness properties even on steels having a carbon content up to 0.4%. Weld metal recovery is approx. 120%. Good operating characteristics, also in positional welding. Weld metal exhibits good toughness properties down to -50°C. Suitable for depositing buffer layers on steels having a higher carbon content.

Materials of Application

S(P)235 to S(P)355; GP240; GP280

Weld Metal Analysis % (typical values)

• C: 0.06 • Mn: 1.10 • Si: 0.50

Mechanical Properties of all Weld Metal

(Single values are typical values)
 Tensile strength (N/mm²): 530 - 680
 Yield strength (N/mm²): >460
 Elongation A₅ (%): >22
 Impact energy J ISO - V 40°C: >47

Welding Positions

DC+



PA PB PC PD PE PF

Redrying: Required, 1h at 250°C - 350°C.
 Preheat to 150 - 300°C, depending on plate thickness.

SUPERCITO is certified by the following independent bodies: LRS, GL, Tüv Nord.

TENACITO AWS/A 5.1: E 7018 - 1

Basic type electrode for high mechanical property requirements and crack resistance. Also suitable for crack resistant joint welds on higher carbon steels. Excellent all-position weldability thanks to the double-coating in diameters up to 3.25 mm, providing very stable arc characteristics. Electrode manipulation in root and overhead positions unproblematic. Low spatter loss, ready slag detachment and regular bead appearance. COD tested for offshore applications.

UNIVERS AWS/A 5.1: E 7016

Basic type electrode with low tensile strength and excellent toughness values. Suitable for root welds in rigid fabrications and large joint cross-sections. It can also be used as buffer on lay applications of higher carbon steels.



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Electrodes for hardfacing applications

CITODUR 600 A DIN 8555: E 6 - UM 60

Rutile electrode for hard surfacing of component parts subject to severe wear conditions. Crack and pore free deposit which will withstand shock and impact abrasion. Can only be machined by grinding. Multirun hard surfacing without buffer layer is possible without detachment from the base material. When hardfacing steels that are difficult to weld, a buffer layer deposited with UNIVERS or CITOCHROMAX-N is required.

CITOMANGAN DIN 8555: E 7 - UM 200KP

Basic manganese-alloyed electrode for wear resistant hardfacing on building machines and gravel mixers, as well as for parts subject to impact and friction abrasion.

CITORAIL DIN 8555: E 1 - UM 300KP

Basic type electrode for medium-hard surfacing which is still machinable. Particularly suitable for repairs of worn parts subject to rolling friction. Good weldability in all positions. Pore and crack resistant weld deposit.

CITODUR 350 DIN 8555: E 1 - UM 350KP

Rutile electrode for machinable medium-hard surfacing. Stable arc, smooth surface, easy slag removal. The high tensile strength and the good elongation secure resistance to cracking on possible violent cooling after welding.

CITODUR 38 DIN 8555: E 10 - UM 60GR

Heavy-coated rutile type electrode for highly wear resistant overlaying on parts subject to frictional abrasion. Not suitable for impact conditions. Clean and smooth bead appearance with minimal under-cutting. Approximately 160% recovery. Machinable by grinding only.

Electrodes for stainless and heat-resisting steels

BELINOX AWS/A 5.4: E 308L - 16

Rutile high-alloy electrode for austenitic stainless Cr-Ni steels or cast steels. For operating temperatures up to +350°C. Non-scaling up to +800°C.

INOX 25/20 AWS/A 5.4: E 310 - 16

Rutile inox electrode austenitic type. Suitable for heat-resisting chromium and chromium-nickel steels, as well as for cast steels. Non-scaling up to +1200°C.

INOX 29/9 AWS/A 5.4: E 312 - 16

Rutile electrode with 25-30% ferrite content, suitable for welding dissimilar and difficult steels and for cladding on ferritic steels. Weld metal non-scaling up to +1100°C. High resistance to cracking when used as buffer layer on sensitive base metals.

BELINOX 316 AWS/A 5.4: E 316L - 16

Rutile high-alloy electrode for austenitic stainless. Cr-Ni-Mo steels or cast steels. Extra low carbon content. For operating temperatures up to +400°C.

CITOCHROMAX N AWS/A 5.4: E 307 - 15

Basic type high-alloy, crack resistant electrode particularly suitable for difficult to weld steels, as well as for joining dissimilar steels and manganese-alloyed steels. Also suitable as buffer layer when hardfacing. The weld metal consists of austenitic Cr-Ni-Mn steel with possible small amounts of delta-ferrite. Non scaling up to +850°C.

INOX 25/14 AWS/A 5.4 : E 309L - 16

Austenitic-ferritic electrode with a ferrite content of approx. 15%. Suitable for joining high-alloy and unalloyed steels. For section thicknesses above 12 mm, the unalloyed steel is given a buffer layer with the INOX 25/14 electrode, and welding is completed using an electrode of the BELINOX or BELINOX 316 type. Recommended for hardfacing of unalloyed steels, providing an 18/8 CrNi alloy in the first pass already.

CATEGORY 5

Electrodes for cast iron

CITOFONTE MONEL

AWS/A 5.15: E NiCu B

Electrode suitable for filling-up and repair of cast defects on malleable or nodular cast iron. Weld metal is machinable.

SUPERFONTE Ni

AWS/A 5.15: E Ni Cl

Suitable for repair of gray cast iron and for joining components made of steel, copper or nickel to malleable castings. Weld metal is machinable.

SUPERFONTE NiFe

AWS/A 5.15: E NiFe Cl

Nickel-iron electrode with special covering. Suitable for welding nodular cast iron and for joining components made of steel, copper or nickel to graphite castings. Weld metal is machinable.

Electrodes for cutting

CITOCUT

Electrode with special coating for cutting steel and gray cast iron. Very useful in repair and demolition work.

Electrodes for aluminium and its alloys

ALCORD 5 Si

AWS/A 5.3: E 4043

Aluminium electrode for welding aluminum and Al-alloys containing <2% alloying elements; also suitable for Al-alloy castings with <7% Si content.

ALCORD 12 Si

AWS/A 5.3: E 4047

Silicon-alloyed aluminium electrode for repair welding of aluminium castings.

CATEGORY 7

MIG-MAG welding wire

International Standards

- EN ISO 14341-A: G 42 4 M G3Si1
- DIN EN 440: G 42 4 M G3Si1
- AWS/ASME SFA A5.18: ER - 70 S6

Materials of Application

S(P)235 – S(P)355; GP240; GP280

Weld Metal Analysis % (typical values)

- C: 0.06 - 0.14
- Mn: 1.3 - 1.6
- Si: 0.7 - 1.0
- S + P: <0.050

Current, Gas Consumption and Wire Feed Speed

CO ₂ : Ø 0.8 12-20l/min: 50 - 70A m/min: 2.5 - 12	CO ₂ : Ø 1.2 12-20l/min: 120 - 280A m/min: 3 - 10
CO ₂ : Ø 1.0 12-20l/min: 80 - 230A m/min: 2.5 - 10	CO ₂ : Ø 1.6 12-20l/min: 200 - 400A m/min: 3 - 8

Mechanical Properties of all Weld Metal

Heat treatment: as welded
 Yield strength [N/mm²] >420
 Tensile strength [N/mm²]: 500-640
 Elongation A₅ [%] >22
 Impact energy ISO-V [J] (+20°C) >80
 Impact energy ISO-V [J] (-40°C) >47

Procedural Recommendation: Mechanical properties apply to the use of shielding EN ISO 14175 - M21 (18% CO₂ - 82% Ar)

Standard Packing in 15kg spools (net weight), also available in 5kg spools.

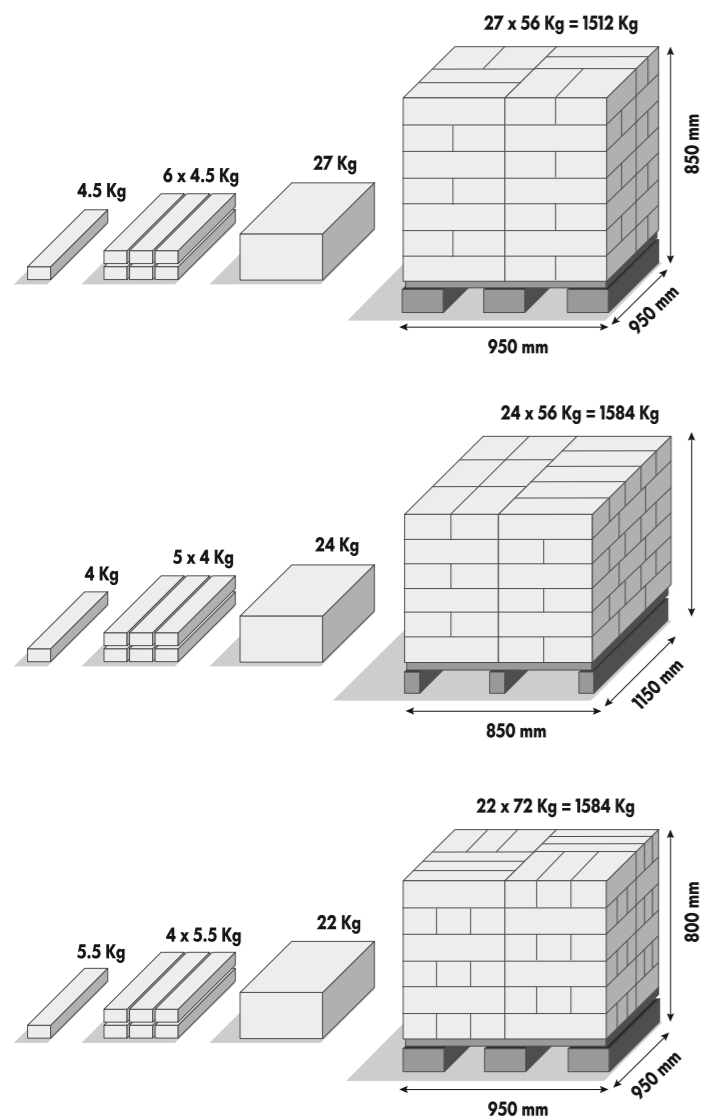
CARBOFIL 1 is certified by the following independent bodies:
 LRS, GL, Tüv Nord, DB.



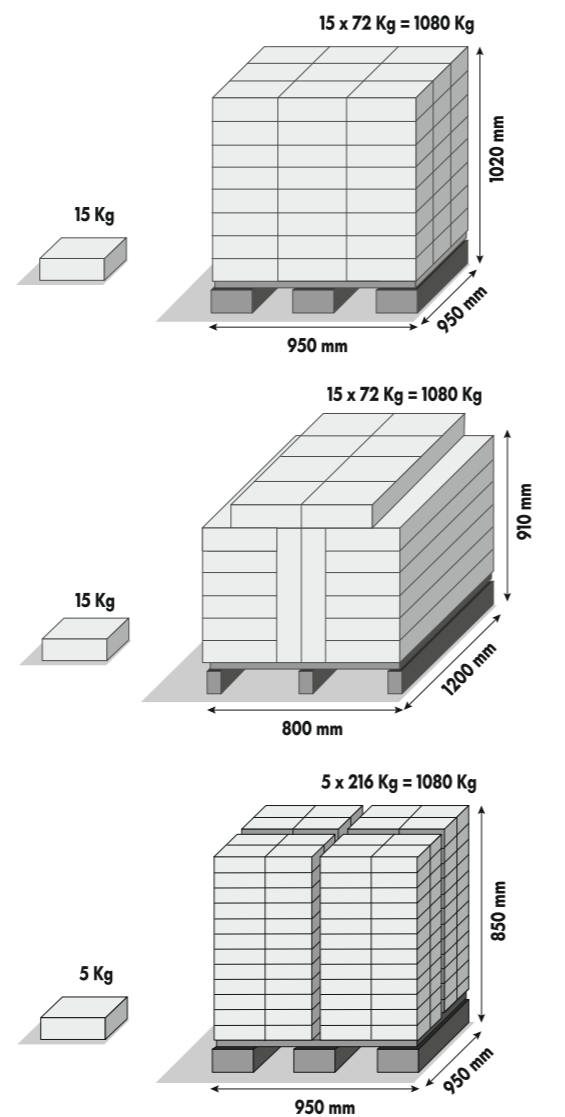


Reliable partner for all welding methods, offering electrodes and wires

Covered Electrodes

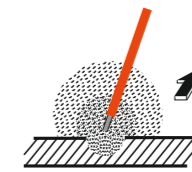


Welding Wires



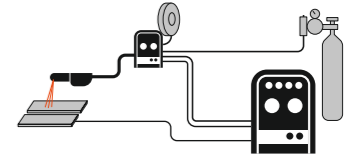
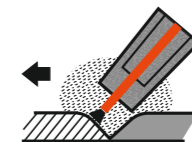
1. Shielded Metal

Arc Welding - SMAW



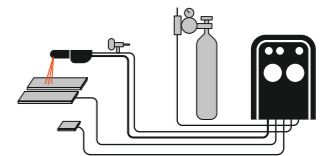
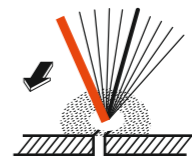
2. Gas Metal

Arc Welding - GMAW



3. Gas Tungsten

Arc Welding - GTAW



4. Submerged

Arc Welding - SAW

