

SUPERON®

DOMESTIC MARKET - INDIA ONLY



WELDING CONSUMABLES

"We Join Better"

Superon was founded in 2004 by our Managing Director, Mr. Sanjay Mehra, with an aim to serve "best-in-class" products at the right price. Over the last 20 years, Superon has become one of India's largest manufacturer and seller of welding consumables and stainless steel wire.

Trusted by over 5 Lakh welders and fabricators, Superon branded products are served across India through a distribution network of over 350 distributors.

Our product range includes:

- 🔧 **Welding Stick Electrodes** - Stainless Steel, Carbon Steel, Nickel Alloys, Cast Iron, Cobalt Alloys & Copper Alloys.
- 🔧 **Welding Filler Wire** - MIG, TIG, SAW (with Flux) - Stainless Steel, Carbon Steel, Nickel Alloy & Cast Iron.
- 🔧 **Maintenance and Repair Solutions** - Hardfacing, Joining and Rebuilding welding electrodes and wires.
- 🔧 **Welding Auxiliaries** - DPT Set, Anti-Spatter, Pickling Gel, Welding Holder, Zinc Spray, Multipurpose Industrial Spray, Spray Paints, Drill bit / Core bit.
- 🔧 **Abrasives and Auxiliaries** - Cutting wheel, Grinding wheel, Flap Disc, Non-Woven Pad, Felt Buff Pad, Buffing Compound.

“ India's no.1
Stainless Steel Welding
Consumable Brand ”



CORPORATE
OFFICE



PLANT-I,
MANESAR



PLANT-II,
GURGAON

A) Welding Electrodes



- Stainless Steel Electrodes 03-04
- Mild Steel Electrodes 04-05
- Low Alloy Steel Electrodes 05-07
- Hardfacing, Cast Iron, Nickel Alloy & Cobalt Electrodes 07-08



B) Cutting and Gouging

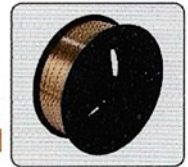
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INTERNATIONAL APPROVALS



A)WELDING ELECTRODES

STAINLESS STEEL ELECTRODES

- Ideal for uninterrupted full-length welding.
- Self-lifting slag, simplifying the welding process.
- Low moisture absorption for improved performance and absence of post weld porosity.
- Excellent re-strike capability for seamless welding.
- All electrodes are vacuum packed under controlled humidity environment to prevent moisture absorption.



	Product Name AWS/SFA	Welding Recommendation	Yield Strength N/mm2	Tensile Strength N/mm2	Elongation A5(%)	Impact (J)	USP
SUPERON 300 Series							
1	SUPERON 307* E 307L-16	AC; DC+	-	≥600	≥35	≥75 at RT	This is an austenitic rutile coated electrode used for joining and overlaying of manganese steel, dissimilar Steel and sulphur / phosphorous containing steel.
2	SUPERON 308H E 308H-16	AC; DC+	-	600	37	>55 at RT	This electrode provides seamless weldability and is well-suited for high temperature applications.
3	SUPERON 308L-15 E 308L-15	DC+	-	≥550	≥40	≥47 at -196°C	This electrode offers superior weldability and is specifically designed for pipe welding. It produces self-peeling slag and passes impact tests at temperatures as low as -196°C.
4	SUPERON 308L* E 308L-16	AC; DC+	-	610	44	60 at RT	This electrode, with an LMA type coating, provides unmatched weldability without spatter and produces self-peeling slag. It is renowned for its outstanding mechanical properties, setting the standard in its class.
5	SUPERON 309Cb E 309Cb-16	AC; DC+	-	590	40	75 at RT	This electrode is a rutile type low carbon MMA electrode for joining dissimilar Steel (austenitic to ferritic Steel) and for cladding of austenitic Steel.
6	SUPERON 309L* E 309L-16	AC; DC+	-	600	≥35	60 at RT	This electrode has excellent weldability and a self-peeling slag, known for its outstanding performance. It boasts best-in-class mechanical properties and is particularly suitable for joining dissimilar Steel.
7	SUPERON 309L-15 E 309L-15	DC+	-	≥550	≥30	44 at -60°C	Low carbon basic coated electrode with an austenitic stainless-steel deposit containing approx. 15% ferrite for welding dissimilar Steel like stainless Steel to low alloyed Steel.
8	SUPERON 309LMo E 309LMo-16	AC;DC+	-	600	35	65 at RT	Low carbon Rutile-basic coated 23Cr 12Ni 2Mo stainless steel type electrode. This electrode has excellent crack resistance and offers a soft fusion with a visually pleasing bead appearance. The slag effortlessly lifts by itself.
9	SUPERON 310* E 310-16	AC;DC+	-	620	35	75 at RT	Rutile SS electrode with a high temperature austenitic stainless-steel deposit. Resistant to corrosion and oxidation up to 1200°C, good resistance against hot cracks, easy slag removal and seamless beads.
10	SUPERON 312* E 312-16	AC;DC+	-	>800	>20	70 at RT	This electrode exhibits superior weldability and demonstrates excellent resistance to cracks, heat, and shocks. It has the highest tensile strength with notable elongation.
11	SUPERON 316L* E 316L-16	AC;DC+	-	>590	≥35	60 at RT	Low carbon Rutile coated Mo containing austenitic stainless-steel electrode with approx. 2-9% ferrite.
12	SUPERON 316L-15 E316L-15	DC+	-	570	40	≥50 at -196°C	This electrode offers superior weldability, self-peeling slag, and controlled fluidity, making it ideal for all position welding. It successfully passes impact tests at temperatures as low as -196°C.
13	SUPERON 317L* E 317L-16	AC;DC+	-	590	36	50 at RT	Rutile type stainless steel electrode suitable for the welding of austenitic stainless Steel with 16-20% Cr, 10-14% Ni and 0-4% Mo.

	Product Name AWS/SFA	Welding Recommendation	Yield Strength N/mm2	Tensile Strength N/mm2	Elongation A5(%)	Impact (J)	USP
14	SUPERON 318-16* E 318-16	AC;DC+	450	590	35	≥65at - +20°C	This electrode demonstrates excellent resistance to intergranular corrosion, along with good weldability and self-peeling slag.
15	SUPERON 320LR-16* E 320LR-16	AC;DC+	≥520	≥640	≥35	-	Rutile coated, non-synthetic, stainless-steel electrode depositing 20Cr/32Ni/3Cu weld metal. The C, Si, P, and S are specified at lower maximum levels, and Nb & Mn are controlled within narrower ranges.
16	SUPERON 347* E 347-16	AC;DC+	-	590	40	60 at RT	This electrode offers a soft fusion process with no spattering, and self peeling slag. It produces exceptional weld bead appearance and can be easily restricked.
17	SUPERON 347-15 E 347-15	DC+	-	590	40	≥47 at - 60°C	This electrode has controlled fluidity and offers superior weldability. It features self-peeling slag and demonstrates superior resistance to intergranular corrosion.
18	SUPERON 383* E 383-16	AC;DC+	≥480	≥630	>35	≥65 at +20°C	Rutile coated electrode with full austenite Cr-Ni-Mo stainless steel alloy deposit which gives good toughness and freedom from weld cracking.
19	SUPERON 385* E 385-16	AC;DC+	>370	>570	>35	≥70 at - 40°C	This electrode is fully austenitic and highly resistant to corrosion. It exhibits good weldability in all positions.
SUPERON Stainless Steel Other Series							
20	SUPERON 410#* E 410-16	AC;DC+	≥250	≥520	≥22	-	This is a low hydrogen type, heavy coated electrode with excellent weldability.
21	SUPERON 410NiMo#* E 410NiMo-16	AC; DC+	≥600	≥850	≥15	-	This is a basic coated electrode, exhibiting superior weldability and excellent resistance to abrasion.
22	SUPERON 430#* E 430-15	AC; DC+	≥350	≥550	≥20	-	Basic coated high-performance electrode for welding of stainless, heat resistant, cold tough Steel, cast steel types, on identical ferrite and similar heat treatable Steel / cast steel types, 15-17 % Cr (AISI 430).
23	SUPERON 630* E 630 - 16	DC (+) / AC	>740	950	18	-	Composition of these electrodes is 16.4 cr, 4.7 Ni, 3.6 Cu. Universal electrode for valve repair and buildup.
24	SUPERON 16-8-2* E 16-8-2-16	AC; DC+	>500	>640	>35	≥50 at RT	Rutile coated SS electrode used primarily for welding stainless steel, such as Types 16-8-2, 316, and 347, for high-pressure, high-temperature piping systems.
25	SUPERON 2209* E 2209-16	DC (+) / AC	>500	>700	25	-	Rutile-base 22-9-3-N type synthetic electrode for joint welding on corrosive resistant duplex- Steel. Non - synthetic variant also available.
26	SUPER ON 2553* E 2553-16	AC; DC+	≥ 650	≥ 800	≥ 20	≥50 at RT	Rutile coated electrode with duplex stainless steel alloy deposit which gives good toughness and freedom from weld cracking.
27	SUPERON 2594-16* E 2594-16	AC;DC+	≥ 650	>800	≥ 20	≥47 at RT	This electrode is designed for super-duplex stainless Steel, offering excellent resistance to pitting and crevice corrosion.
28	SUPERON 2595* E 2595-16	AC;DC+	≥ 650	≥ 800	≥ 20	≥50 at RT	Low carbon concentration, superb weldability, arcs without spatter, and very smooth bead appearance. In the range of 40-70FN, weld metal contains a very high amount of ferrite.

* # - 26 designation are also available for higher deposition rates. * -17 & -15 designation are also available. • E 308-16, E 309-16, E 316-16, E 309 Mo-16 are also available.

MILD STEEL ELECTRODES

- General purpose welding electrode, demonstrating strong arc forces, minimal spatter and radiographic weld bead.
- Excellent arc strength - seamless strike/ re-strike property.
- Customized variants of E6013, E7018, E7018-1 available in line with customer's welding parameter.
- Customizable packaging options- Vacuum packed, Hermetic sealing, Tin Cans, Plastic tubes, Corrugated boxes etc.



SUPERON 6000 Series

29	SUPERON 6010 E6010	DC(+)	>350	440-520	>26	>47 at - 30°C	Highly versatile electrodes that can be used in all welding positions. Well-suited for pipe welding applications.
30	SUPERON 6011 E6011	AC; DC(+)	>380	450-530	>24	>47 at -30°C	This is an all position electrode, best suited for pipe welding application.

Product Name AWS/SFA		Welding Recommendation	Yield Strength N/mm2	Tensile Strength N/mm2	Elongation A5(%)	Impact (J)	USP
SUPERON 6000 Series							
31	SUPERON 6012 E6012	AC,DC -	>350	430-480	>24	-	This electrode exhibits remarkable bridging abilities, particularly in situations with inadequate fit-up. It possesses a stable arc and performs exceptionally well at high currents, minimizing spattering.
32	SUPERON 6013 E6013	AC,DC(±)	>350	430-480	>26	>60 at 0°C	It offers exceptional slag detachability and exhibits excellent impact notch toughness at 0°C.
33	SUPERON 6013 M E6013	AC,DC(±)	>370	450-490	>24	>60 at 0°C	This electrode is coated with a medium layer of rutile and produces a finely rippled and smooth weld bead. It has exceptional slag detachability and offers excellent performance when striking and restriking the arc.
34	SUPERON 6013 S E6013	AC,DC(±)	>380	450-480	>26	>60 at 0°C	Electrode demonstrating exceptional weldability. Best suited for fillet joints with thick sections. It exhibits excellent arc stability, even when operating at low current levels.
35	SUPERON 6013 VD E6013	AC,DC(±)	>360	440-480	>24	>60 at 0°C	Rutile-cellulosic electrode well-suited for vertical down welding.
36	SUPERON 6018 E6018	AC,DC(+)	>420	460-520	>28	>40 at -30°C	The weld metal produced by this electrode is highly resistant to cracking, which is attributed to the presence of a high basic slag and achieving a metal recovery rate of 120%. Additionally, it offers exceptionally smooth weldability.
37	SUPERON 6022 E6022	AC,DC -	>320	430-450	>24	-	This electrode is highly effective for welding roof decking to support beams, especially when dealing with burn-through weld spots. It demonstrates outstanding capabilities in arc striking and restriking.
SUPERON 7000 Series							
38	SUPERON 7010-G E7010-G	AC, DC+	>420	520-560	>26	>48 at 30°C	Superior electrode suitable for all positions, delivering exceptional performance. Ideal for pipe welding, showcasing remarkable mechanical properties.
39	SUPERON 7014 E7014	AC,DC(±)	>440	500-540	>26	>46 at 0°C	This electrode displays remarkably smooth arc characteristics, excellent arc stability, and minimal spattering. It provides medium to low penetration while offering outstanding slag removal and a visually appealing weld bead appearance.
40	SUPERON 7015 E7015-H4	AC, DC+	450	550-620	30	70	Basic coated, low hydrogen electrode for producing tough and crack-free welded joints.
41	SUPERON 7016 E7016	AC,DC(+)	>450	510-540	>26	>46 at -30°C	Potassium-type low hydrogen electrode that delivers exceptional plasticity, impact toughness, and resistance against cracking.
42	SUPERON 7016-1 E7016-1 H4	AC, DC+	>440	510-550	>26	>50 at -35°C	This moderate-coated electrode creates crack-resistant weld metal suitable for various stress conditions. It excels in positional welding, enabling full penetration root run in pipe welding.
SPECIAL PURPOSE LOW ALLOY Steel							
43	SUPERON 7018 E7018	AC,DC(+)	>460	540-580	>30	>80 at -30°C	This basic electrode is specifically designed to enhance the deposition rate and improve the appearance of the weld bead when working with mild and low alloyed Steel, particularly in situations with high restraint.
44	SUPERON 7018-H4R E7018-H4R	AC,DC(+)	>460	560-580	>30	>80 at -30°C	This electrode exhibits exceptional weldability and boasts mechanical properties such as easy restrike, self lifting slag.
45	SUPERON 7018-1 E7018-1 H4	AC, DC+	>480	540-580	>26	>100 at 45°C	This electrode is known for its improved deposition rate, impact value and easy weldability.

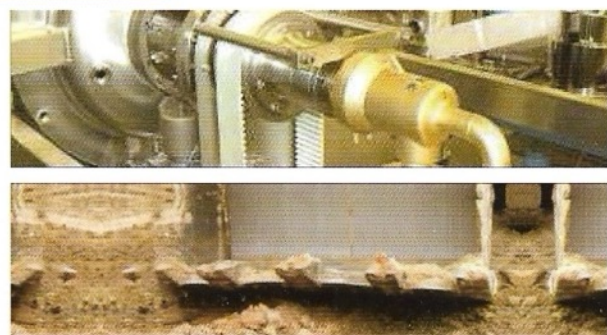


- E7018/E7018-1 provides a high deposition of weld metal with extremely low diffusible hydrogen content conforming to H4/H4R Standards.
- E7018/E7018-2 has a 125% recovery.
- Versatile electrode that can be used in all welding positions, including pipe welding.
- Top-notch mechanical properties, exceeding industry standards.
- Exhibits excellent re-strike capability and minimal spatter levels.

	Product Name AWS/SFA	Welding Recommendation	Yield Strength N/mm ²	Tensile Strength N/mm ²	Elongation A5(%)	Impact (J)	USP
46	SUPERON 7018-1 H4R E7018-1 H4R	AC; DC+	>480	540-580	>26	>120 at - 45°C	This product excels in weldability and boasts exceptional mechanical properties, surpassing industry standards. It also ensures superior quality and reliability with a diffusible hydrogen level below 4.0ml/100gm & with excellent moisture resistance property.
47	SUPERON 7018-A1 E7018-A1 H4	AC; DC+	>480	540-580	>26	>40 at - 20°C	A creep-resistant welding electrode with a basic coating that enhances deposition rate and bead appearance, specifically engineered for welding 0.5% Mo Steel in all positions.
48	SUPERON 7018-G E7018-G	AC; DC+	>480	540-580	>26	>50 at - 50°C	This heavily coated iron powder electrode is specifically designed for horizontal and vertical welding, offering accelerated speed and enabling high deposition rates.
49	SUPERON 7024 E7024	AC;DC(±)	>440	500-540	>28	>48 at RT	This heavily coated, iron powder electrode is designed for high-speed welding applications, particularly in horizontal and flat positions, to achieve high deposition rates.
50	SUPERON 7024-1 E7024-1 H4	AC; DC(-)	>480	540-580	>26	>60 at -20°C	Designed for horizontal and down hand welding, this iron powder-based electrode with a heavy coating enables high-speed operation and achieves remarkable deposition rates.
SUPERON 8000 Series							
51	SUPERON 8013-G E8013-G	AC; DC+	>480	540-580	>26	N.R	This rutile coated electrode is specifically designed for pipe welding, producing radiographic quality weld deposits with exceptional all-position capability. It creates a typical 1.2Cr-0.5Mo type low alloy steel deposit that exhibits remarkable resistance to creep up to 500°C.
52	SUPERON 8018-B2 E8018-B2 H4	AC; DC+	>480	560-590	>24	>48 at -18°C	A basic electrode specifically engineered to enhance deposition rate, making it an excellent option for the fabrication and maintenance of boilers, including associated piping of 1Cr - 0.5Mo type steel welding.
53	SUPERON 8018-B6 E8018-B6 H4	AC; DC+	>480	580-640	>26	>40 at 0°C	Basic iron powder electrode for low carbon 5Cr-0.5Mo welds, offering exceptional resistance to creep and heat up to 650°C. It also possesses air hardening properties.
54	SUPERON 8018-C1 E8018-C1 H4	AC; DC+	>510	540-580	>26	>46 at - 60°C	Crafted for 2% nickel deposit applications, this electrode is renowned for its superior quality. It delivers exceptional arc stability, ensuring precise and controlled welding. With its effortless slag removal and minimal spatter losses, this electrode guarantees a clean and efficient welding process.
55	SUPERON 8018-C2 E8018-C2	AC; DC+	>480	540-580	>26	>50 at -100°C	Iron powder electrode for welding 3% nickel steel and aluminum-killed steel, with low alloy and low hydrogen composition. Offers excellent low-temperature impact properties and enables efficient deposition in all positions.
56	SUPERON 8018-C3 E8018-C3	AC; DC+	>480	540-580	>26	>50 at - 40°C	A low hydrogen iron powder electrode that generates a strong and flexible weld deposit comprising 1% nickel and 0.25% molybdenum.
57	SUPERON 8018-D3 E8018-D3	AC; DC+	>480	540-580	>26	>60 at - 50°C	Medium-heavy coated electrode for welding Mn-Mo type low alloy steel. Offers subzero toughness and all-position capability.
58	SUPERON 8018-G E8018-G	AC; DC+	>480	540-580	>26	>54 at - 50°C	This electrode, containing 1% nickel and 1.5% manganese, delivers exceptional impact values even in frigid conditions as low as -50°C. It demonstrates outstanding weldability and maintains excellent impact properties at subzero temperatures.

Product Name AWS/SFA	Welding Recommendation	Yield Strength N/mm2	Tensile Strength N/mm2	Elongation A5(%)	Impact (J)	USP
59 SUPERON 8018-W2 E8018-W2	AC; DC+	>480	540-580	>26	>48 at - 20°C	A unique electrode producing 0.5Cr - 0.7Ni - 0.5Cu weld metal, perfect for weathering steel welding. Provides excellent resistance against atmospheric corrosion.
SUPERON 9000 Series						
60 SUPERON 9015-B3 E9015-B3 H4	AC; DC+	>480	540-580	>26	>48 at - 30°C	This electrode is an excellent choice for welding higher strength piping, castings, and forgings made of 2.5%Cr and 0.5%Mo steel. It exhibits exceptional resistance to moisture reabsorption, which effectively prevents hydrogen cracking and aids in eliminating starting porosity.
61 SUPERON 9018-B3 E9018-B3 H4	AC; DC+	>480	540-580	>26	>48 at - 30°C	This electrode is an excellent choice for welding higher strength piping, castings, and forgings made of 2.5%Cr and 0.5%Mo steel. It exhibits exceptional resistance to moisture reabsorption, which effectively prevents hydrogen cracking and aids in eliminating starting porosity.
62 SUPERON 9015-B9 E9015-B91 H4	AC; DC+	>480	540-580	>26	>48 at 0°C	This electrode is designed for welding Cr-Mo-V-Nb Steel like P91, T91, and F91, as well as materials such as 1.4903 and similar steel grades. It offers exceptional strength and creep resistance, making it suitable for high-temperature applications up to 600°C.
63 SUPERON 9018-D1 E9018-D1	AC; DC+	≥495	≥610	≥28	≥30 J	Basic coated extra low hydrogen all position electrode suitable for welding Steel with similar composition. Producing tough and crack-free welded joints.
64 SUPERON 9018-G E9018-G	AC; DC+	>480	540-580	>26	>60 at - 50°C	This electrode contains 0.4% molybdenum and 1% nickel in the weld metal, making it a suitable choice for welding steel 16Mo3. It is specifically designed for various applications, including earthmoving equipment, boiler and power house construction, oil refineries, penstocks, and high-strength low-alloy (HSLA) Steel.
65 SUPERON 9018 - B9 E9018-B91 H4	AC; DC+	>480	540-580	>26	>48 at +20°C	This electrode is ideal for welding Cr-Mo-V-Nb Steel like P91, T91, and F91, as well as materials such as 1.4903 and similar steel grades. It exhibits remarkable strength and outstanding resistance to creep, making it well-suited for high-temperature applications up to 600°C.
SUPERON >10000 Series						
66 SUPERON 10018-D2 E10018-D2 H4	AC; DC+	>480	540-580	>26	>70 at -50°C	This electrode, featuring a basic coating and iron powder composition, is a low hydrogen option for welding high yield strength Steel with a yield strength exceeding 600N/mm2.
67 SUPERON 10016-G E10016-G H4	AC; DC+	≥625	≥730	≥20	≥60 J	Basic coated extra low hydrogen all position electrode suitable for armour Steel with high tensile strength. Producing tough and crack-free welded joints.
68 SUPERON 10018-G E10018-G	AC; DC+	>480	540-580	>26	>50 at - 60°C	This low hydrogen iron powder electrode, with a basic coating and LMA type, creates welded joints that are robust and free from cracks. It offers a stable and concentrated arc, along with effortless slag removal and smooth weld beads.
69 SUPERON 11018M E11018M H4	AC; DC+	>480	540-580	>26	>60 at - 50°C	This basic coated electrode is specifically designed for welding high tensile fine-grained Steel with a yield strength of approximately 700 N/mm2. It produces fine rippled seams, minimal spatter, and allows for easy slag removal.
70 SUPERON 12018M E 12018-M	AC; DC+	≥790	850-920	≥25	≥40 J	Low hydrogen, all-position, basic heavy coated iron powder type electrode suitable for welding of low alloy, high tensile strength fine-grained Steel, quenched and tempered steel, typically used to weld forging, casting plate and pressure vessels.
71 SUPERON 12018-G E12018-G	AC; DC+	>760	840-	>26	>47 at - 45°C	This high-quality electrode is ideal for welding high tensile Steel that demand welds with tensile strengths of 120,000 psi.

HARDFACING, CAST IRON, NICKEL ALLOYS AND COBALT



	Product Name AWS/SFA	Welding Recommendation	Yield Strength N/mm2	Tensile Strength N/mm2	Elongation A5(%)	Impact (J)	USP
72	SUPERON 35RC DIN 8555: E1-UM-350	AC; DC+	-	-	-	-	The hardness of this electrodes is in the range of 37-40 Hrc. It is classified as a rutile type electrode.
73	SUPERON 55LH DIN 8555: E6-UM-60P	AC; DC+	-	-	-	-	The hardness of this electrode is in the range of 57-60 HRc. It features a basic coating.
74	SUPERON 55RC DIN 8555: E6-UM-60P	AC; DC+	-	-	-	-	The hardness of this electrode is in the range of 55-60 Hrc. It is classified as a rutile type electrode.
75	SUPERON 60RC DIN 8555: E6-UM-60-S	AC; DC+	-	-	-	-	This hardness of this electrode is in the range of 58-60 Hrc. It is classified as a rutile type electrode.
76	SUPER CAST Ni E Ni-CI	AC; DC+	-	-	-	-	This electrode offers exceptional machinability and is composed of pure nickel. It produces a smooth and concentrated arc, making it easy to remove slag during the welding process.
77	SUPE CAST NIFE E NiFe-CI	AC; DC+	300-400	400-550	≥15	-	This electrode is coated with graphite and contains a Ferro-Nickel alloy. It ensures excellent bonding and smooth flow of the weld metal, while also offering good machinability.
78	SUPE CAST NIFE-K E NiCu	AC; DC+	-	-	-	-	A controlled weld bead facilitates straightforward edge buildup, with self-releasing slag. The weld deposits exhibit a notably fine, consistent, and uniform ripple pattern.
79	SUPE CAST NM E St-1	AC; DC+	300-400	400-550	≥15	-	This electrode is coated with graphite and contains a Ferro-Nickel alloy. It ensures excellent bonding and smooth flow of the weld metal, while also offering good machinability.
80	SUPERON MN DIN 8555: ~E7-UM-200KP	AC; DC+	-	-	-	-	This electrode is heavily coated with austenitic manganese alloy. The hardness after welding is in the range of 180-220 BHN (Brinell Hardness Number), while in the working condition it reaches 400-450 BHN.
81	SUPERON Ni-1 ENI-1	AC; DC+	-	> 450	25	-	These electrodes, containing 95% nickel and 2.5% titanium, are specifically designed for welding commercially pure nickel in both wrought and cast forms. They are suitable for joining nickel to itself as well as to steel materials. The typical specifications for the nickel base metal include ASTM B160, B161, B162, and B163.
82	SUPERON NiCrFe -2 E NiCr Fe-2	DC+	>400	>600	40	≥47 at -196°C	Outstanding performance in out-of-position welding. Exceptional corrosion resistance, even at elevated temperatures and as low as -196°C.
82	SUPERON NiCrFe-3 E NiCr Fe-3	DC+	>420	>700	43	≥47 at -196°C	Superb performance in out-of-position welding. Exceptional corrosion resistance under typical elevated temperature conditions.
83	SUPERON NiCrMo-10 E NiCrMo-10	DC+	> 500	> 760	> 36	150 at RT	Nickel-base non synthetic electrode used for welding Haste-alloy C-22 having Ni-Cr-Mo-W alloys. It is suitable for welding components in chemical processing plant with highly corrosive media and for the welding of the clad side of joints in steel clad with nickel-chromium-molybdenum alloy.
84	SUPERON NiCrMo-13 E NiCrMo-13	DC+	> 500	> 760	> 42	150 at RT	Nickel-base non synthetic electrode used for welding Haste-alloy C-59 having Ni-Cr-Mo alloys. It is a versatile alloy with excellent wet corrosion resistance for the most demanding applications.
85	SUPERON NiCrMo-14 E NiCrMo-14	DC+	> 580	> 820	> 36	150 at RT	Nickel-base non synthetic all-position electrode used for joining INCONEL alloy C-686 having Ni-Cr-Mo-W alloys and also used to join duplex, super duplex, full austenitic stainless Steel and other Ni-Cr-Mo alloys.
86	SUPERON NiCrMo-3 E NiCr Mo-3	DC+	>420	>760	> 36	>10 at -196°C	Outstanding weldability. Fully austenitic with exceptional resistance to corrosive substances.
87	SUPERON NiCrMo-4 E NiCrMo-4	DC+	>400	>720	>30	>50 at -196°C	Exceptional resistance to pitting and crevice corrosion. Specifically designed to perform effectively in demanding conditions, including pipelines, pressure vessels, chemical processing plants, and oil and gas facilities.
88	SUPERON NiCrMo-5 E NiCr Mo-5	DC+	> 500	>760	> 36	150	Nickel-base non-synthetic electrode used for welding Haste-alloy having Ni-Cr-Mo-W alloys.
89	SUPERON NiCu7 E Ni-Cu-7	DC+	230	490	32	>80 at -RT	This versatile welding solution in Monel is ideal for repair, joining, and resolving various challenges. The weld metal offers exceptional resistance to corrosion from sea water, salts, and reducing acids.
90	SUPERON 6A ECoCr-A	AC; DC+	-	-	-	-	A controlled weld bead facilitates straightforward edge buildup, with self-releasing slag. The weld deposits exhibit a notably fine, consistent, and uniform ripple pattern.
91	SUPERON 12B ECoCr-B	AC; DC+	-	-	-	-	This electrode has outstanding resistance to mineral and metal abrasion.
92	SUPERON 21E ECoCr-E	AC; DC+	-	-	-	-	A low carbon, austenitic alloy with outstanding work-hardening characteristics, high temperature strength, and impact resistance.

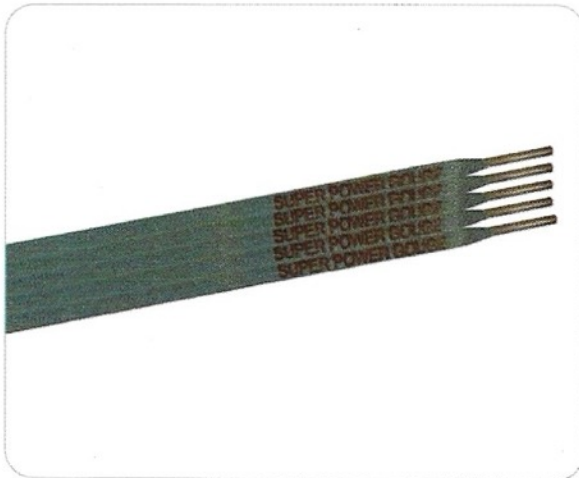
B) CUTTING AND GOUGING

GOUGING CARBONS

- Superon Gouging Carbons are proficient to work with high current values and effective to cut/gouge high thickness metals. The electrodes offer stable arc characteristics and groove uniformity.
- Highly adaptable, effective & cost-efficient solution for working on wide range of metals including Carbon Steel, Stainless Steel, Cast Irons & many more ferrous alloys as well as non-ferrous alloys.



Packing Details		Dimension			
Sr. No.	Item Name	Diameter (mm)	Length (mm)	PCS / PKT	PKT / BOX
1	SUPER GOUGING CARBONS	6.0, 7.0, 8.0, 9.0, 10.0, 11.0, 12.0	355	50	10



GOUGING / CUTTING ELECTRODES

Highly concentrated arc force & exothermic coated electrode offers all position cutting and piercing of all metals & alloys using standard electric arc equipment. No special skill, supplementary equipment or oxygen tanks are required. Slow burn-off rate leaves little residue, requiring comparably less finishing. Electrode does not overheat, can withstand high amperage.

KEY FEATURES

- High arc force leading to easy cutting
- Forceful penetrating arc, retains till the end of electrode
- High blowing effect, Molten metal is blown away quickly

Packing Details

Sr. No.	Product Name	Unique Features
1	SUPER POWER CUT 100	▪ Highly heat resistant electrode having concentrate arc right at the point of application ▪ Finishing operation is rarely necessary ▪ Piercing, cutting stainless steel & cast iron, cleaning castings etc
2	SUPER POWER GOUGE	▪ Excellent electrode to gouge & bevel ▪ Ideal electrode to remove unwanted metal prior to final machining ▪ The whitish smoke facilitates the welder to spot the crack easily during gouging operation ▪ Superb U groove preparation & minimal cleaning after groove preparation
3	SUPERTRODE A90	▪ Forceful penetrating arc with low smoke ▪ For high speed, all position cutting and piercing of any metal ▪ Offers narrow kerfs, smooth & clean cuts
4	SUPERTRODE A91	▪ Gouging electrodes for cast irons & other metals ▪ Removal of old welds & rivets ▪ Used for preparing sections prior to welding, gouging out old / defective weld metal, removing flash & risers

C) STAINLESS STEEL FILLER WIRES

- Superon is recognized as India's leading supplier of Stainless Steel welding consumables. Strict mechanical and chemical parameters have enabled Superon to be a dependable Stainless Steel welding filler metal supplier.
- Superon SS MIG wires are available in both matt and bright finish. They can be supplied in plastic spool, basket spool or marathon drum pack.
- Superon SS TIG consumables display grade and size on every stick. The wires have mirror surface finish, resulting in seamless weld joints.

SS Welding Wires (TIG / MIG & SAW)

SUPERON 300 Series

AISI 304 /304L	AISI 304LP	ER 307 /307S1*	ER 308 /308L*	ER 308H*	ER 308LSi	ER 309 /309L
ER 309H	ER 309LSi	ER 309LMo	ER 310	ER 312	ER 316 /316L*	ER 316H*
ER 316LMo*	ER 316LSi*	ER 316LSiMo*	ER 317L	ER 318Si	ER 320	ER 321/321H
ER 347 /347L	ER 347Si /Lsi	ER 347H	ER 385 /904L			

SUPERON 400 Series, Duplex and Super Duplex

ER409Cb/Nb	Er410	ER 410NiMo	ER 420	ER 430 /430L	ER430LNb	ER 2209
ER 2594						

* Controlled FN grades also available

SS MIG available in following 5 grades in every AWS class

- LHL : Low heat input for thin sheet welding
- AG : Automotive component welding
- AG-HS : Automotive components welding with higher welding
- HSW : High speed welding grade
- Robotic : For robotic welding



SS SAW and Flux

Superon offers both SS Saw wires and complimentary flux combination. Our wire/flux combination are available for all major austenitic, martensitic and duplex Stainless Steel grades.

SUPERSAW SSN

SUPERSAW SSN is a proprietary flux technology for welding austenitic stainless steel and heat resisting high chrome steel. It is a fluoride basic, carbon neutral flux well suited for all 300-400 grades of stainless steel wires. SUPERSAW SSN contains chrome bearing ingredients that actively compensate chromium loss during the weld process.

SUPER SAW DUPLEX

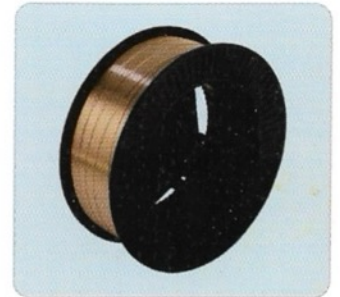
SUPERSAW DUPLEX, a Proprietary saw flux formulation for welding duplex stainless steel grades-such as 2209, 2594 and others. It is an agglomerated fluoroide-basic formulation, suitable for both AC/DC condition.

Recommended Welding Conditions

Current	795-805 Amps
Welding Voltage	25-37 V
Welding Speed	Upto 805 mm/m

D) MILD STEEL, CHROME-MOLY, NICKEL, TITANIUM, ALUMINIUM AND COBALT ALLOYED WELDING WIRE

- Produce X-ray quality weld over most metal surface conditions.
- All wires are certified and tested as per EN/AWS standards. Every lot is supplied with a test certificate.
- Grade and size embossed on all TIG rods for easy identification.



Nickel Alloys, Titanium Alloys

ER Ni-1	ER Ni-CI	ER NiFe-CI	ER NiCr-3	ER NiCrMo-3
ER NiMo-3	ER NiCu-7	ER NiCrFe1	ER NiCrFe2	ER NiCrFe3
ERNiCr Mo4	ERNiCr Mo10	ERNiCr Mo14	ER Ti - 2	ER Ti - 5

Mild Steel, Chrome Molly, Cobalt Alloys

ER 70S6	ER 70S2	ER 80S B2	ER 90S B3	ER 90S B9
ER 100S SG	ER CoCr-A	ER CoCr-B	ER CoCr-E	



ALUMINIUM WIRE

- Generally recommended for welding 5052, any 6XXX series alloys and castings
- Use on many weldable cast and wrought aluminum alloys
- Better puddle and fluidity makes it less prone to cracks
- Alloy embossed on each rod for easy identification

	Product Name AWS/SFA	Size in mm	Pack Size in Kg/lbs	Welding positions	Typical Applications	USP
1	SUPERON 4043 ER 4043, AWS A5.10	1.6, 2.4, 3.2	4.5 Kg(10 lbs)	All	Bicycle frames, Pressure vessels	Use on many weldable cast and wrought aluminum alloys
2	SUPERON 5356 ER 5356, AWS A5.10	1.6, 2.4, 3.2	4.5 Kg(10 lbs)	All	Architectural structures, Armored vehicles, Gun mount bases	B3 alloyed steel designed for prolonged elevated temperature service up to 600°C and corrosion resistance

E) WELDING ELECTRODE HOLDER

Superon Electrode Holders are crafted using state-of-the-art techniques and top-quality materials to fulfill our customer requirements

PRODUCT CHART

AMPS	200	400	600
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USER INDUSTRIES / APPLICATIONS

- Fully Insulated Body
- Thermoset Material Cap
- Brass Forged Connectors
- Nylon with Glass Field Material Handle
- High Tensile Spring
- Light Weight and Durable



F) PROPRIETARY MAINTENANCE AND REPAIR WELDING SOLUTIONS

REPAIR JOINING ELECTRODE

Product Name	Alloy Base	Mechanical Properties Of Weld Metal (Typical)				Unique Feature (All Vacuum Packed)
		Yield Strength N/mm2(min)	Tensile Strength N/mm2(min)	Elongation A5(%) (min)	Impact (J) (min)	
01 SUPERTRODE A 10	Mn, Si	400	450	26	80 J at 0°C	- Excellent weldability with superior mechanical properties. - Universal – All Positional capabilities. - Contact type welding electrode results fine rippled deposits.
02 SUPERTRODE A 11	Mn, Si, Ni	500	610	30	47 J at -40°C	- Extra low hydrogen-moisture resistant steel electrode for unalloyed construction steel. - Smooth, spatter and turbulence free arc transfer. 25% higher deposition rate than conventional.
03 SUPERTRODE A 16	Cr, Ni, Mo	-	580	35	80 J at RT	High pressure and high temperature pipe welding.
04 SUPERTRODE A 20	Cr, Ni	320	550	35	55 J at -40°C	- All purpose, rutile coated wire with alloyed core wire. - Used for joining low carbon alloy steel, Cr-Ni Steel & major austenitic stainless steel.
05 SUPERTRODE A 22	Cr, Ni, Mo	410	580	37	70 J at 0°C	- High alloyed electrode suitable for high temp application upto 1200 C. - Excellent resistance to hot-cracking, scaling & chemical corrosion. - Used for joining of SS 310 type and dissimilar combination of steel.
06 SUPERTRODE A 24	Cr, Ni, Mo	600	750	24	-	- Ferrite balanced – austenitic alloy deposit suitable for welding dissimilar steel & unknown steel. - Excellent resistant to cracks, scales & corrosion upto 1000 °C.
07 SUPERTRODE A 26	Cr, Ni, Mo, Mn, Si	500	800	40	-	- Corrosion resistant Mo-bearing stainless steel electrode. - Used for joining of low carbon, austenitic steel, Cr Ni Mo bearing steel, Crack sensitive alloys and chemical resistance cladding.
08 SUPERTRODE A 27	Cr, Ni, Mo	660	910	28	-	- Electrode for high strength joint welding and surfacings of similar and equal steel or cast steel and many more. - Austenitic – ferritic deposit exhibits excellent hot-cracking & corrosion resistant.
09 SUPERTRODE A 28	Cr, Ni, Mo	530	690	40	-	Extra strong and tough stainless steel electrode for joining Steel to stainless steel, manganese steel. Ideal "black" to "white" welding electrode.
10 SUPERTRODE A 37	Cr, Ni, Mn	-	620	35	60 J at RT	Basic coated 18/8/5Mn type high-performance electrode for welding of Mn 12% austenitic stainless to mild steel.
11 SUPERTRODE A 63	C, Si, Mn, Cr, C, Si, Cu,	≥ 740	950	18	-	- Precipitation hardening martensitic weld deposit used for valves repair and build ups. - Mechanical properties can be enhanced by heat-treatment.
12 SUPERTRODE A 45(S)	C, Mn, Si	-	400	30	-	Supertrode 45S is a specially designed, very low silicon content welding electrode, suitable for fabrication and repairs of galvanizing baths.
13 SUPERTRODE A 93	-	350	350	30	-	This electrodes keeps temperature as low as possible during welding annealing to 250°C and post-weld tempering to 700°C as required on ferritic base materials.
14 SUPERTRODE A 98	Cr, Mo, V, Mn	590	640	22	50 J at RT	- Moisture resistant, hydrogen controlled, basic type electrode. - Weld metal possesses excellent elevated temperature properties.

CLADDING & DIE BUILD UP ELECTRODES

Product Name	Alloying elements in iron based alloy	Hardness	Unique Feature (All Vacuum Packed)
01 SUPERTRODE A 25	Cr, Ni, Mo, Mn	As Welded : 160-200 BHN As Welded : 160-200 BHN	- Best impact resistant deposit with work hardenability. - Excellent crack resistivity used for joining & surfacing.
02 SUPERTRODE A 35	C, Cr, Mn, Ni, Mo, V	38 - 40 HRC	Basic coated air hardening type high performance electrode for welding of high tensile strength and toughness Steel by C-Cr-Mn-Ni-Mo-V alloy deposit.
03 SUPERTRODE A 45	Cr, Mo, V, W	45 - 50 HRC	Electrode for repairs on similar hot working tools, forging dies, press jacks, hot draw rings, hot cutting and up setting tools.
04 SUPERTRODE A 53	Cr, Ni, Mo, V, W	50 - 58 HRC	Machinable crack-free multiple build-up can be done for Pinch Roller, Wrapper Rolls, Edger Rolls, ROT rolls etc.
05 SUPERTRODE A 60	Cr, Ni, Mo, V, W, Co	55 - 60 HRC	- Electrode for hard & abrasive resistant surfacing with high toughness. - Edge retention property of deposit suitable for armouring of cutting edge tools.
06 SUPERTRODE A 70	Cr, Mo, V	25 - 30 HRC	- High build up electrode having best resistance to deformation, compression & impact loading. - Applied as cushion layer prior to hard facing, for buildup of worn parts like rails, drive sprockets, gear teeth, chains, wheels etc.
07 SUPERTRODE A 73	C, Mn, Cr, Ni	As Welded : 180-220 BHN W/H : 400-500 BHN	- Joining & Cladding electrode for High Mn Steel that can be flame cut. - Tough overlay with work hardening capability. - Excellent cushion layer before hardfacing.
08 SUPERTRODE A 76	Cr, Ni, Mo, V, Co	35 - 40 HRC	- Excellent compatibility with die Steel. - Added Co enhances deformation & wear resistance at elevated temperatures.
09 SUPERTRODE A 76 HF	Cr, Ni, Mo, V, W, Co	40 - 45 HRC	- Improved creep resistance & impact toughness weld deposit used for hot working tools. - Controlled hardness along with W-Co combination, ideal for surfacing of work hardened tools & edges.
10 SUPERTRODE A 77	Cr, W, Mo, V	45 - 50 HRC	- Martensitic steel deposit containing fine carbides of W, Cr & V. - Excellent resistance to metal-metal wear and "Hot hardness" retention upto 550°C.
11 SUPERTRODE A 84	Cr, Ni, Mo, V, W	55 - 58 HRC	Balanced alloy composition designed for protection of extra tough cold & hot working tools.
12 SUPERTRODE A 85	C, Si, Cr, Mo, V	54 - 57 HRC	- Unique high hardness deposit suited for metal-to-metal wear application, suited best for die build up & repairs. - Moderate to high impact resistance with abrasion & erosion resistance.
13 SUPERTRODE A 86	C, Cr, Ti	55 - 60 HRC	- Unique hardness ideal for multiple build up without cracks. - Hard & tough fine TiC with beneficial alloy carbides. - Best Suited for severe impact abrasion and moderate abrasion.
14 SUPERTRODE A 88	-	40 - 48 HRC	Martensitic deposit for cast iron hardfacing. Porosity free weld deposit for buildup directly on worn out cast iron surface.

CR-B Paste

- Self-fusing ultra hard chromium boride master alloy (750-1100 HV) with unique needle like structure (hardness second only to diamonds) for a super abrasion & erosion resistant hardface.
- Hardness: 66-70HRC
- Volumetric Coverage: 300 cm³/kg
- CrB Paste has proven to be the most economical hard surface in all the applications like power station pulverised fuel exhausters, furnace extractors, cyclone blades, quarry fans, cement kiln fans, precipitator booster fans, steel sinter fans etc.

HARD SURFACE ELECTRODES

Product Name	Alloying elements in iron based alloy	Hardness	Unique Feature (All Vacuum Packed)
01 SUPERTRODE A 58	C, Cr,	55 - 60 HRC	- Improved chromium carbide containing iron based electrode. - Ideal alloy for severe abrasion resistance.
02 SUPERTRODE A 62	C, Cr, Mn, V, W	58 - 63 HRC	Electrode for repairs on similar hot working tools, forging dies, press jacks, hot draw rings, hot cutting and up setting tools.
03 SUPERTRODE A 71	Cr, Mo, V, Mn, Si	57 - 60 HRC	Hardfacing electrode resistant to impact, compression and abrasion.
04 SUPERTRODE A 72	C, Si, Cr	60 - 64 HRC	For abrasion resistance and moderate impact resistance.
05 SUPERTRODE A 75	Cr-C	58 - 63 HRC	- Basic - rutile coated hardfacing electrode for smooth weld deposit. - Self lifting slag equally suited for edge build up without stress relieving cracks.
06 SUPERTRODE A 79	C, Cr, Mo, Nb, V, W	60 - 65 HRC	- Self shielded complex carbide containing electrode with extreme abrasion resistance. - High retention up to 300°C, suited for high temperature wear resistance properties.
07 SUPERTRODE A 81	C, Cr, Mo, Nb, Ti, W	63 - 67 HRC	- Specially designed electrode with Improved toughness properties. - Hardness retention upto 700°C. - Suited for high temperature severe abrasion & moderate impact wear resistance coating.

HARD SURFACE TUBULAR ELECTRODES

08 SUPERTRODE A 82 (T)	C, Cr,	55 - 60 HRC	- Densely packed chromium carbide containing tubular electrode. - High deposit, easy handling, Moisture proof flux coating.
09 SUPERTRODE A 83 (T)	C, Cr, V	55 - 63 HRC	Tubular electrodes with added vanadium carbide to improve wear resistant properties.

CAST IRON WELDING ELECTRODES

Product Name	Alloy Base	Mechanical Properties Of Weld Metal (Typical)				Unique Feature (All Vacuum Packed)
		Yield Strength N/mm2 (min)	Tensile Strength N/mm2 (min)	Elongation A5(%) (min)	Hardness	
01 SUPERTRODE A 40	C, Mn, Fe	360	440	20	35 HRC	Non-Machinable Cast Iron.
02 SUPERTRODE A 41	Ni, Fe	300	500	-	170-200 BHN	- All Purpose Nickel – Iron electrode for repair of casting defects. - Weld repair of foundry defects like shrinkage cavities, porosity etc. - Build up of worn out areas of cast irons.
03 SUPERTRODE A 42	Ni, Fe	350	500	20	160-190 BHN	- Universal easy trouble free quick cast iron repairs. - Barium-free electrode for joining dirty contaminated cast irons and CI – steel joints.
04 SUPERTRODE A 43	Ni	330	490	-	150-170 BHN	- Soft Machinable , pure nickel weld deposit. - Best suited for welding of GCI, Malleable cast iron and for welding on fatigued casted parts.



SUPERON®

DOMESTIC MARKET - INDIA ONLY

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