www.hyundaiwelding.com

HYUNDAI WELDING

SOLID WIRES & RODS FOR STAINLESS STEEL WELDING

HYUNDAI WELDING offers a new range of stainless steel solid wires and rods to satisfy customers' technical requirements in terms of excellent welding performance and quality. Our excellent quality wire and rods help to solve problems associated with feedability, arc stability and deposit quality for stainless steel welding.

HYUNDAI WELDING

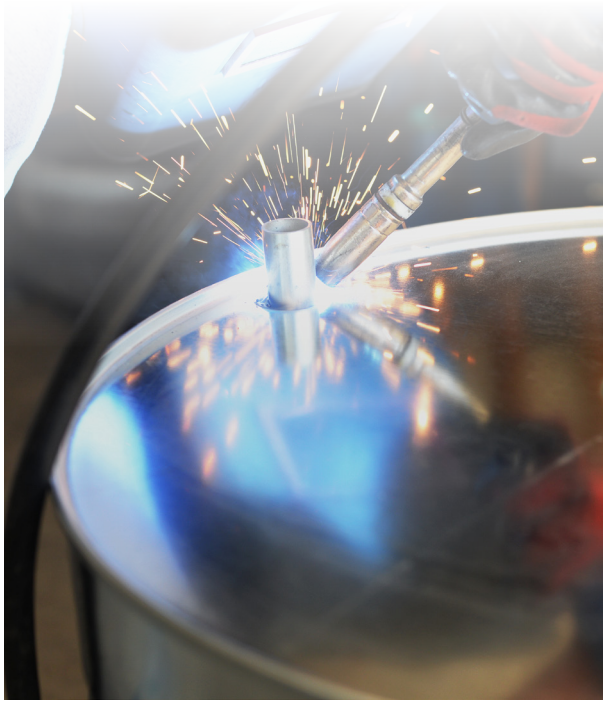
HYUNDAI WELDING is a global manufacturer of welding consumables and equipment. As the top leading manufacturer of welding consumables in Korea, and with a global network of sales, distribution and manufacturing plants, HYUNDAI WELDING has developed into a key player in the international welding industry.

Our company is fully committed to the ever-changing needs of our customers and has evolved in just under 50 years to provide welding expertise and breakthroughs in welding technology. HYUNDAI WELDING understands customer needs and offers customers world-class products and world-class solutions.

PRODUCT RANGE

GMAW/MIG Wires for Stainless Steel

HYUNDAI WELDING offers a standard range (308LSi, 316LSi, 309LSi, 307Si, 309L) of high-quality stainless steel GMAW/MIG wires for welding applications which are used in various industries such as Automotive, Pipeline, Food & Beverage, Chemical, Petrochemical and Power Plants. Our stainless steel GMAW/MIG wires come in various sizes and packaging options to meet different requirements globally. Used in the fabrication of stainless steel components and apparatus such as containers, vessels, tanks and piping, HYUNDAI WELDING brings you the highest added value according to GMAW/MIG wire requirements such as feedability, surface finish, surface cleanness and chemical composition.



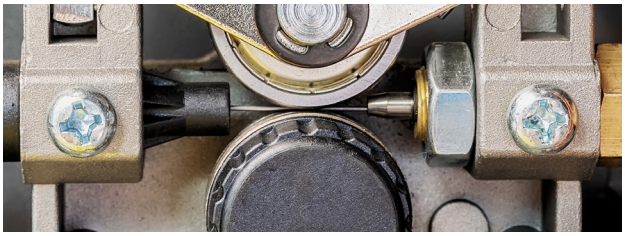
GTAW/TIG Rods for Stainless Steel

The filler metal for TIG welding plays a crucial role in achieving a strong and corrosion-resistant weld which depends on the specific grade of stainless steel being welded and the requirements of the application. HYUNDAI WELDING supplies Stainless Steel GTAW/TIG Wires as a filler metal with most popular grades (308LSi, 308L, 316LSi, 316L, 309LSi, 309L) among stainless steels, used for broad range of industrial applications such as root runs for pipes and tubes. Our stainless steel GTAW/TIG rods are produced to the highest quality standards to ensure ease of use and consistency which are characterised by high quality weld metal deposits, great precision, superior surfaces and excellent strength.

PRODUCT ADVANTAGES

Surface Quality & Wire Feedability

The quality of the surface of welding wires is very important for problem-free welding with a high productivity. With the unique production process, HYUNDAI WELDING stainless steel solid wires have a perfect surface quality and stand for long periods of problem-free welding in GMAW/MIG process with perfect arc stability and excellent feedability. All produced wires are subjected to wire feeding test to ensure consistency.



Cleanliness of Wire Surface

Another surface quality aspect is the cleanliness of the wire. Contaminants from the wire drawing process on the surface need to be removed meticulously in order not to evaporate during welding and act as a source of porosity and X-Ray test failures. Clean surface is critical for TIG to reduce risk of micro-porosity related to impurities on wire surface.

Chemical Composition & Mechanical Testing

Tightly controlled chemical composition is the basis for consistent mechanical properties (tensile strength, yield strength and elongation) as well as high performance and quality. Thus, the chemical analysis of weld metal is carried out as AWS requirement.

A Crystal-clear View of Material Properties

In addition to chemical analysis and mechanical testing, the assessment of the metallographic structure also provides valuable information about the material quality including inclusion rating, grain size, ferrite content and micro / macro analysis.

Superior Welds with Robotic Welding

Together with the unique production process, our GMAW/MIG wires in fiber drums which can be adapted quick and easily to any conventional wire feeder (short setup time), provides excellent welding quality and as a result increase in productivity for robotic applications.

CONSUMABLE GUIDE

GMAW / MIG Product Range

Product Name	AWS A 5.9	EN ISO 14343-A
SMT-308LSi Inox	ER 308LSi	G 19 9 L Si
SMT-316LSi Inox	ER 316LSi	G 19 12 3 L Si
SMT-309LSi Inox	ER 309LSi	G 23 12 L Si
SMT-307Si Inox	-	G 18 8 Mn
SMT-308L Inox	ER308L	G19 9 L
SMT-309L Inox	ER 309L	G 23 12 L

GTAW / TIG Product Range

Product Name	AWS A 5.9	EN ISO 14343-A
SMT-308LSi Inox	ER 308LSi	W 19 9 L Si
SMT-308L Inox	ER 308L	W 19 9 L
SMT-316LSi Inox	ER 316LSi	W 19 12 3 L Si
SMT-316L Inox	ER 316L	W 19 12 3 L
SMT-309LSi Inox	ER 309LSi	W 23 12 L Si
SMT-308L Inox	ER308L	W 19 9 L
SMT-309L Inox	ER 309L	W 23 12 L

Product Name	Typical Chemical Composition of the Wire (%)								Typical Mechanical Properties of All-Weld Metal				
									YS	TS	EL	Impact ISO-V	
	C	Mn	Si	Cr	Ni	S	P	Mo	Mpa (lbs/in^2)	Mpa (lbs/in^2)	(%)	°C (°F)	J (ft·lbs)
SMT-308LSi Inox	0.03	1.0-2.5	0.65-1.0	19.5-21.0	9.0-11.0	0.03	0.03	0.3	400 (58,000)	600 (87,000)	35	-196 (-321)	50 (37)
SMT-316LSi Inox	0.03	1.0-2.5	0.65-1.0	18.0-20.0	11.0-14.0	0.02	0.03	2.5-3.0	400 (58,000)	585 (84,800)	40	-196 (-321)	40 (30)
SMT-309LSi Inox	0.03	1.0-2.5	0.65-1.0	23.0-25.0	12.0-14.0	0.03	0.03	0.3	400 (58,000)	650 (94,300)	35	-196 (-321)	55 (41)
SMT-307Si Inox	0.12	5.0-8.0	0.65-1.0	17.0-20.0	7.5-9.0	0.03	0.03	0.3	400 (58,000)	600 (87,000)	35	-196 (-321)	50 (37)
SMT-308L Inox	0.03	1.0-2.5	0.30-0.65	19.5-21.0	9.0-11.0	0.03	0.03	0.3	400 (58,000)	600 (87,000)	35	-196 (-321)	50 (37)
SMT-316L Inox	0.03	1.0-2.5	0.30-0.65	18.0-20.0	11.0-14.0	0.02	0.03	3.0	400 (58,000)	600 (87,000)	40	-196 (-321)	40 (30)
SMT-309L Inox	0.03	1.0-2.5	0.30-0.65	23.0-25.0	12.0-14.0	0.03	0.03	0.75	400 (58,000)	650 (94,300)	35	-196 (-321)	55 (41)

Approvals: CE, TUV, DB, CWB
Approvals vary by product type and grade, so please request information for details.

PACKAGING & SIZES

GMAW / MIG Product Range

Product Name	Diameter Range mm (inch)					Packaging Options			
	0.8 (.030)	0.9 (.035)	1.0 (.039)	1.2 (.045)	1.6 (1/16)	12.5kg (27.6lbs) Basket Spools (K300/D300)	15kg (33lbs) Basket Spools (K300/D300)	5kg (11lbs) Plastic Spool (D200)	250kg (551lbs) Drum
SMT-308LSi Inox	✓	✓	✓	✓	✓	✓	✓	✓	✓
SMT-316LSi Inox	✓	✓	✓	✓	✓	✓	✓	✓	✓
SMT-309LSi Inox	✓	✓	✓	✓	✓	✓	✓	✓	✓
SMT-307Si Inox	✓	✓	✓	✓	✓	✓	✓	✓	✓
SMT-309L Inox	✓	✓	✓	✓	✓	✓	✓	✓	✓

GTAW / TIG Product Range

Product Name	Diameter Range mm (inch)						Packaging Options
	1.0 (.039)	1.2 (.045)	1.6 (1/16)	2.0 (5/64)	2.4 (3/32)	3.2 (1/8)	
SMT-316LSi Inox	✓	✓	✓	✓	✓	✓	5kg (11lbs) Tube
SMT-316L Inox	✓	✓	✓	✓	✓	✓	
SMT-308LSi Inox	✓	✓	✓	✓	✓	✓	
SMT-308L Inox	✓	✓	✓	✓	✓	✓	
SMT-309LSi Inox	✓	✓	✓	✓	✓	✓	
SMT-309L Inox	✓	✓	✓	✓	✓	✓