

**STAINLESS STEEL**  
**WIRES**

BUILDING TOMORROW WITH STEEL

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# ABOUT US

Ambica Steels Limited, a visionary manufacturer in the stainless steel industry, has been delivering excellence and innovation since its inception in 1970. With a rich heritage and advanced manufacturing facilities located in Delhi and Gujarat, producing over 80,000 tonnes of stainless steel, in a wide variety of superior quality stainless steel long products. Our commitment to quality, sustainability, and customer satisfaction is reflected in our state-of-the-art technology and practices. As a globally recognized brand, we pride ourselves on our ability to meet the diverse needs of our customers across various industries. At Ambica Steels, we are more than just manufacturers; we are partners in your success, crafting the future of stainless steel with every product we create.

At the heart of our organization are the 5C values: **Credibility, Collaboration, Curiosity, Communication, and Commitment.** These principles drive our integrity, teamwork, innovation, transparency, and dedication, ensuring excellence in everything we do.

**#WiredToRaiseTheBar**

## WELDING

# WIRES

Ambica Steels -  
Stainless Steel MIG, TIG, and Core wire  
as per AWS Standard.

Ambica Steel manufactures high-quality TIG, MIG, and Core Stainless Steel Welding Wires, ensuring superior performance, durability, and precision. Designed for diverse industrial applications, our wires offer excellent weldability, corrosion resistance, and strength, meeting the highest industry standards for reliable and efficient welding solutions.

We also provide customized packaging tailored to your specific requirements.



## TIG Wire

### SPECIFICATIONS

- Size: 1.20 mm – 4.00 mm, Above 4mm- in coil
- Surface Bright Finish
- Length 36"- 500 mm or 1000 mm +/- 1.00 mm
- Packing in plastic or fibre tubes of 5 kgs or 10lbs.
- Embossing – We offer embossing on either one side or both sides.

### APPLICATIONS

Each Grade has specific uses it's made for if you make thinner gauge material like kitchen sinks and tool boxes or do heavier projects like pipe welding.

## MIG Wire

### SPECIFICATIONS

- Size 0.60 mm – 1.60 mm
- Surface – Matte, Bright Finish, Semi Bright
- Packing – 1.00 kgs SD 100, 5kgs wire SD 200, 12.50kgs or 15 kgs (SD 300) plastic or BS 300 Basket Spools.
- Grades – ER307Si, ER308L/LSi, ER 309L/LSi, ER 316L/LSi, ER 310



### APPLICATIONS

As a MIG welder you need to buy only the highest quality stainless steel MIG welding wire by doing so, you could save extra money spent on welding operations like cutting, shaping, joint formation, preheating, tracking, grinding, and soon.



# Core Wires

## SPECIFICATIONS

- Cutlength of 350 mm & coil as well
- Surface Finish – Matte & Bright
- Size Range- 1.60 mm - 5.00 mm
- Packing – Coil, Bundle, Customized packing

## CHARACTERISTICS OF WELDING WIRE

- High Corrosion Resistance – Ideal for harsh environments like the marine and chemical industries.
- Strong & Durable Welds – Ensures high tensile strength and structural integrity.
- Heat & Temperature Resistant – Maintains properties under extreme conditions.
- Low Spatter & Smooth Weldability – Provides clean, stable arcs with minimal defects.
- Available in Various Grades & Types – Suitable for different stainless steel alloys and applications.



## APPLICATIONS:

Investing in high-quality stainless steel core welding wire ensures superior weld strength, durability, and efficiency. It reduces costs on edge preparation, slag removal, rework, and post-weld cleaning while providing smooth arc stability, deep penetration, and minimal spatter. Ideal for construction, shipbuilding, oil & gas, and heavy machinery, it enhances productivity and corrosion resistance in demanding environments.

# Welding Wire Certificates



CPR 305



VD TUV 1153

## STAINLESS STEEL

# WIRES

Ambica Steel India manufactures Stainless Steel Wires from 0.15 to 14.00 mm diameter in various grades for several applications.

## Fine Wires

The fine wires can be produced from 0.15 to 0.80 mm with exceptionally tight tolerances of diameter and ovality. These can be supplied in a range of tensile strengths and spools to suit the required application. The wires can be supplied soft annealed or hard drawn.

### CHARACTERISTICS OF FINE WIRE

- Bright Surface condition
- Controlled mechanical properties w.r.t individual application
- High resistance to corrosion

### SPECIFICATION

Diameter (mm)	Surface Finish	Packaging and Spool Type
0.150 – 0.250	Bright Annealed/Bright Drawn	DIN 125/160/200
0.260 – 0.800	Bright Annealed/Bright Drawn	DIN 125/160/200/250/355



### APPLICATIONS

Wire Suitable for Braiding, Knitting & Weaving. Mainly used in wire mesh manufacturing automotive, printing and filter industries.



## Cold Heading Wires

Cold heading is feeding wire into a machine, cutting it into pieces, and hammering on it. The material is not heated or machined, but formed into its desired shape at room temperature.

Ambica Steel Wire for Cold Heading Quality is made by choosing selected quality wire rods and a special heat treatment process. This enables the production of wire of desired surface and micro-structure necessary for superior products in spite of several stringent conditions.

### CHARACTERISTICS OF COLD HEADING WIRE

- Uniform Vicafil coated surface for seamless heading operations and crack-free heads
- Strict control of chemical composition for quality and performance
- Surface Finish - Soap Drawn, Skin Pass, Soft Annealed

### SPECIFICATION

Diameter (mm)	Surface Finish	Packing
0.80 & Above	Matte, Bright Finish	Coils/ Former pack

### APPLICATIONS

Wire Suitable for Fasteners and Cold Heading Application such as bolts, nuts, screws, rivets, nails etc.

# Electro Polish Quality Wire

EPQ wire has a brilliant mirror bright like surface resulting in a radiant appearance when electro-polished after forming. Often used when the part is visible on the item where it is being used and eye appeal is of importance to the end customer.

## CHARACTERISTICS OF ELECTRO - POLISH QUALITY (EPQ) WIRE

- Ambica Steels EPQ wire has brilliant mirror bright surface that result in very lustrous appearance when electro- polished
- Wires Are Provided with 1/8 Hard, 1/4 Hard, 1/2 Hard, 3/4 Hard Condition

## SPECIFICATION

Diameter (mm)	Surface Finish	Packing
1.40 & Above	Bright Electro Polishing Quality	Euro Coils/ Coils/ Former pack



## APPLICATION

Ideal for manufacturing baskets, trays, trolleys, precision pins, kitchen appliances, and more. Widely used in food, medical, decorative, and architectural applications for durability and hygiene.

# General Purpose Wire

Stainless steel wires are widely used across engineering, chemical, and construction industries, as well as in the manufacturing of ornaments, utensils, wall ties, tying wires, steel balls, and various general applications. At Ambica Steel, we produce stainless steel wires that meet international standards and can also be customized to customer specifications. Available in a range of tensile strengths and packaging options, including c coils and spools, our wires are designed to suit diverse applications, including Vineyard Wires, Staple Wires, and Redraw Wires.

## SPECIFICATION

Diameter (mm)	Surface Finish	Packing
0.80 & Above	Matte Finish, Bright Finish, and Semi-Bright Finish	Coils/Euro coils/ Spools/ Former pack



## APPLICATION:

Ideal for a variety of tasks, including vineyard trellising, securing with staples, wire mesh installation, nail reinforcement, and more. Versatile and durable, this wire is perfect for agricultural, construction, and DIY projects.

## SPECIAL CHARACTERISTICS

- Produced from Wire Rods meeting International Standards
- We can supply general purpose wires in Soft Annealed, 1/4 Hard, 1/2 Hard, 3/4 Hard & Full Hard Condition



# MECHANICAL PROPERTIES

Mechanical properties along with packing details specification  
for 1/8, 1/4, 1/2, 3/4 hard temper wire

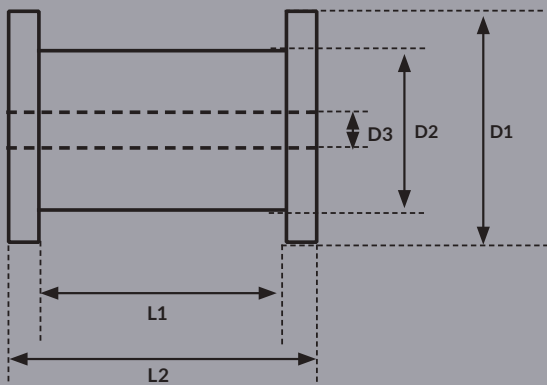
Temper	Wire dia range	Coil dia		Coil Weight	Surface Finish	Total Wt. on Former
	mm	ID	OD	kg		kg
1/8 hard 120 KSI Max.	6.00-8.00	24-27	33-37	500 kg Max	Bright / Matt	1500
	2.00-5.50	18-22	25-30	500 kg Max	Stearate Coated	1000
		18-22	25-30		Matt (clean)	1000
		18-22	25-30		Bright	1000
		18-22	25-30		Stearate Coated	1000
		18-22	25-30		Matt (clean)	1000
		18-22	25-30		Bright	1000
	1.60-2.00	18-22	25-30	200 kg Max	Stearate Coated	1000
		18-22	25-30		Matt (clean)	1000
		18-22	25-30		Bright	1000
	0.90-1.50	14-16	19-22	40-60 Kg	Stearate Coated	500
		14-16	19-22		Matt (clean)	500
		14-16	19-22		Bright	500
1/4 hard 128 KSI Max.	2.00-5.50	18-22	25-30	500 kg Max	Stearate coated	1000
		18-22	25-30		Matt (clean)	1000
		18-22	25-30		Bright	1000
		18-22	25-30		Stearate Coated	1000
		18-22	25-30		Matt (clean)	1000
		18-22	25-30		Bright	1000
	1.60-2.00	18-22	25-30	200 kg Max	Stearate Coated	1000
		18-22	25-30		Matt (clean)	1000
		18-22	25-30		Bright	1000
	0.90-1.50	14-16	19-22	40-60 Kg	Stearate Coated	500
		14-16	19-22		Matt (clean)	500
		14-16	19-22		Bright	500

# PACKAGING

Ambica offers its product in various packing options to suit customer requirements and end use. We also provide customized packing solutions. Special care is taken while packing to ensure that the product reaches its destination in 'mill fresh' condition; all precautions are taken to ensure sea-worthiness. Fine-Wires on spools are stretch film wrapped in corrugated boxes and finally can be supplied in Wooden Boxes or Pallets or as per customer's specific requirements.

- Carrier
- Coil with HDPE Packing
- Metal Spool
- Wooden Reel
- Layer wound plastic /Basket Spool
- Layer Wound Coil of Paper Core
- Fine Wire Spool
- Plastic Spool

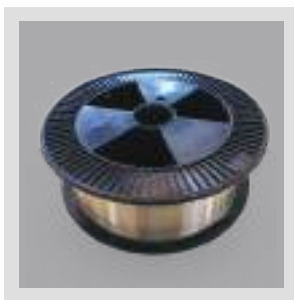
## PLASTIC SPOOLS AS PER DIN SPECIFICATIONS WITH THE DIMENSIONS



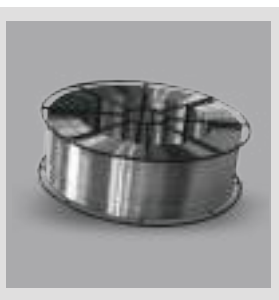
## FINE WIRE

### Spool Dimentions

Spool	Spool Weight (gm)	Flange Dia. D1 (mm)	Barrel Dia. D2 (mm)	Bore Dia. D3 (mm)	Traverse Length L1 (mm)	Overall Length L2 (mm)	Wire Weight (Kgs)
DIN 125	200	125	80	16	100	125	2
DIN 160	350	160	100	22/32	128	160	6
DIN 200	600	200	125	22/32/36/59	160	200	12
DIN 250	1050	250	160	22/32/36	160	200	20
DIN 355	1850	355	224	36	160	200	45



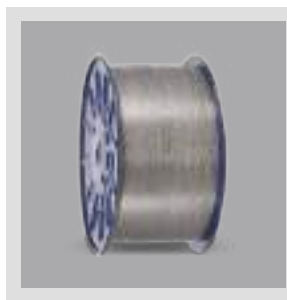
SD 300 SPOOL



BS 300 SPOOL



SD 270 SPOOL



METAL SPOOL



PLASTIC TUBE FOR TIG



DIN SPOOL FOR FINE WIRE



COIL



COIL ON FORMER



# STAINLESS STEEL WIRE-GRADES CHEMICAL COMPOSITION

Series	TYPE AISI	Equivalent International Standards	C Max	Mn Max	P Max	S Max	Si Max	Cr	Ni	Cu	Mo	N	Ti	Others	Product Category
		W.Nr.	%	%	%	%	%	%	%	%	%	%	%	%	
200	202	1.4373	SUS 202	0.15	7.5-10.0	0.06	0.03	1.00	17-19	4.0-6.0	—	0.25	—	—	<div>FN</div> <div>GP</div> <div>MG</div> <div>TG</div> <div>CR</div>
	204Cu	1.4597	—	0.15	6.5-9.0	0.06	0.03	1.00	15.5-17.5	1.5-3.5	2.0-4.0	1.00	0.05-0.25	—	<div>CH</div> <div>GP</div>
300	304	1.4301	SUS304	0.08	2.00	0.045	0.030	1.00	18.0-20.0	8.0-10.0	—	—	—	—	<div>FN</div> <div>CR</div> <div>CH</div> <div>GP</div> <div>MG</div> <div>TG</div>
	304Cu (2%Cu)	1.4567	—	0.08	2.00	0.045	0.030	1.00	17.0-19.0	8.0-10.0	Min 2%	—	—	—	<div>CR</div> <div>GP</div>
	316	1.4401	SUS316	0.08	2.00	0.045	0.030	1.00	16.0-18.0	10.0-14.0	—	2.0-3.0	—	—	<div>FN</div> <div>CR</div> <div>CH</div> <div>GP</div> <div>MG</div> <div>TG</div>
	316L	1.4404	SUS316	0.03	2.00	0.045	0.030	1.00	16.0-18.0	10.0-14.0	—	2.0-3.0	—	—	<div>FN</div> <div>CR</div> <div>CH</div> <div>GP</div> <div>MG</div> <div>TG</div>
	ER307Si	1.4370	—	0.12	6.00-7.50	0.030	0.020	0.65-0.95	17.2-19.8	8.0-9.4	0.30	—	—	—	<div>MG</div> <div>TG</div> <div>CR</div>
	ER308L	1.4316	—	0.02	1.50-2.00	0.025	0.020	0.50	19.0-21.0	9.5-11.0	—	—	—	—	<div>MG</div> <div>TG</div> <div>CR</div>
	ER308Lsi	—	—	0.03	1.00-2.50	0.030	0.020	0.65-1.00	19.50-22.0	9.0-11.0	0.50	—	—	—	<div>MG</div> <div>TG</div> <div>CR</div>
	ER309L	1.4332	—	0.03	1.50-2.50	0.020	0.015	0.50	23.0-25.0	12.0-14.0	—	—	—	—	<div>MG</div> <div>TG</div> <div>CR</div>
	ER309Lsi	—	—	0.03	1.00-2.50	0.030	0.020	0.65-1.00	23.0-25.0	12.0-14.0	0.50	—	—	—	<div>MG</div> <div>TG</div> <div>CR</div>
	ER310	1.4842	—	0.08-0.15	1.50-2.50	0.025	0.025	0.60	23.0-28.0	20.0-22.0	—	—	—	—	<div>MG</div> <div>TG</div> <div>CR</div>
	ER316	—	—	0.08	2.00	0.020	0.020	0.50	18.0-20.0	12.0-14.0	—	2.20-2.75	—	—	<div>MG</div> <div>TG</div> <div>CR</div>
	ER316L	1.4430	—	0.02	1.50-2.00	0.020	0.020	0.50	18.0-20.0	12.0-14.0	—	2.20-2.75	—	—	<div>CH</div> <div>GP</div> <div>MG</div> <div>TG</div> <div>CR</div>
400	430L	1.4016	SUS430	0.03	1.00	0.040	0.030	1.00	16.0-18.0	—	—	—	—	—	<div>CH</div> <div>GP</div> <div>MG</div> <div>TG</div> <div>CR</div>
FN - Fine Wire			CR - Core Wire				CH - Cold Heading Wire			GP - Genreal Application Wire			MG - MIG Wire		TG - TIG Wire

**Other Grades:** Grades 302, 302HQ, 303, 304H, 310, 310S, 314, 316Ti, 321, 347,ER308, ER309, ER312, ER316, ER347, 430, 430F, and ER 430 are available upon request.

## TESTING

# QUALITY ASSURANCE

At the core of the functioning of Ambica Steels India Limited, lies a strong commitment towards quality. Ambica steels India limited has been progressively innovative since the beginning and its products have stood test of the time. The organization has a legacy of delivering quality products at desired prices and that too within a defined time frame.

### FOR GUARANTEEING QUALITY AT EVERY STEP, WE ENSURE THAT

- Perfectly documented work-procedures endorsed by the 3rd party accreditations, certifications and approvals
- In-house testing laboratories installed with ultra-modern equipment

At Ambica steels India limited, we always study and evaluate our safety systems, and aim to become better than the industry's best.

## AMBICA QUALITY

In addition to the stringent process control techniques followed during production, Ambica Steels India Limited carry out comprehensive Chemical & Mechanical testing on the final products to ensure compliance to customer's product specification and expectation. Ambica steels also offers third party inspection as per customer demand.

## TESTING FACILITIES

### UTS (ULTIMATE TENSILE STRENGTH) & % ELONGATION

UTS Testing as per ASTM A 370 / EN 10002-1.

### POSITIVE MATERIAL IDENTIFICATION (PMI)

Equipment using X-Ray fluorescence method for material identification –in process & during final packing..



### IGC (INTER GRANULAR CORROSION) TEST

This test is for detecting susceptibility to intergranular attack in Austenitic. Stainless Steel as per test method ASTM A 262 / DIN 3651-2.

### WIRE TORSION TEST

This tests is a measure of wire ductility, and help to ensure sufficient wire strength to withstand normal loads

### RADIATION TESTING

This Instrument is an advanced pocket size instrument that detects and localizes radiation sources.

### SPECTROMAXX LMX10 ADVANCE

With Fe base with capabilities to detect over 30 elements and also gas content.

### WIRE WRAPPING TESTING

### WIRE BEND TEST

## CERTIFICATES & APPROVALS





# CORE VALUES

## THE 5CS OF AMBICA

At Ambica Steels, our foundation is built on five powerful values that drive our vision, shape our culture, and define our success. These values guide us in everything we do, ensuring we deliver excellence with integrity.



These five values are not just words—they are the essence of who we are. At Ambica Steels, we are #WiredToRaiseTheBar and set new benchmarks in everything we do!

**#WiredToRaiseTheBar**



## CONTACT US

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