

The logo for Ambica Steels India Ltd features a stylized 'AS' monogram in yellow and black, followed by the word 'AMBICA' in a bold, white, sans-serif font. Below 'AMBICA', the words 'STEELS INDIA LTD' are written in a smaller, white, sans-serif font. The background of the entire page is a close-up, artistic photograph of stainless steel wire coils, with some wires glowing red from heat.

**AS** **AMBICA**  
STEELS INDIA LTD

**STAINLESS STEEL**  
**WIRES**

BUILDING TOMORROW WITH STEEL WIRE

CONTENTS

About Us .....	03
Quality Assurance .....	04
Certificates & Approvals.....	05
<b>Stainless Steel Wires</b>	
• Fine Wires.....	06
• Spring Wires.....	07
• Cold Heading Wires .....	08
• Electro Polish Quality Wire .....	09
• General Purpose Wire .....	09
<b>Welding Wires</b>	
• TIG Wire.....	10
• MIG Wire .....	10
<b>Mechanical Properties.....</b>	<b>11</b>
<b>Packaging.....</b>	<b>12</b>
<b>Wires Grades.....</b>	<b>14</b>
<b>Contact Us .....</b>	<b>16</b>

# 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.

**COMMITTED TO QUALITY.  
COMMITTED TO YOU.**

## 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



# 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)	Tolerance (mm)	Tensile (N/mm <sup>2</sup> )	Packaging and Spool Type
0.150 – 0.250	+/- 0.004	850 max.	DIN 125/160/200
0.260 – 0.400	+/- 0.004	830 max.	DIN 125/160/200/250/355
0.410 – 0.630	+/- 0.004	800 max	DIN 125/160/200/250/355
0.635 – 0.800	+/- 0.004	780 max.	DIN 125/160/200/250/355



### APPLICATIONS

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

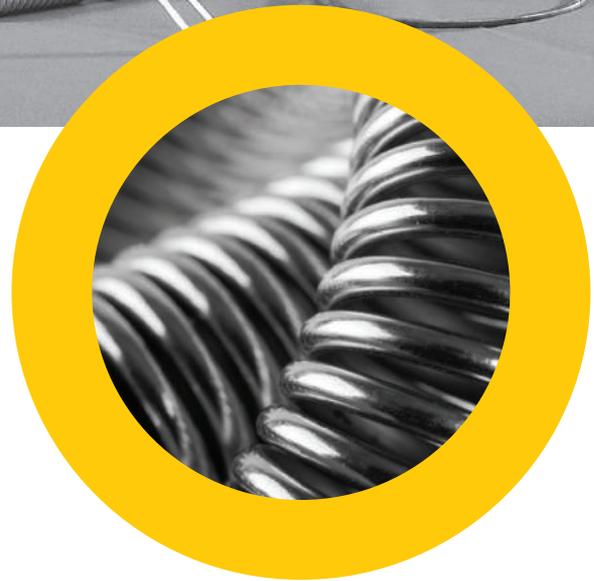


## Spring Wires

Spring wire is a product with very specific technology. It has a strong structure and a good balance of flexibility and tensile strength.

### CHARACTERISTICS OF SPRING WIRE

- Consistent Tensile Strength
- Bright Surface / Stearate or soap coated surface
- Controlled Cast and Helix
- High Fatigue strength with high heat resistance capacity



### APPLICATIONS

Our Spring Wire is processed under strict quality control with close adherence to the Cast Helix Wrap and Bend test of the wire and suitable surface finish (Bright / Coated).

### SPECIFICATION

Diameter (mm)	Grade (AISI)	Tol. (mm)	Tensile-Std.	Packaging	Surface Finish
0.150 - 0.300	302/304/3016	+/- 0.006	ASTM - A313	DIN 125/160/200	Bright
0.310 - 1.000	17-7 PH	+/- 0.008	JIS - G4314	DIN 160/200/250/355/ Coils etc.	Bright / Soap
0.450 - 0.600		+/- 0.010	EN - 10270-3	DIN 200 / 250 / COILS	Bright / Soap
0.610 - 1.000		+/- 0.015	IS - 4544 <sup>PART-IV</sup> <sub>2001</sub>	DIN 200 / 250 / COILS	Soap Coated
1.610 - 3.000		+/- 0.020		DIN 560 / 760 / COILS	Soap Coated
3.100 & Above		+/- 0.025		Coils & Former Pack	Soap Coated



## 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.

### APPLICATIONS

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

### CHARACTERISTICS OF COLD HEADING WIRE

- Uniform coated surface
- Strict control of chemical composition
- Surface Finish - Soap Drawn, Skin Pass, Soft Annealed

### SPECIFICATION

Diameter (mm)	Tolerance	Tensile (Nmm <sup>2</sup> )	Packing
0.80 - 2.00	+/- 0.010	600 - 750	Coils / Former pack
2.01 & Above	+/- 0.020	550 - 650	Coils / Former pack
0.80 - 2.00	+/- 0.010	500 - 650	Coils / Former pack
2.01 & Above	+/- 0.020	500 - 630	Coils / Former pack

# 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 & Full Hard Condition

## SPECIFICATION

Diameter (mm)	Tolerance	Tensile (N/mm <sup>2</sup> )	Packing
1.40 - 3.00	+/- 0.010	750 - 900	Coils / Former pack
3.01 & Above	+/- 0.020	700 - 850	Coils / Former pack



## APPLICATION

Wire used for manufacture of fabricated basket, SS - ball, trays, kitchen appliances and other formed parts. These wires are widely used in the food industry, medical application, decorative and architectural usage.

# General Purpose Wire

Stainless Steel Wires are used in Engineering, Chemical, Construction and many other industries besides various types of application in manufacturing of Ornaments, Utensils, Wall Tie/Tying wires, steel ball and other general applications. Stainless Steel Wires at Ambica Steel are manufactured as per INTERNATIONAL STANDARDS as well as in accordance with customer's specifications. These can be supplied in a range of tensile strengths and coil/spools to suit the required application.

## SPECIAL CHARACTERISTICS

- Produced from Wire Rods meeting International Standards
- Excellent surface finish
- Quality checked at each process stage
- Manufactured as per customer specific requirement



## WELDING

# WIRES

Ambica Arc Brand -  
Stainless Steel MIG & TIG  
wire as per AWS Standard.



## Ambica Arc - TIG Wire for GTAW Process

If you work in the power generation industry where critical welds are made, you can pick up our ER 309L type TIG FILLER WELDING WIRE Stainless Steel Wire you can weld Stainless Steel Wire to Carbon Steel and the outcome will last longer even if it is subjected to stress and thermal cycles.

### CHARACTERISTICS OF TIG WIRE

- Size 1.20 mm - 6.00 mm
- Surface Bright Finish
- Length 36"- 500 mm or 1000 mm +/- 1.00 mm
- Packing in plastic or fibre tubes of 5 kgs or 10lbs.

## Ambica Arc - MIG Wire for GMAW Process

### CHARACTERISTICS OF TIG WIRE

- Size 0.60 mm - 1.60 mm
- Surface - Matte, Bright Finish
- Packing - 1.00 kgs SD 100, 5kgs wire SD 200, 12.50kgs or 15 kgs (SD 300) plastic or BS 300 Basket Spools.

### 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.



### 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.

# 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
		ID	OD			
1/8 hard 120 KSI Max.	mm			kg		kg
	5.00-8.00	24-27	33-37	250-400	Bright / Matt	1500
	4.50-6.00	18-22	25-30	100-200	Stearate coated	1000
	4.50-6.00	18-22	25-30	100-200	Matt (clean)	1000
	4.50-6.00	18-22	25-30	250-400	Bright	1000
	2.00-4.50	18-22	25-30	100-200	Stearate Coated	1000
	2.00-4.50	18-22	25-30	100-200	Matt (clean)	1000
	2.00-4.50	18-22	25-30	250-400	Bright	1000
	1.50-2.00	18-22	25-30	100-200	Stearate Coated	1000
	1.50-2.00	18-22	25-30	100-200	Matt (clean)	1000
	1.50-2.00	18-22	25-30	250-400	Bright	1000
	0.90-1.40	14-16	19-22	50-100	Stearate Coated	500
	0.90-1.25	14-16	19-22	50-100	Matt (clean)	500
	0.90-1.40	14-16	19-22	50-100	Bright	500
	1/4 hard 128 KSI Max.	4.50-6.00	18-22	25-30	100-200	Stearate coated
4.50-6.00		18-22	25-30	100-200	Matt (clean)	1000
4.50-6.00		18-22	25-30	250-400	Bright	1000
2.00-4.50		18-22	25-30	100-200	Stearate Coated	1000
2.00-4.50		18-22	25-30	100-200	Matt (clean)	1000
2.00-4.50		18-22	25-30	250-400	Bright	1000
1.50-2.00		18-22	25-30	100-200	Stearate Coated	1000
1.50-2.00		18-22	25-30	100-200	Matt (clean)	1000
1.50-2.00		18-22	25-30	250-400	Bright	1000
0.90-1.40		14-16	19-22	50-100	Stearate Coated	500
0.90-1.25		14-16	19-22	50-100	Matt (clean)	500
0.90-1.25		14-16	19-22	50-100	Bright	500

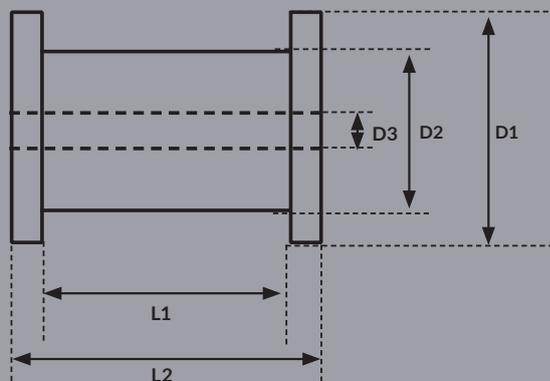
# AMBICA

# 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
- Paper Drum Pack
- Basket Spool K 415
- Layer Wound Coil of Paper Core
- Plastic Spool-H400
- 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



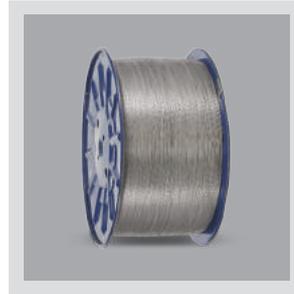
SD 300 SPOOL



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.	JIS														%
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	—	—	FN GP MG TG	
	204Cu	1.4597	—	0.15	6.5-9.0	0.06	0.03	1.00	15.5-17.5	1.50	1.50	1.00	0.05-0.25	—	—	CH GP	
	302	1.431	SUS302	0.15	2.00	0.045	0.030	1.00	17.0-19.0	8.0-10.0	—	—	0.10	—	—	SW GP	
	302HQ	1.4567	—	0.03	2.00	0.045	0.030	1.00	17.0-19.0	8.0-10.0	3.0-4.0	—	—	—	—	CH GP	
	303	1.4305	SUS303	0.12	2.00	0.200	0.15-0.35	1.00	17.0-19.0	8.0-10.0	—	—	—	—	—	—	GP
	304	1.4301	SUS304	0.08	2.00	0.045	0.030	1.00	18.0-20.0	8.0-10.5	—	—	—	0.10	—	—	FN SW CH GP MG TG
300	304H	1.4301	—	0.04-0.10	2.00	0.045	0.030	0.75	18.0-20.0	8.0-10.50	—	—	—	—	—	SW GP	
	304Cu	1.4567	—	0.08	2.00	0.045	0.030	1.00	17.0-19.0	8.0-10.0	3.0-4.0	—	—	—	—	CH GP	
	304L	1.4307	SUS304L	0.03	2.00	0.045	0.030	1.00	18.0-20.0	8.0-12.0	—	—	0.10	—	—	FN SW CH GP MG TG	
	310	—	—	0.25	2.00	0.045	0.030	1.50	24.0-26.0	19.0-22.0	—	—	—	—	—	FN	
	310S	1.4845	—	0.08	2.00	0.045	0.030	1.50	24.0-26.0	19.0-22.0	—	—	—	—	—	FN	
	314	1.4841	—	0.25	2.00	0.045	0.030	1.50-3.00	23.0-26.0	19.0-22.0	—	—	—	—	—	FN GP	
	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	0.10	—	—	FN SW CH GP MG TG
	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	0.10	—	—	FN SW CH GP MG TG
	316Ti	1.4571	—	0.08	2.00	0.045	0.030	1.00	16.0-18.0	10.0-14.0	—	—	2.0-3.0	0.10	5x%C upto 0.8	—	FN GP
	321	1.4541	SUS321	0.08	2.00	0.045	0.030	1.00	17.0-19.0	9.0-13.0	—	—	—	—	5x%C min	—	FN GP

347	1.4550	—	0.08	2.00	0.045	0.030	1.00	17.0-19.0	9.0-13.0	—	—	—	—	GP
ER307Si	1.4370	—	0.20	5.00-8.00	0.030	0.030	1.20	17.0-20.0	7.0-10.0	0.75	0.50	—	—	MG TG
ER308	1.4303	—	0.08	1.0-2.50	0.025	0.030	0.30-0.65	19.5-22.0	9.0-11.0	0.75	0.75	—	—	MG TG
ER308L	1.4316	—	0.03	1.0-2.50	0.025	0.030	0.30-0.65	19.5-22.0	9.0-11.0	0.75	0.75	—	—	MG TG
ER308Lsi	—	—	0.03	1.00-2.50	0.030	0.030	0.65-1.00	19.50-22.0	9.0-11.0	0.75	0.75	—	—	MG TG
ER309	—	—	0.12	1.00-2.50	0.030	0.030	0.30-0.65	23.0-25.0	12.0-14.0	0.75	0.75	—	—	MG TG
ER309L	1.4332	—	0.03	1.00-2.50	0.030	0.030	0.30-0.65	23.0-25.0	12.0-14.0	0.75	0.75	—	—	MG TG
ER309Lsi	—	—	0.03	1.00-2.50	0.030	0.030	0.65-1.00	23.0-25.0	12.0-14.0	0.75	0.75	—	—	MG TG
ER310	1.4842	—	0.08-0.15	1.00-2.50	0.030	0.030	0.30-0.65	25.0-28.0	20.0-22.5	0.75	0.75	—	—	MG TG
ER312	1.4337	—	0.15	1.0-2.50	0.030	0.030	0.30-0.65	28.0-32.0	8.5-10.5	0.75	0.75	—	—	MG TG
ER316	—	—	0.08	1.0-2.50	0.030	0.030	0.30-0.65	18.0-20.0	11.0-14.0	0.75	2.00-3.00	—	—	MG TG
ER316L	1.4430	—	0.03	1.0-2.50	0.030	0.030	0.30-0.65	18.0-20.0	11.0-14.0	0.75	2.00-3.00	—	—	MG TG
ER316Lsi	—	—	0.03	1.00-2.50	0.030	0.030	0.65-1.00	18.0-20.0	11.0-14.0	0.75	2.00-3.00	—	—	MG TG
ER 347	1.4551	—	0.08	1.0-2.50	0.030	0.030	0.30-0.65	19.0-21.5	9.0-11.0	0.75	0.75	—	—	MG TG
430	—	—	0.12	1.00	0.040	0.030	1.00	16.0-18.0	—	—	—	—	—	CH GP MG TG
430L	1.4016	SUS430	0.03	1.00	0.040	0.030	1.00	16.0-18.0	—	—	—	—	—	CH GP MG TG
430F	1.4104	SUS430F	0.12	1.25	0.060	0.15-0.35	1.00	16.0-18.0	—	—	—	—	—	GP
ER 430	1.4015	—	0.10	0.60	0.030	0.030	0.50	15.5-17.0	0.60	0.75	0.75	—	—	MG TG
434	1.4113	—	0.12	1.00	0.040	0.030	1.00	16.0-18.0	—	—	0.75-1.25	—	—	FN GP

FN - Fine Wire	SW - Spring Wire	CH - Cold Heading Wire	GP - Genreal Application Wire	MG - MIG Wire	TG - TIG Wire
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## CONTACT US

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AMBICA STEELS INDIA LIMITED

