

STAINLESS STEEL
WIRES

BUILDING TOMORROW WITH STEEL WIRE

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ABOUT US

Welcome to Ambica Steels India Ltd., a pinnacle of excellence in the stainless steel industry. We are proud manufacturers of high-quality stainless steel wires, tailored to meet global standards. Our expansive facility, stretching over 100 acres in Gujarat, India, is a testament to our scale and expertise. Specializing in a wide range of wire sizes from 0.10 mm to 8.00 mm, we are equipped to cater to diverse industrial needs. At the core of our operations lies a cutting-edge, technologically advanced facility, boasting state-of-the-art machines that deliver unparalleled precision. Our commitment to maintaining the highest quality standards is unwavering, ensuring that every product we deliver exemplifies reliability and excellence.

**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.

WIRE WRAPPING TESTING

WIRE BEND TEST

STAINLESS STEEL

WIRES

Ambica Steel India manufactures Stainless Steel Wires from 0.15 to 0.80 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

GRADES

AISI 304(L) 316 (L) 316 Ti, 310, 314, 321 etc.

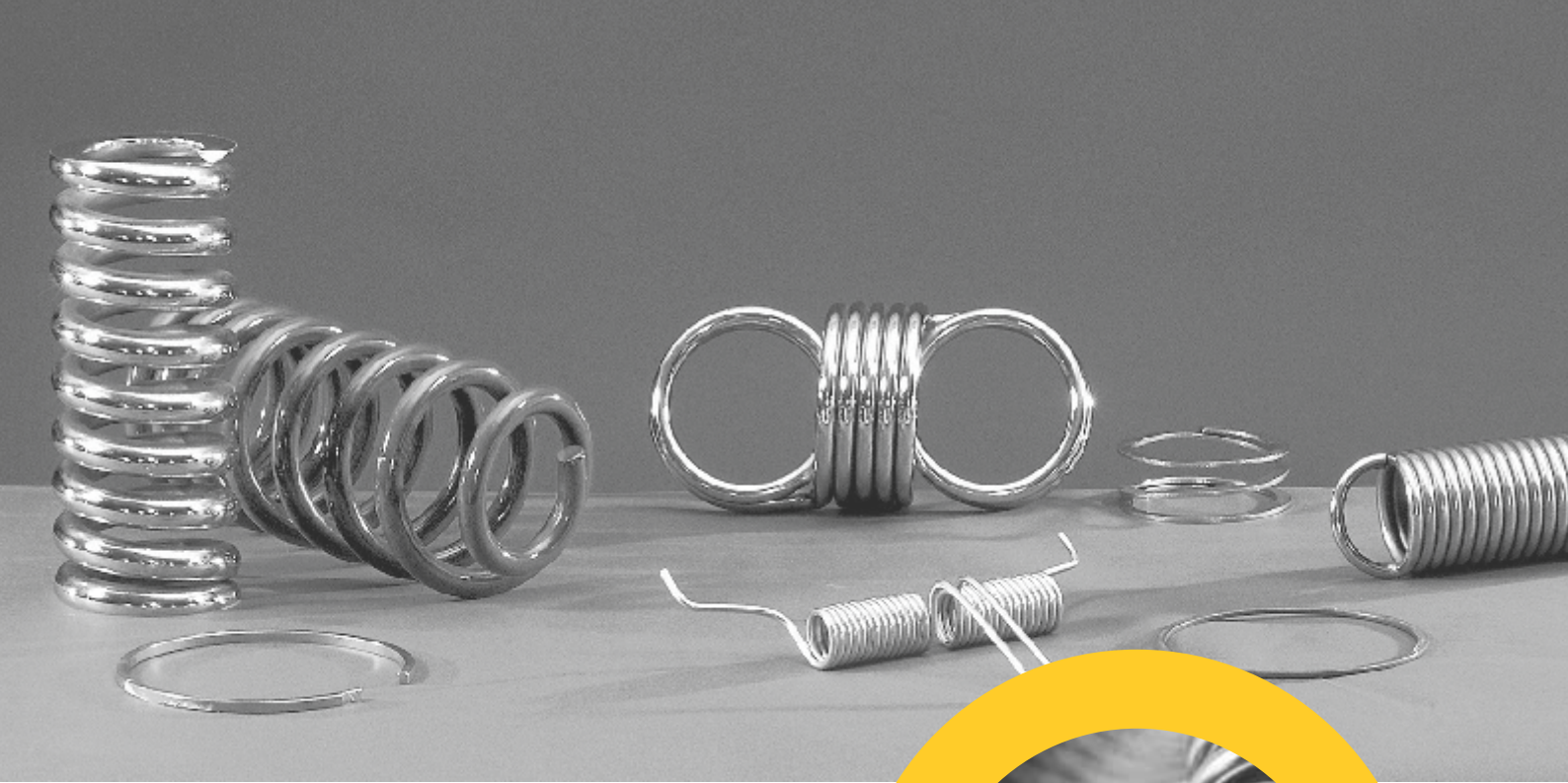
SPECIFICATION

Diameter (mm)	Tolerance (mm)	Tensile (N/mm ²)	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

GRADES

AISI 302, 304, 316, 17-7 PH etc.

SPECIFICATION

Diameter (mm)	Grade (AISI)	Tol. (mm)	Tensile-Std.	Packaging	Surface Finish
0.150 - 0.300	302/304/316	+/- 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 - 1.600		+/- 0.015	IS-4454 ^{PART-IV} ₂₀₀₁	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



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).



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 coated surface
- Strict control of chemical composition

GRADES

AISI 304 (L), 316 (L), 304 Cu, 204 Cu, 430 L, 302 HQ, 304 HC

SPECIFICATION

Diameter (mm)	Grade (AISI)	Tolerance	Tensile (Nmm ²)	Packing
0.80 – 2.00	AISI 304/304L 316/316L / 204Cu	+/- 0.010	600 – 750	Coils / Former pack
2.01 & Above		+/- 0.020	550 – 650	Coils / Former pack
0.80 – 2.00	AISI 302 HQ, 304 HC	+/- 0.010	500 – 650	Coils / Former pack
2.01 & Above		+/- 0.020	500 – 630	Coils / Former pack

APPLICATIONS

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

General Purpose Wires

ELECTRO POLISH

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 ¼ hard temper cold drawn finish

GRADES

AISI 304, 304L, 316, 316L, 204Cu etc.

SPECIFICATION

Diameter (mm)	Grade (AISI)	Tolerance	Tensile (N/mm ²)	Packing
1.40 – 3.00	AISI 304/304L 316/316L / 204Cu	+/- 0.010	750 – 900	Coils / Former pack
3.01 & Above		+/- 0.020	700 – 850	Coils / Former pack

REDRAW WIRE

The Redraw wires can be produced from 0.6 mm to 2.40 mm with exceptionally tight tolerances of diameter and ovality. These can be supplied in a range of tensile strengths and Coil/spools to suit the required application. The wires can be supplied soft annealed.

CHARACTERISTICS OF REDRAW WIRE

- Clean, matte surface
- Soft wire suitable for drawing into fine diameters
- High coil weights in drums or on carriers for minimum change-over

GRADES

AISI 302, 304, 304L, 316, 316L, 316Ti, 314, 321, 430L etc.

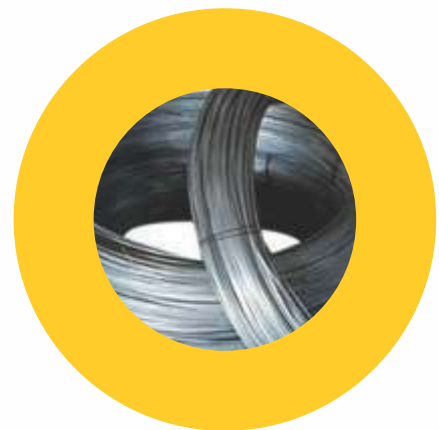
SPECIFICATION

Diameter (mm)	Grade (AISI)	Tolerance	Tensile (N/mm ²)	Packing
0.60 – 2.00	300 Series	+/- 0.015	650 – 800	Coils / Former pack
2.01 & Above		+/- 0.020	600 – 750	Coils / Former pack
0.80 – 2.00	400 Series	+/- 0.010	500 – 650	Coils / Former pack
2.01 & Above		+/- 0.020	500 – 630	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.



WELDING

WIRES

Ambica Arc Brand – Stainless Steel MIG, TIG and Sub Arc Welding Wire AS PER AWS Standard. Stainless Steel Core Wire for MMAW Welding electrodes are available in various Grades and we also offer as per customised requirements.

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.

GRADES

- 202
- 304L
- 316L
- ER 307 si
- ER 308L
- ER 308 Lsi
- ER 309L
- ER 309 Lsi
- ER 310
- ER 316L
- ER 347
- 430L



APPLICATIONS

Application includes Defense, Aerospace, Customised fabrication, Automotive, Ship building, Chemicals, Pharma & several other industries.



Ambica Arc - MIG Wire for GMAW Process

CHARACTERISTICS OF MIG WIRE

- Size: 0.6 mm to 1.60 mm
- Finish: Matte & Bright
- Packing: 1kg to 15 kg
- Packing type: Basket spools, Plastic spools, SD100, SD200, SD270, SD300

GRADES

202, 304L, 316L, ER 307Si, ER 308L,
ER 308LSi, ER 309L, ER 309LSi, ER 310,
ER 316L, ER 347, 430L



APPLICATION

Application includes Defense, Aerospace, Customised fabrication, Automotive, Ship building, Chemicals, Pharma & several other industries.



SUB ARC WIRE

CHARACTERISTICS OF SUB ARC WIRE

- Size 1.60 mm – 5.00 mm
- Surface – Matte, Bright Finish.

GRADES

307Si, ER308, ER308L, ER 308LSi, ER 309, ER 309L, ER309LSi, ER 310, ER 316, ER 316L, ER 316LSi, ER 347, ER 430, ER 430LNb & 409Ti.

PACKING

Packing 25.00 kgs. Or 60 Lbs. Layer wound coils with core or H 400 Plastic Spools or K 415 Metal Wire Basket Spool. Stainless Steel SAW Wire can be supplied either on a metal rim, plastic spool or a metal basket spool. We have the option, choice is yours.



APPLICATION

If you are involved in the SAW (Submerged Arc Welding) process, you know that it is an extremely rapid welding process that generates high deposition rates. It is generally a dynamic process that requires use of a submerged arc wire. With a few techniques to boost your SAW projects, including tandem, twin wire and stick-out welding, you can use our wires in a profitable manner.

CORE WIRE

CHARACTERISTICS OF CORE WIRE

- Stainless Steel Core Wire for MMAW electrodes.
- Size 1.60 mm – 5.00 mm
- Supplied in either Coil form or Cut length as required.

GRADES

307Si, ER 308, ER 308L, ER 308LSi, ER 309, ER 309L, ER309LSi, ER 310, ER 316, ER 316L, ER 316LSi, ER 347, ER 430, ER 430LNb, & 409Ti.



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

FINE WIRE

Spools Dimensions

Diameter (mm)	Spools	Spool wt. (kg)	Wire Wt. Max. (Kg)	D1	D2	D3	L1	L2
0.150 – 0.200	DIN 125	0.150	3.00	125	80	16	100	125
0.100 – 0.250	DIN 160	0.350	6.50	160	100	22	128	160
0.150 – 0.400	DIN 200	0.600	12.00	200	125	22	160	200
0.250 – 0.630	DIN 250	1.000	22.00	250	160	22	160	200
0.410 – 0.800	DIN 355	2.00	45.00	355	224	36	160	200

SPRING WIRE

Specification

Diameter (mm)	Grade (AISI)	Tol. (mm)	Tensile –Std.	Packaging	Surface Finish
0.150 - 0.300	302/304/316	+/- 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 - 1.600		+/- 0.015	IS-4454 ^{PART-IV} 2001	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

Specifications

Diameter (mm)	Grade (AISI)	Tolerance	Tensile (N/mm ²)	Packing
0.80 – 2.00	AISI 304/304L 316/316L / 204Cu	+/- 0.010	600 – 750	Coils / Former pack
2.01 & Above		+/- 0.020	550 – 650	Coils / Former pack
0.80 – 2.00	AISI 302 HQ , 304 HC	+/- 0.010	500 – 650	Coils / Former pack
2.01 & Above		+/- 0.020	500 – 630	Coils / Former pack

EPQ WIRE

Specifications

Diameter (mm)	Grade (AISI)	Tolerance	Tensile (N/mm ²)	Packing
1.40 – 3.00	AISI 304/304L 316/316L / 204Cu	+/- 0.010	750 – 900	Coils / Former pack
3.01 & Above		+/- 0.020	700 – 850	Coils / Former pack

REDRAW WIRE

Specifications

Diameter (mm)	Grade (AISI)	Tolerance	Tensile (N/mm ²)	Packing
0.60 – 2.00	300 Series	+/- 0.015	650 – 800	Coils / Former pack
2.01 & Above		+/- 0.020	600 – 750	Coils / Former pack
0.80 – 2.00	400 Series	+/- 0.010	500 – 650	Coils / Former pack
2.01 & Above		+/- 0.020	500 – 630	Coils / Former pack



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AMBICA STEELS INDIA LIMITED

