



With 5 decades of special steel making experience, Panchmahal Steel is a leading producer of Stainless Steel long products in India. With fully integrated facilities from steel melting to cold finishing, we offer a comprehensive range of Stainless Steel grades, in hot rolled wire rod & bars and cold finished bars & wires.

Panchmahal's state-of-the art steel melting facility includes an ultra high powered electric furnace, AOD convertor, ladle furnace for superior steel refining and continuous casting.

Facilities for cold finished bars & wires include coil-to-bar drawing & bar-to-bar peeling lines, heat treatment facilities, shot blasting & pickling lines and spooling, cutting & stamping lines for Stainless Steel welding products.

We offer Stainless Steel in Austenitic, Martensitic, Ferritic, Duplex, Super Duplex and low nickel - high manganese (200 series) grades.

Panchmahal's core strength lies in its ability to meet customers unique requirements. Our fully integrated facilities enable us to produce Stainless Steels with various modified chemistries for customer specific applications.

With ever changing market dynamics, Panchmahal is equipped to provide customized products and services for global markets, for volume as well as for specialty niche market requirements.

Stainless Steel Wire Rod & Bars

Stainless Steel Wire Rod & Bars are available in Austenitic, Martensitic, Ferritic, Duplex & low Nickel - high Manganese (200 series grades) for further forming, drawing, machining and cold heading & fastener applications.

Applications

- Architecture, Building & construction
- Automobile Components
- Ball bearing
- Bar & Wire drawing
- Braiding
- Cold heading & fasteners
- Cylinder shafts
- Food processing equipment
- Heat resisting applications
- Hot forging
- Machining
- Oil & Gas Industries
- Pump & Valves
- Refractory Anchors
- Screens & Filters
- Spokes
- Springs
- Surgical Instruments
- Thread Rolling
- Welding
- White goods & consumer durables
- Wall Ties
- Wire Mesh
- Wire Ropes

Wire Rod

Coil Weight : 700 - 900 kg
Size Range : 5.5 mm to 28.00 mm
Supply Condition : Hot Rolled & HRAP

Bars

Size Range : 2.00 mm to 80.00 mm
Tolerances : h8, h9, h10, h11, k12, DIN 1013, A484, GRIT 240 & 320
Length : 1000 - 7500 mm
Packing : 100 - 1000 kg bundles
Supply Condition : Hot Rolled, Cold drawn & Polished, Peeled & Polished, Strain Hardened (Class 1 and 2)

Hex and Square

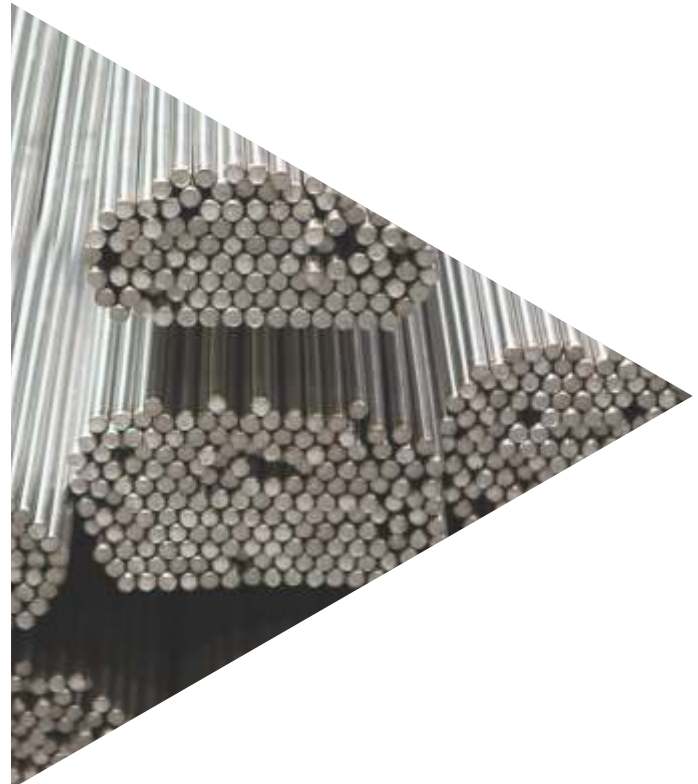
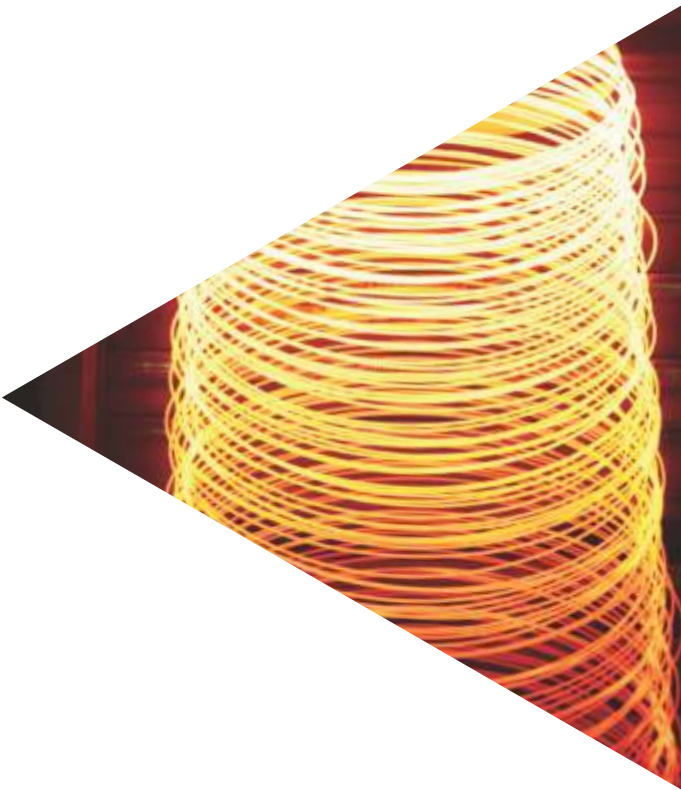
Size Range : 4.00 mm to 20.00 mm

Cold Finished Bars for precise engineering

Hardened & Tempered (QT), Solution Annealed & Soft Annealed bars are produced in standard and customized lengths for demanding applications like Cylinder Shaft, Pumps & Valves and Oil & Gas Industry.

Bars for Free Machining

Austenitic, Ferritic and Martensitic free machining grades are produced with Calcium Silicide (Ca-Si) treatment. Sulphur levels of 0.15-0.35% are maintained for improved machining and better tool life.



Stainless Steel Wires

Overview

Supply Condition	Size Range	Coil Weight	Packing
Soft Annealed (Matt/Bright) 1/4 Hard, 1/2 Hard, Full Hard, Spring Hard, EPQ	0.80 mm to 18.0 mm	50 kg to 800 kg	Coils with / without metal carriers Core packing with pallet Drum packs Cheese wound / Euro Coils / Spools

Wires for Cold Heading & Fasteners

Various grades of Wires are available for cold heading & fastener applications. Supply conditions include soft annealed & soap drawn wires for production of nails, nuts, bolts & screws.

Heat Resistant Wires

Grades are produced with controlled chemistry for better heat resistance. Wire rod, bars & wires are available for various applications including refractory anchors, conveyor belts for food processing industry, cold heading & fasteners.

Wires for Braiding, Weaving, Knitting & Filters

Bright and matt finish wires are available in sizes 0.20 mm to 5.0 mm with consistent surface finish and high corrosion resistance properties. Wires are supplied on spools and in coils.

Wires for Spring

Soap coated & bright drawn wires are produced with controlled chemistries to ensure forming consistency and reproducibility. Wires are produced as per ASTM A313 and supplied on metal carriers and spools.

Wires for Ball Making

Cold drawn wires are produced in various sizes & grades with controlled tolerances & chemistries for manufacturing of precision Stainless steel balls used for domestic & industrial applications.

EPQ Wires

Aesthetically superior wires are produced from 1.6 mm to 8.0 mm for electro-polishing & electro-plating processes for manufacturing White Goods and Consumer Durables.

Fine Wire

Size	Surface Finish	Condition	Plastic Spool Size	Weight
0.25 mm to 0.80 mm	Bright	Soft Annealed, Bright Hard Drawn	DIN 160/DIN 200/DIN 250	4-6 Kg./10-12 Kg/18-20 Kg.



Stainless Steel Welding Wires

TIG, MIG, SAW, Core Wires



Wires for Welding

Panchmahal's welding product range includes Core wires in coils & cut length for electrode manufacturing and TIG, MIG & SAW filler wires.

We produce standard as well as customised chemistries as per AWS, EN & GOST standards.

Customised packing, Labelling & Stamping solutions for private labels are also offered.

	MIG Wires	TIG Wires	SAW Wires	Core Wires in Coils	Core Wires in cut length	MIG Wires in Bulk Pack
						
Sizes	0.8 mm to 1.6 mm	1.0 mm to 5.0 mm	1.6 mm to 4.0 mm	1.6 mm to 5.0 mm	1.6 mm to 5.0 mm	0.8 mm to 1.6 mm
Finish	Matt or Bright	Bright	Matt or Bright	Matt or Bright	Matt or Bright	Matt or Bright
Length	----	1000 mm or 36"	----	----	Customized	----
Packing	12.5 kg & 15.0 kg Precision Layer Wound Plastic (D300) & Metal Baskets (BS300)	5 Kg (10 lbs) plastic tubes	25 kg Layer Wound with Core H 400 Plastic Spools K 415 Metal Baskets	100 Kg to 800 Kg Coils	250 Kg to 1000 Kg crates	100-125 kg & 200-225 kg drums



Stainless Steel Grades

Austenitic

Panchmahal	Equivalent		C	Mn	Si	S	P	Cr	Ni	Mo	Cu	Other
	EN	ASTM/UNS										
201	1.4372	201/S20100	<0.150	5.50-7.50	<1.00	<0.030	<0.060	16.00-18.00	3.50-5.50			
202	1.4373	202/S20200	<0.150	7.50-10.00	<1.00	<0.030	<0.060	17.00-19.00	4.00-6.00			
204Cu	1.4597	S20430	<0.100	6.50-9.00	<1.00	<0.030	<0.060	15.50-17.50	1.50-3.00		2.00-3.50	
301	1.4310	301	0.050-0.150	<2.00	<1.00	<0.030	<0.045	16.00-18.00	6.00-8.00			
302	-	302/S30200	<0.120	<2.00	<1.00	<0.030	<0.045	17.00-19.00	8.00-10.00			
302HQC	1.4567	S30430	<0.030	<2.00	<1.00	<0.030	<0.045	17.00-19.00	8.50-10.50		3.00-4.00	
303	1.4305	303/S30300	<0.100	<2.00	<1.00	0.150-0.350	<0.045	17.00-19.00	8.00-10.00			
303Cu	1.4570	-	0.000-0.080	0.00-2.00	<1.00	0.150-0.350	<0.045	17.00-19.00	8.00-10.00		1.40-1.80	
304	1.4301	304/S30400	<0.070	<2.00	<1.00	<0.030	<0.045	18.00-20.00	8.00-10.50			
304H	1.4948	304H/S30409	0.040-0.100	<2.00	<1.00	<0.030	<0.045	18.00-20.00	8.00-10.50			
304S	1.4301	304/S30400	<0.070	<2.00	<1.00	0.020-0.030	<0.045	18.00-20.00	8.00-10.50			
304L	1.4307	304L/S30403	<0.030	<2.00	<1.00	<0.030	<0.045	18.00-20.00	8.00-12.00			
304LS	1.4307	304L/S30403	<0.030	<2.00	<1.00	0.020-0.030	<0.045	18.00-20.00	8.00-12.00			
304NM	1.4306	304L/S30403	<0.030	<2.00	<1.00	<0.030	<0.045	18.00-20.00	10.00-12.00			
304Cu2	-	-	<0.045	<2.00	<1.00	<0.030	<0.045	18.00-20.00	8.00>		2.00-3.00	
304Cu3	-	S30430	<0.030	<2.00	<1.00	<0.030	<0.045	18.00-20.00	8.00>		3.00-4.00	
305	-	S30500	<0.120	<2.00	<1.00	<0.030	<0.045	17.00-19.00	11.00-13.00			
310S	1.4845	310S/S31008	<0.080	<2.00	<1.50	<0.015	<0.045	24.00-26.00	19.00-22.00			
314	1.4841	314/S31400	<0.250	<2.00	1.50-2.50	<0.015	<0.045	24.00-26.00	19.00-22.00			
316LN	1.4406	S31651	<0.080	<2.00	<1.00	<0.030	<0.045	16.00-18.00	10.00-14.00	2.00-3.00		N: 1000-1600 ppm
316L	1.4404	316L/S31603	<0.030	<2.00	<1.00	<0.030	<0.045	16.50-18.00	10.00-14.00	2.00-3.00		
316LS	1.4404	316L/S31603	<0.030	<2.00	<1.00	0.020-0.030	<0.045	16.50-18.00	10.00-14.00	2.00-3.00		
316Ti	1.4571	316Ti/S31635	<0.080	<2.00	<1.00	<0.030	<0.045	16.00-18.00	10.00-14.00	2.00-3.00		Ti-5x(C+N)/0.70
321	1.4541	321/S32100	<0.080	<2.00	<1.00	<0.030	<0.045	17.00-19.00	9.00-12.00			Ti-5xC/0.90
904L	-	904L/N08904	<0.200	<2.00	<1.00	<0.030	<0.040	19.00-23.00	23.00-28.00	4.00-5.00	1.00-2.00	
1.4828	1.4828	-	<0.200	<2.00	<2.00	<0.015	<0.045	19.00-21.00	11.00-13.00			
1.4835	1.4835	S30815	0.050-0.120	<1.00	1.40-2.50	<0.015	<0.045	20.00-22.00	10.00-12.00			N: 1200-2000 ppm Ce: 0.03 - 0.08

Martensitic

Panchmahal	Equivalent		C	Mn	Si	S	P	Cr	Ni	Mo	Cu	Other
	EN	ASTM/UNS										
410/403	1.4006	410/S41000	0.080-0.150	<1.00	<1.00	<0.030	<0.040	11.50-13.50				
416	1.4005	416/S41600	0.060-0.150	<1.25	<1.00	0.150<	<0.060	12.00-14.00				
420	1.4021	420/S42000	0.160-0.250	<1.50	<1.00	<0.030	<0.040	12.00-14.00				
1.4024	1.4024	-	0.120-0.170	<1.00	<1.00	<0.030	<0.040	12.00-14.00				
420B	1.4028	420/S42000	0.260-0.350	<1.50	<1.00	<0.030	<0.040	12.00-14.00				
420BF	1.4029	-	0.250-0.320	<1.50	<1.00	0.150-0.250	<0.040	12.00-13.50		<0.60		
420RM	1.4122	-	0.330-0.450	<1.50	<1.00	<0.030	<0.040	15.50-17.50	1.00	0.80-1.30		
420C	1.4034	420/S42000	0.430-0.500	<1.00	<1.00	<0.030	<0.040	12.50-14.50				
420NiMo	-	S42010	0.150-0.300	<1.00	<1.00	<0.030	<0.040	13.50-15.00	0.25-1.00	0.40-1.00		
440B	1.4112	S44003/440B	0.750-0.950	<1.00	<1.00	<0.030	<0.040	16.00-18.00		0.20-0.60		
440C	1.4125	S44004/440C	0.950-1.200	<1.00	<1.00	<0.030	<0.040	16.00-18.00		0.20-0.60		
1.4057	1.4057	431/S43100	0.120-0.220	<1.50	<1.00	<0.030	<0.040	15.00-17.00	1.50-2.50			
1.4104	1.4104	-	0.100-0.170	<1.50	<1.00	0.150-0.350	<0.040	15.50-17.50		0.20-0.60		
1.4418	1.4418	-	0.000-0.060	0.00-1.50	0.00-0.70	0.000-0.030	0.000-0.040	15.00-17.00	4.00-6.00	0.80-1.50	0.00-0.00	N:0.200(ppm)min

*Any customised chemistries are available on request

Stainless Steel Grades

Ferritic

Panchmahal	Equivalent		C	Mn	Si	S	P	Cr	Ni	Mo	Cu	Other
	EN	ASTM/UNS										
409L	-	-	<0.030	<1.00	<1.00	<0.030	<0.040	10.50-11.75	<0.60			Ti-6xC/0.75
409 Ti Ni	1.4516		<0.030	<1.00	<1.00	<0.030	<0.040	10.50-11.75	0.75-1.00			Ti-6xC/0.75
409 Cb Ni	-	S40976	<0.030	<1.00	<1.00	0.030	<0.040	10.50-11.75	0.751.00			Nb-10x(C+N)-0.80 N: 0.040 (ppm) max
430F	1.4105	430F/S43020	0.080	<1.25	<1.50	0.150-0.350	<0.040	16.00-18.00		0.20-0.60		
430L	1.4016	430/S43000	<0.030	<1.00	<1.00	<0.030	<0.040	16.00-18.00				
430Ti	1.4510	-	<0.050	<1.00	<1.00	<0.015	<0.040	16.00-18.00				Ti: [4*(C+N)+0.15] to 0.80
430LNb	1.4511	-	<0.030	<0.60	<0.50	<0.030	<0.030	16.00-18.00				Nb-12xC/1.00
434	1.4113	-	<0.080	<1.00	<1.00	<0.030	<0.040	16.00-18.00	-	0.90-1.40	-	-
441	1.4509	-	<0.030	<1.00	<1.00	<0.015	<0.040	17.50-18.50	-	-	-	Ti: 0.1-0.6 Nb- Min (0.30+(3xC)) to 1.00
446		S44600/446	<0.200	<1.50	<1.00	<0.030	<0.040	23.00-27.00	<0.75	-	-	N: 2500 ppm max

Welding

Panchmahal	Equivalent		C	Mn	Si	S	P	Cr	Ni	Mo	Cu	Other
	ISO 14343	AWS										
ER304L	-	-	<0.030	1.00-2.00	0.50-1.00	<0.030	<0.030	18.00-20.00	8.00-10.00	<0.25	<0.25	
307Si	18 8 Mn	-	<0.200	5.00-8.00	<1.20	<0.030	<0.030	17.00-20.00	7.00-10.00	<0.50	<0.50	
ER308L	19 9 L	ER308L	<0.030	1.00-2.50	0.30-0.65	<0.020	<0.030	19.50-22.00	9.00-11.00	<0.30	<0.30	
ER308LSi	19 9 L Si	ER308LSi	<0.030	1.00-2.50	0.65-1.00	<0.020	<0.030	19.50-22.00	9.00-11.00	<0.30	<0.30	
308L (Low Si)	-	-	<0.020	1.75-1.95	<0.15	<0.010	<0.020	20.25-20.50	9.70-10.50	<0.20	<0.20	
ER309L	23 12 L	ER309L	<0.030	1.00-2.50	0.30-0.65	<0.020	<0.030	23.00-25.00	12.00-14.00	<0.30	<0.30	
ER309LSi	23 12 L Si	ER309LSi	<0.030	1.00-2.50	0.65-1.00	<0.020	<0.030	23.00-25.00	12.00-14.00	<0.30	<0.30	
ER310	25 20	Er310	0.080-0.150	1.00-2.50	0.30-0.65	<0.020	<0.030	25.00-27.00	20.00-22.00	<0.30	<0.30	
ER316L	(19 12 3 L)	ER316L	<0.030	1.00-2.50	0.30-0.65	<0.020	<0.030	18.00-20.00	11.00-14.00	2.00-3.00	<0.30	
ER316LSi	(19 12 3 L Si)	ER316LSi	<0.030	1.00-2.50	0.65-1.00	<0.020	<0.030	18.00-20.00	11.00-14.00	2.00-3.00	<0.30	
ER317L	(18 15 3 L)	ER317L	<0.030	1.00 -2.50	0.30-0.65	<0.030	<0.030	18.50-20.50	13.00-15.00	3.00-4.00	<0.75	
ER318	-	S31980/ER318	<0.080	1.00-2.50	0.30-0.65	<0.030	<0.030	18.00-20.00	11.00-14.00	2.00-3.00	<0.75	Nb: 8°C to 1.00
330Cb	1.4887	-	<0.150	<2.00	1.00-2.00	<0.015	<0.030	20.00-23.00	33.00-37.00	-	-	Nb: 1.0-1.50 N:1100(ppm)max
ER347	19 9 Nb	ER347	<0.080	1.00-2.50	0.30-0.65	<0.020	<0.030	19.00-21.00	9.00-11.00	<0.30	<0.30	Nb-10xC/1.00
ER385	20 25 5 Cu L	ER385	<0.025	1.00-2.50	<0.50	<0.020	<0.020	19.50-21.50	24.00-26.00	4.20-5.20	1.20-2.00	
ER410	13	ER410	<0.120	<0.60	<0.50	<0.020	<0.030	12.00-15.00	<0.50	<0.30	<0.30	
ER420	420	ER420	0.250-0.400	<0.60	<0.50	<0.030	<0.030	12.00-14.00	<0.60	<0.75	<0.75	
ER430	17	ER430	<0.100	<0.60	<0.50	<0.030	<0.030	16.00-17.00	<0.30	<0.30	<0.30	
410NiMo	13 4	ER410NiMo	<0.050	<0.60	<0.50	<0.020	<0.030	11.00-12.50	4.00-5.00	0.40-0.70	<0.30	

Duplex

Panchmahal	Equivalent		C	Mn	Si	S	P	Cr	Ni	Mo	Cu	Other
	EN	ASTM/UNS										
ER312	29 9	AWS ER312	<0.150	1.00-2.50	0.30-0.65	<0.020	<0.030	28.00-32.00	8.00-10.50	<0.50	<0.50	
329	1.4460	S32900	<0.080	<1.00	<0.75	<0.030	<0.040	22.00 -24.00	2.00-5.00	1.00-2.00	-	
ER2209	22 9 3 NL	AWS ER2209	<0.030	0.50-2.00	<0.90	<0.020	<0.030	21.50-23.50	7.50-9.50	2.50-3.50	<0.50	N (ppm) 1000/2000
1.4362	1.4362	2304/S32304	<0.030	<2.00	<1.00	<0.015	<0.035		3.50-5.50	0.10-0.60	0.10-0.60	N (ppm) 500/2000

Precipitate Hardening Steel

Panchmahal	Equivalent		C	Mn	Si	S	P	Cr	Ni	Mo	Cu	Other
	EN	ASTM/UNS										
17-4Ph	1.4542	630/S17400	<0.070	<1.00	<1.00	<0.030	<0.040	15.00-17.50	3.00-5.00	-	3.00-5.00	0.1500-0.4500

*Any customised chemistries are available on request



Approvals

ISO 9001 : 2015 • ISO 14001 : 2015
ISO 45001 : 2018 • AD 2000 - Merkblatt W0
PED • BIS • Vd TUV - Merkblatt 1153



Giving Edge to your Business

Stainless Steel

WIRE RODS • BRIGHT BARS • WIRES

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