

#### **Steel Products**

• Flat Products

## Long Products 11111STECL COM

#### Flat Products



- Slabs
- Hot rolled coils / sheets / plates
- Cold rolled coils / sheets
- Galvanized / Al-Zn base coils, sheets
- Pre-painted Zinc based or Al-Zn based steel coils







Length





#### Dimensions

Parameters	Coils	Sheets and Plates	Checkered coils
Thickness	1.2 - 25 mm	6 – 600 mm	2 – 10 mm
Width	900 – 2500 mm	1500 – 4500 mm	900 – 1500 mm
Coil weight	14 – 35 MT	Depends upon the production route i.e., slabs / ingots	14 – 35 MT for coils
Coil ID	762 / 850 mm	n Not Applicable	762 mm for coils

Not applicable As per customized requirement for sheets / sheets / plates

As per customized requirements for sheets / plates



#### Various hot rolled steel specifications and applications

IS Standards

Steel Grades

Sr.no

		15 Staridards				
2	For Cold rolling and galvanized and HRPO grades Steel for welded tubes	IS 1029 HR strips bailing, IS 1079 HRO to HRS grades for HRPO and IS 11513 for cold rolling and galvanizing IS 2385 HR strips / sheets for making CR tin plates and CR Black plates	g,STANDARD	SAE 1006 / SAE 1008 / SAE 1010 / ASTM A1011 CS, DS type grades	/ JIS G3131 JIS G3132	GOST 1050
2	Steel for weided tubes	13 10/46, 13 1304/			JIS G3132	
3	Structural grades	IS 2062	S234, S275, S355 in JR/JO /J2 conditions as per EN10025 specification	Grade33,40,50,55,60 as per ASTN 1011, ASTM A36, A283, A572	ИJIS G3101	GOST 16523, GOST 14637, GOST 19281
4	Automobile sector	IS 1079 Grade YS255 to YS550 and DP steel	S315MC, S355MC, S420MC, S460MC, S500MC, S600MCand S700MC	SAE1392 XLF grades and as per ASTM A1011	JIS G3113	
5	Pipes for oil / gas secto	r IS 1978 for pipe line	L245 to L555 Grades as per EN110208	API 5L Grade B,X42,X-46,X-52,X-56,X-60,X-65,X-70	JIS G3106 /JIS G3128	VI.
6	Boiler and pressure vessels	IS 2002 for Boiler quality and IS 15914 for gas cylinder and IS 11714 for carbon and alloy steel tubes, IS 2041 for pressure vessels and boiler plates for medium and high temp applications	All grades as per EN10028	ASTM A515, A387, A240,A516	JIS G3116 / G3103	
7	Corrosion / weather resistant steel	IS 2062, IS 11587	S235, S275, S355 with Copper as per EN10025, EN10155/156	ASTM A606 / TM A242AS	JIS G3125 / JIS G3114	
8	Checkered plates	IS 3502-2009	DIN 59220	ASTM A786	JISG3193	
9	Ship building grades	IS 3039 HR for construction of shipping hulls		ASTM A131		
10	Steel plates for galvanized pot	IS 8917	BS 2858			
11	Steel for agriculture village disc	IS 9442				
12	Fire resistant steel	IS 15103				

EN Standards

ASTM Standards

JIS Standards

#### Cold rolled Steels coils and sheets







....pioteeniconi

#### Dimensions

Thickness 0.3 to 30 mm

Coil Weight

Width 1000 to 1850 mm

Also can be supplied slit widths from min 50 mm width

5 to 20 MT

Coil ID 508 and 610 with +/- 20 mm Surface finish Bright, Mat and rough

Thickness / Width / Flatness As per standard

Oiling As per customer requirement

Packing Packing with protection at edges

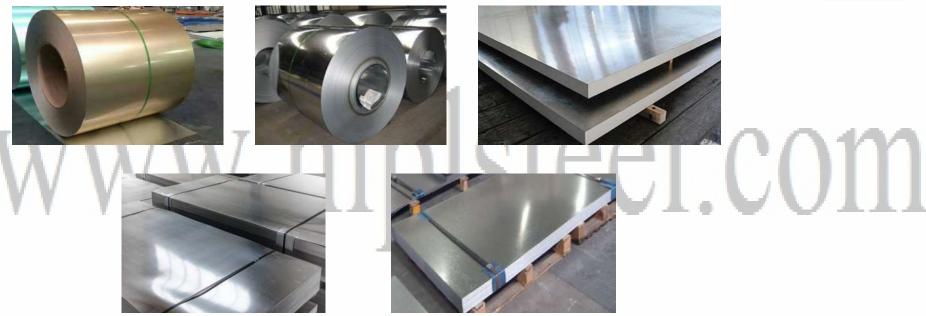
#### Cold rolled Steels coils and sheets

Sr.no	Applications	IS Standards	EN Standards	ASTM Standards	JIS Standards
1	Cold rolled full hard and annealed grades	-513 CR0, CR1, CR2, CR3, CR4	DC-01, DC-02, DC-03, DC-04, DC-05and DC-06 as per EN10130 standards	SAE 1006, SAE 1008, SAE1010 /ASTM A1008 CS, FS, DD, EDDS grades	JISG3141 SPCC, SPDC, SPCEN
2	Cold rolled annealed made of high strength micro –alloyed steels for cold forming	IS 14491-1997	H240 LA, H280LA, H320LAas per EN10268		
3	Cold rolled annealed grades for enamelling quality	IS 513,is 9485	EKDC-01 to EKDC-06as per EN10209 specifications	ASTM A424 Type 2	JIS G3133
4	Cold rolled Electricals steels	IS 648 for Non grain oriented and IS 3024 for grain oriented steel, IS 15391 non grain oriented semi finish	EN10341	ASTM A677	JIS G2522
5	Cold rolled strips for spring	IS 2507			
6	CR strips for strapping	IS 5872	. PID		T . A
7	CR medium and high carbon low alloy for general engineering applications	IS 7226	1		
8	CR strips for carbon steel razor blades	IS 9476			
9	CR for tin plates / electrolytic chromium /chromium oxide coating	IS 11951, IS 12591			
10 11	CR for welded tubes CR electrolytic tin plate	IS 12367 IS 1993			



#### Hot dip galvanized Al-Zn coated products







#### Hot dip galvanized, Al-Zn coated products

Dimensions

Thickness 2.20 to 4.5 mm

Width 900 to 1800 mm

Slit coils can be supplied with 50 mm min. width

Coil Weight 5 to 20 MT

Coil Weight gsm 100 – 275 Lower or higher coat weights also can be supplied based on actual

requirements

Coil ID 508 /610 mm

Surface Treatment / Passivation Chormating with CR6 / CR3 / oiling / dry / anti finger print quality for AZ base

steel

Spangle Normal, Minimized spangle, Zero Spangle

The base of galvanized product can be hot rolled or cold rolled base depending on size



#### Hot dip galvanized, Al-Zn coated products

	Specifications	IS Standard	EN Standard
ľ	Hot Dip galvanized steel	IS 277	DX-51, DX-52, DX-53, DX-54 as per EN10327 standard
	Hot dip galvanized for structural application	IS 277	S220GD, S250GD, S280GD, S320GD, S350GD, S550GD as per EN10326 standard
	Al-Zn coated products	IS 15961, IS 15965	Al-Zn coating from 100gsm to 150gsm as per EN10326 /EN10327 standard

#### Pre – painted galvanized base or Al-Zn based steel coils/sheets







#### Pre-painted galvanized base or Al-Zn based steel

**Dimensions and Quality** 

Thickness 0.16 to 2 mm Width

Coil weight

**Steel Grades** 

Different paint types

900 to 1500 mm

3 to 10 MT

DX 51, CS type B, Structural Grades S220, S250

Polyester, Plastisol as per customer requirements and paints availability and as per standards

### Pre-painted galvanized base or Al-Zn based steel coils / sheets

ASTM specification

for Al-Zn based pre-

painted steel

For special projects



Applications Indian Standard EN Standard ASTM

For roofing application

For cold IS 14246 for normal storage Zn based pre-painted As per EN10169 part 1 and ASTM 792 for Al-Zn and applications steel and IS 15965 part 2 specification and ASTM A755 for G1 based

pre painted steel

#### Long Products

www.niplsteel.com

- Billets, Blooms
- Wire rods
- Round Bars
- Re Bars
- Steel Sections

# niplsteel.com

#### Billets, Blooms







Supply Condition	As Cast	TTT 10 110 0 to						
Size	100, 120, 130, 1 mills production	, 140, 150 , 200, 250 mm in square billets. In square billets blooms can be supplied as per ion program						
Steel Grades	As per customer	s per customer specification for wire rod, bars and rebars making						
End Application	o rebar, wire rods, sections							
IS Standards	IS 2830	General structural purpose and ordinary purpose						
	IS 2831							
	IS 2100	Steel Billets, bars and section for Boilers						
	IS 8502	Steel Billets, blooms, Ingots for production of spring, rivets, screws						
	IS 8951	Steel Billets, blooms, ingots for production of High carbon wire rods						
	IS 8952	Steel billets, blooms, ingot for production of Mild steel wire rods						
	IS 14650	Carbon steel cast billets, blooms, ingots and slabs for re rolling purpose						

#### Wire rods and round bars















#### Dimensions and supply condition of wire rods and round bars

Wire Rods

Size 5.5 to 34 mm diameters

As per standards

Diameter tolerance

Out of roundness As per standards Coil weight 2.2 MT max

Supply Condition Hot rolled, Control cooled, spherodized

annealed, Pickled, Phosphated

Hot rolled round bars and round corner square

Hot rolled bars 20 to 500 mm

Round corner square 75 to 180 mm

Bundle weight As per weight

Hot rolled, Normalized, Forged as rolled Supply condition

#### Wire rods and Bars Grades



Category	Applications	Indian Standards	Popular Steel grades	JIS Standards	Indian Wire Standards	
Low carbon steel	Binding wires, cable armor wires, fasteners, fencing wires, mesh wires (IS 7887 wires)	IS 2255, IS 7887	SAE1006/SAE1008/S AE1010/ SAE1012/ SAE1015/ SAE1018/ SAE 1020/SAE1025/SAE1030		IS 279 GI wire for telephone, IS 280, IS 7887, IS 1673, IS 1812, IS 2879, IS 3975, IS 4224, IS 8510, IS 10794	
High carbon steel	Spring wires, spoke wires, tyrebead wires, tyre cord wires, acsr wires, PC wires	IS 1570 C35 to C113 (IS 7904 standard)	SAE1035,SAE1040,SAE1045, AE1050,SAE1055,SAE1060,SAE1065,SAE1070,SAE1075,SAI 1080	<sup>A</sup> SWRH82B	IS 1835, IS 2589, IS 4223, IS 4454, IS 4824, IS 6902, IS 8564, IS 8565, IS9962, IS 12262	
Alloy steel	Fasteners, Automotive applications, ball bearing wire, free cutting steel	IS 1570 various grades as per list (ISO 7283 for bright bars manufacturing)	EN1A, SAE10B21,SAE15B25, SAE1541,SAE4140,SA E52100		IS 3431, IS 3885, IS 6967, IS 7557, IS 9550, Bright bars	

#### Special Grades wire rods and round bars

Special steel wire rods and Black Bars (Round & RCS)

Carbon steel JIS S25C, JIS S45C, JIS S48C, JIS S53C, EN8D, SAE 1035, SAE 1050, IS 11169

CK45

Alloy steel SCM 415H, SCM 420H, SCM 453H, SCR 420H IS 5517

16MnCr5,20MnCr5, 41Cr4,EN18,SAE4130,SAE5130, IS 4367 and IS 11169 IS 4432

IS 2073 IS 1570

IS 11169

SAE8620,EN24,EN353,15CrNi6,18CrNi8,42CrMo4,EN19

Spring steel SAE9245,54SiCr6,SUP12,SUP9,SUP7,SUP12V IS 3195 and IS 3431

50CrV4 and all high strength spring steel

Bearing quality SAE52100,100Cr6,100CrMnSi6,SUJ2,S53CG,C56E2 IS 4398

Free cutting SAE12L14,9SMnPb28,11SMnPb30,SUM24L,EN1AL

11SMn30, EN1A, SAE 1144, and medium carbon leaded

Resulphurised Steel

Micro alloyed JIS S45CSIV, 38MnvS6, 27MnS1VS6, D38SV5S

Special Steel Cold Heading Quality Wire Rods

Low carbon SAE 1006, SAE 1008, SAE 1010, SAE 1015, SAE 1018 IS 1570 C04 to C20

Low carbon boron 10B21, 15B25, 10B33, 19MnB4, 10B35

Medium carbon SAE 1541,15B41, 51B37

Alloy Steel SCM 435, SAE 4135, SAE 4140, SAE 8640, SAE 5140, 41Cr4

Electrode Quality Wire Rods

ER70S2,ER80SG,ER90SG,EA 3, ER 70S6, EH10K, EH14 IS 814



www.niplsteel.com

el.com

#### Rebar





Size 6 to 40 mm Specifications IS Standards British American Canadian Brazilian Japanese European ISO Chinese Standards Standards Standards Standards Standards standards Standards Standards IS 1786 BS 4449 **ASTM 615** CAN/CAS NBR 7480 JIS G3112 EN10080 ISO 6935 GB 1449

No. of bars guaranteed per bundle as per customer requirements

Fe415 to Fe600

Grade

Making and Certification With all necessary approvals and as per customer's requirements and importing countries standards with prior agreement

G30

#### **Steel Section**







Indian Standard IS 808 for dimensions and weight	ts for different sections

Sr.no	Section	Size range as per IS 808
		<u> </u>
1	Beams	MB100 – MB600
2	Junior Beams	JB150 – JB225
3	Light Beams	LB75 – LB600
4	Wide Flange Beams	WB150-WB600
5	Columns	SC-100 to SC-250
6	Heavy Weight Columns	HB 150 – HB 450
7	Channels	JC 100 – JC 200
		LC 75 – LC 400
8	Parallel Flange Channels	MCP 75 – MCP 400
9	Equal Angles	20 x 20 x 3 to 200 x 200 x 25
10	Unequal Angles	30 x 20 x 3 to 200 x 150 x 20



com

Steel grades can be as per IS 2062, EN10025, ASTM A36 as per customer requirements