

# **CERTIFICATIONS**

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RECOGNITION BRINGS MORE GRATIFICATION TO OUR ENDEAVORS









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# DELIVERING RESULTS, RELIABILITY & ROCKSOLID DEPENDABILITY

We are 20 year young leading Manufacturers of Welded Stainless Steel Tubes, Pipes, Stainless Steel Coils and Sheets, etc. We have a wide factory area of 8 acres. We are an ISO 9001:2008 certified company with an annual turnover of more than INR 400 Crores.

The company has carved its niche in the market with its technical expertise and in depth knowledge of the field. Reliability, authenticity and customer satisfaction are some of attributes that have won us goodwill among our valued clients. SNB ensures uninterrupted production capabilities throughout the year by having 2 Mega watt electricity backup.

We are one of the reputed SS Coils Manufacturers and Suppliers in India. Our Stainless Steel Coils are made available in Industry- Specific Grades such as 201, 202, 304, 304L, 316, 316L,409.

We are acknowledged as one of the most reputed stainless steel Tube and Pipe Manufacturers and Exporters in the global Market. We maintain a stock of 1500 tonnes of tube for speedy delivery against the orders.

SNB vision is to be the world's stainless steel industry benchmark through the excellence of its people, its innovative approach and overall conduct. Underpinning this vision is a performance culture committed to aspiration targets, safety and social responsibility, continuous improvement, openness and transparency. Moreover there is total involvement of its employees in meeting the quality objectives as laid down in the company quality managements.

# REASONS TO BUY FROM SNB:

- · Biggest pipe stock yard in the country.
- Largest range of sizes and thickness of pipes available in ready.
- · Latest Machinery.
- · Highest quality standards.
- · Best known brand name in the country.





Responsibility Begins At Home.

With climate change becoming a growing problem, there's never been a more important time to collectively become more aware of how we as individuals, corporations and businesses are affecting the planet. And to do our bit for the environment, we have built Haryana's biggest solar plant in sonipat. So while we serve our clients with perfection, we serve the mother nature too by generating and using solar energy.



# PRODUCT RANGE







#### Welded Stainless Steel Round Tubes/Pipes

SNB is one of the most trusted manufacturer, exporter, stock holder and supplier of a qualitative range of welded stainless steel tubes/ pipes

Outer Diameter	9.52 mm - 127 mm
Thickness	0.48 mm - 3.00 mm
Length	As per customer's requirement (3m - 7m)
Specification	ASTM A554, A249
Steel Grade	202, 304, 304L, 316, 316L, 409
Application	Construction, Furniture etc
Surface Finish	Surface Finish



SNB is one of the leading manufacturers and exporters of a wide range of stainless steel square pipes.

Outer Diameter	10 x 10 mm - 100 x 100 mm
Thickness	0.48 mm - 3.00 mm
Length	As per customer's requirement (3m - 7m)
Specification	ASTM A554, A249
Steel Grade	202, 304, 304L, 316, 316L, 409
Application	Construction, Furniture etc
Surface Finish	Surface Finish



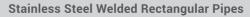






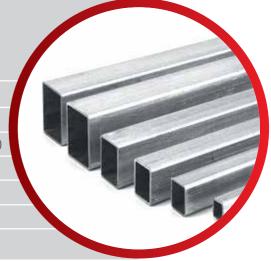






SNB is one of the distinguished manufacturers, suppliers and exporters of stainless steel rectangular pipes.

Outer Diameter	10x20 mm - 150x50 mm
Thickness	0.48 mm - 3.00 mm
Length	As per customer's requirement (3m - 7m)
Specification	ASTM A554, A249
Steel Grade	202, 304, 304L, 316, 316L, 409
Application	Construction, Furniture etc
Surface Finish	Surface Finish



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# PRODUCT RANGE



# COIL —

#### **Stainless Steel Coils**

We are occupied in the business of manufacturing premium quality stainless steel coils. The offered product finds a vast application in houseware, petroleum, automobile & electronic industries.

Thickness	0.10 mm - 3.9 mm
Width	650 mm
Length	As per customer's requirement
Finish	No. 1 / CR / 2D / 2B
Steel Grade	200 series, 300 series
Specification	ASTM A240
Application	Pipe manufacturing, Kitchenware &





#### **Stainless Steel Slitted Coils**

SNB has a recognised name in the industry for stainless steel slitted coils. We have the latest technology machinery to guarantee the edge quality of stainless steel slitted coils.

Thickness	0.10 mm - 3.9 mm
Width	20 mm - 650 mm
Length	As per customer's requirement
Finish	No. 1 / CR / 2D / 2B
Steel Grade	200 series, 300 series
Specification	ASTM A240
Application	Pipe Industries, Fabrication industries





#### **Stainless Steel Circles**

SNB offers a wide range of stainless steel circles that are in compliance with the industry standards. They are manufactured using high quality steel and are available in different grades, shapes and sizes. High tensile strenght, corrosion resistant and fine finish are some of the attributes our stainless steel circle possess.

Thickness	0.10 mm - 1.5 mm
Outer Diameter	3 inch - 25 inch
Surface Finish	2B, No. 4 / CR / 2B / 2D
Standard	ASTM A240, DIN 1.4301
Steel Grade	200 series, 300 series
Application	Kitchen ware, Sanitary ware etc

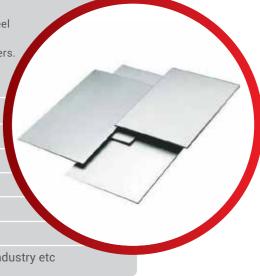




#### Stainless Steel Sheets

We manufacture and supply a wide range of stainless steel sheets which are used in various industries. SNB Stainless Steel Sheets are recognized in the global market for providing the most competitive, qualitative supply solution to all its customers. Some of the features of our products are-high durability, excellent finish, high strength and corrsion resistant

Outer Diameter	0.30 mm - 2.0 mm
Width	As per customer's requirement
Length	As per customer's requirement
Specification	No. 1 / CR / 2D / 2B
Steel Grade	200 series, 300 series
Standard	ASTM A240
Application	Gas Stove industry & fabrication ind







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# WEIGHT CHART



# OO COUND PIPES

	Si	ze	Wall thickness (Weight per 20 Feet)							
S. No.	inch	mm	0.48	0.58	0.68	0.78	0.90	1.20	1.45	2.00
1	3/8"	9.52	0.55	0.85	0.95	1.1	1.2	1.6	1.8	2.4
2	1/2"	12.70	0.91	1.1	1.3	1.5	1.6	2.2	2.5	3.3
3	5/8"	15.88	1.15	1.4	1.7	1.9	2.1	2.7	3.3	4.3
4	3/4"	19.05	1.40	1.7	2.0	2.3	2.5	3.3	4.0	5.2
5	7/8"	22.23	1.60	1.9	2.3	2.7	2.9	3.9	4.7	6.1
6	1"	25.40	1.90	2.3	2.7	3.0	3.4	4.5	5.4	7.2
7	1.25"	31.75	2.40	2.9	3.3	3.8	4.3	5.6	6.8	9.2
8	1.5"	38.10	2.80	3.4	4.1	4.5	5.1	6.6	8.1	11.1
9	2"	50.80	3.90	4.6	5.4	6.1	7.0	9.0	11.0	15.1
10	2.5"	63.50	4.60	4.60 5.8 6.8 7.7 8.7 11.5 13.8 18						
11	3"	76.20	5.60	7.0	8.1	9.3	10.4	13.8	16.7	22.8
12	4"	101.60	7.70	9.3	10.8	12.4	13.9	18.5	22.3	30.6
13	5"	127.00	9.60	11.6	13.6	15.5	17.4	23.2	27.9	38.4



# SQUARE PIPES

	Si	ze		V	Vall thicl	kness (W	eight per	20 Feet)		
S. No.	inch	mm	0.48	0.58	0.68	0.78	0.90	1.20	1.45	2.00
1	3/8"x3/8"	10x10	0.91	1.1	1.3	1.5	1.6	2.2	2.5	3.3
2	1/2"x1/2"	12x12	1.10	1.4	1.7	1.9	2.1	2.7	3.3	4.3
3	5/8"x5/8"	15x15	1.50	1.7	2.0	2.3	2.5	3.3	4.0	5.2
4	3/4"x3/4"	20x20	1.90	2.3	2.7	3.0	3.4	4.5	5.4	7.2
5	1"x1"	25x25	2.40	2.9	3.3	3.8	4.3	5.6	6.8	9.2
6	1.25"x1.25"	30x30	2.80	3.4	4.1	4.5	5.1	6.6	8.1	11.1
7	1.5"x1.5"	40x40	3.80	4.6	5.4	6.1	7.0	9.0	11.0	15.1
8	2"x2"	50x50	4.80	5.8	6.8	7.7	8.7	11.5	13.8	18.9
9	2.5"x2.5"	60x60	5.80	7.0	8.1	9.3	10.4	13.8	16.7	22.8
10	3"x3"	80x80	7.70	9.3	10.8	12.4	13.9	18.5	22.3	30.6
11	4"x4"	100x100	9.60	11.6	13.6	15.5	17.4	23.2	27.9	38.4



# RECTANGLAR PIPES

$A \perp$										
	Si	ze	W	all thickne	ess (Weig	ght per 20	Feet)			
S. No.	inch	mm	0.48	0.58	0.68	0.78	0.90	1.20	1.45	2.00
1	1/2"x3/4"	10x20	1.40	1.7	2	2.3	2.5	3.3	4	5.2
2	1/2"x 1"	13x26	1.90	2.3	2.7	3	3.4	4.5	5.4	7.2
3	1.25"x1/2"	30x10	1.90	2.3	2.7	3	3.4	4.5	5.4	7.2
4	1.5"x1/2"	40x10	2.40	2.9	3.3	3.8	4.3	5.6	6.8	9.2
5	3/4"x1.5"	20x40	2.80	3.4	4.1	4.5	5.1	6.6	8.1	11.1
6	2"x1/2"	50x10	2.80	3.4	4.1	4.5	5.1	6.6	8.1	11.1
7	1"x2"	25x50	3.60	4.4	5.1	5.8	6.5	8.7	10.4	14.2
8	2.5"x1.25"	65x35	4.80	5.8	6.8	7.7	8.7	11.5	13.8	18.9
9	2.5"x1.5"	60x40	4.80	5.8	6.8	7.7	8.7	11.5	13.8	18.9
10	3"x1"	75x25	4.80	5.8	6.8	7.7	8.7	11.5	13.8	18.9
11	3"x1.5"	80x40	5.80	7	8.1	9.3	10.4	13.8	16.7	22.8
12	4"x2"	105x55	9.60	11.6	13.6	15.5	17.4	23.2	27.9	38.4













# **COMPANY MACHINERY**

# **GRADES**



#### COIL PROCESSING MACHINES

1. COLD ROLLING MACHINE 4HI
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- 2. COLD ROLLING MACHINE 12HI
- 3. HR/CR AP LINE
- 4. SLITTING LINE-1
- 5. SLITTING LINE-2
- 6. SLITTING LINE-3
- 7. BRIGHT ANNEALING LINE -1
- 8. BRIGHT ANNEALING LINE 2
- 9. BRIGHT ANNEALING LINE 3
- 10. CTL LINE 1
- 11 CTL LINE 2
- 12 CUTTING LINE 1
- 13 CUTTING LINE 2
- 14 SHOT BLASTING MACHINE
- 15 COIL BUILD UP LINE

WIDTH RANGE 300-650

THICKNESS RANGE 0.50-5.00MM

WIDTH RANGE 300-650

THICKNESS RANGE 0.10-2.80MM

WIDTH 200-650MM

THICKNESS RANGE 0.2-5.00MM

WIDTH RANGE 750

THICKNESS RANGE 0.10-1.20MM

WIDTH RANGE 750

THICKNESS RANGE 0.30-2.00

WIDTH RANGE 1550MM

THICKNESS RANGE 4.00MM

WIDTH RANGE200-650M THICKNESS 0.10-2.00MM

# TUBE / PIPE MAKING MACHINES1. HIGH FREQUENCY MILL 1

PIPE STRAIGHTING MACHINE

2.	HIGH FREQUENCY MILL 2	"2" INCHES
3.	HIGH FREQUENCY MILL 3	"3" INCHES
4.	TIG MILL —	9NOS
5.	END FACING MACHINE	2NOS

POLISHING MACHINES

5 NOS

10 HEAD ROUND PIPE

4 NOS

36 HEAD SQUARE PIPE

1 NOS

20 HEAD SQUARE PIPE

2NOS

"1" INCHES

### 201, 202, 301, 304, 304L, 316, 316L, 321, 409, 409L

Stainless Steel Grades AISI	Main Characteristic	Typical Application/End Use
201	High cold work hardening rate, normal formability	Welded tubes, utensils, kitchen appliances, sinks, architecture building & construction, consumer durables
202	High cold work hardening rate good formability.	Water tubings, watch parts, foot rule, industrial knives, bus body accessories, kitchen appliances, kerosene and gas stove parts.
301	Attains high strength by being cold worked,while retaining good ductility.	Used in cold Worked condition for springs and wear plates
304	Better welding characteristics with good formability and general corrosion resistance	Watch parts, engine gaskets, flexible hoses, foot rule, Door hinges, capillary tubings and sinks.
304L	Low carbon content,weldable and resistance to sensitisation. Good corrosion and oxidation resistance.	Hypodermic needles and capillary tubings.
316	Superior corrosion resistance to sea water and many chemicals and weldable.	Engine gaskets, flexible hoses, process plant and paper industry equipment.
316L	Low carbon content highly corrosion resistant, weldable and resistant to sensitation.	Process plant parts particularly in thick sections.
321	Weldable and resistant to sensatitisation good corrosion and oxidation resistance.	Heater elements, process plant, furnace parts and high temperature tubes.
409	Better Engineering Properties	Auto mobile Industry
409L	Better Engineering Properties	Auto mobile Industry

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# **CHART**



#### **ASTM SEPECIFICATION FOR STEEL TUBES & PIPES**

Specification	Allowable outside Daimeter Variations in mm			Aloowable wall Thickness Variations		Exact Length Tolerances in mm		Testing	
	Norminal Diameter	Over	Under	Over %	Under %	Over %	Under %		
ASTM A-213 seamless boiler, Superheater and Heat Exchager Tubes	Under 25.4 25.4-38.1 incl. 38.1-50.8 excl. 50.8-63.5 excl. 63.5-76.2 excl. 76.2-101.6 incl.	0.10 0.15 0.20 0.30 0.38 0.38	0.10 0.15 0.20 0.30 0.38 0.38	+20 +20 +22 +22 +22 +22	-0 -0 -0 -0 -0 -0	3.17 3.17 3.17 3.76 4.76	0 0 0 0 0	Tension Test Flattening Test Flare Test Hardness Test 100% Hydrostatictest Refer to ASTM A-450	
ASTM A-249 Welded boiler, Superheater Heat exchager and condenser Tubes	Diameter Under 25.4 25.4-38.1 incl. 38.1-50.8 excl. 50.8-63.5 excl. 63.5-76.2 excl. 76.2-101.6 incl.	0.10 0.15 0.20 0.25 0.30 0.36	0.10 0.15 0.20 0.25 0.30 0.36	+10 +10 +10 +10 +10 +10 Minimum wall-	-10 -10 -10 -10 -10 -10 -18%0 available on request	3.17 3.17 3.17 4.76 4.76 7.76	0 0 0 0 0	Tension Test Flattening Test Flare Test/Flange Test *Reverse Bend Test HardnessTest *Reverse flattening Test Refer to ASTM A-450 *Wherever Applicable	
ASTM A-269 Seamless & Welded Tubing for General Service	Under 12.7 12.7-38.1 excl. 38.1-88.9 excl. 88.9-139.7 excl. 139.7-203.2 excl.	0.13 0.13 0.25 0.38 0.76	0.13 0.13 0.25 0.38 0.76	+15 +10 +10 +10 +10	-15 -10 -10 -10	3.2 3.2 4.8 4.8 4.8	0 0 0 0	Flare test Flange Test(welded Only) Hardness Test Flattening Test 100% Hydrostatic	
ASTM A-270 seamless & Welded sanitary Tubing	25.4 38.1 50.8 63.5 76.2 101.6	.05 .05 .05 .05 .08	.20 .20 .28 .28 .30	+12.5 +12.5 +12.5 +12.5 +12.5 +12.5	-12.5 -12.5 -12.5 -12.5 -12.5 -12.5	3.2 3.2 3.2 3.2 3.2	0 0 0 0	Reverse Flattening Test 100% Hydrostatic Test External polish on all tubes Refer to ASTM A-270	
ASTM A-312 seamless & welded Pipe	13.70-48.3 incl. 48.3-114.3 incl. 114.3-220 incl.	0.40 0.79 1.60	0.79 0.79 0.79		m wall 12.5% orminal Wal dl	6.4 6.4 6.4 (Normally Ra Lenghts order		Tension Test Flattenning Test 100% Hydrostatic Refer to ASTM A-530	
ASTM A-358 welded Pipe for High Temperature	For all size 5"NB & Above	+0.5%	-0.5%	-	-0.3 mm	Customers Specificati		Gransvers Tension test Transverse guided bend test. Hydrostatic test. Radiographic penetrnt (optional.)	
ASTM A-554 Mechanical Steel Tubing	Upto 5" 127 mm	0.1 to 0.5	0.1 to 0.5	+10	-10%	1.6 to 4.88	0	As per customer Requirement	
ASTM A-688 for Welded Feed Water heater 'U' Tubes	Under 25.4	0.101	6 0.1016	+20	-0(for Min.0 Wall thk.) -10(for Avg. Wall thk.)	3 to 13	0	Tension, Hardness, corrosion, Reversebend. Flange, Flattening. Hydrostatic Test Pneumatic test, NON destructive Test	

#### PERMISSIBLE DEVIATIONS OF OUTSIDE DIAMETER AND WALL THICKNESS

Scope	Outside Diameter		Wall Thickness		
Tube Manufacturing process outside diameter d mm	ISO Tolerance class	Permissible deviation	ISO Tolerance class	Permissible deviation	
Cold -fabricated	D2 D3 D4	+1.0%min.± 0.5mm In special cases ±0.75%min.±0.3mm ±0.5%min.±0.1mm	T3 T4 T1	+1.0%min.± 0.5mm In special cases ±0.75%min.±0.3mm ±0.5%min.±0.1mm	
Hot-fabricated	D1	±1.5%min.±0.75mm in special cases: ±1.0%min.±0.5mm	T1 T2	±15%MIN.±0.6mm in special cases ±12.5%min.±0.4 mm.	

#### PERMISSIBLE DEVIATIONS OF OUTSIDE DIAMETER AND WALL THICKNESS

Nominal	Nominal	Outside	Outside Daimeter									
	Pipe Size	Daimeter	Sch. 5	S	Sch.	10 S	Sch.	40 S	Sch.	80 S		
1/2	15	21.34	1.65	0.812	2.11	1.014	2.77	1.286	2.77	1.286		
3/4	20	26.67	1.65	1.032	2.11	1.296	2.87	1.708	2.87	1.708		
1	25	33.40	1.65	1.310	2.77	2.121	3.38	2.537	3.38	2.537		
1.1/4	32	42.16	1.65	1.671	2.77	2.728	3.56	3.435	3.56	3.435		
1.1/2	40	48.26	1.65	1.923	2.77	3.150	3.68	4.101	3.68	4.101		
2	50	60.33	1.65	2.421	2.77	3.986	3.91	5.515	3.91	5.515		
2.1/2	65	73.03	2.11	3.741	3.05	5.336	5.16	8.755	5.16	8.755		
3	80	88.90	2.11	4.578	3.05	6.546	5.49	11.448	5.49	11.448		
3.1/2	90	101.60	2.11	5.248	3.05	7.514	5.74	13.756	5.74	13.756		
4	100	114.30	2.11	5.918	3.05	8.483	6.02	16.296	6.02	16.296		

#### **FORMULA**

1.	Weight of SS Sheet, Plate Length (mtr) x Width (mtr) x Thickness (mm) x 8 = Wt. (Per Sheet)
2.	Weight of SS Pipes & Tubes (Kg), OD (mm) - Wall Thickness (mm) x Wall Thickness (mm) x 0.00756 = Wt. (Per Ft.)
3.	Weight of SS Round (Kg), Diameter (mm) x Diameter (mm) x 0.0019 = Wt. (Per Ft.)
4.	Weight of SS Hex (Kg), Diameter (mm) x Diameter (mm) x 0.002072 = Wt. (Per Ft.)
5.	Weight of SS Square (Kg), Diameter (mm) x Diameter (mm) x 0.0024 = Wt. (Per Ft.)
6.	Weight of SS Circle (Kg), Diameter (mm) x Diameter (mm) x Thickness x 0.0000063 = Wt. (Per PC)
7.	Weight of SS Flat (Kg), Width (mm) x Thickness (mm) x 0.00243 = Wt. (Per Ft.)

#### **TESTING & QUALITY ASSURANCE**

- Eddy Current Test
- Hydrostatic/Pneumatic Pressure Test
- Flaring Test
- Ra Test

- Elongation Test
- Reverse Flattening Test



#### Hardness Test

Vickers hardness test is to observe the questioned material's ability to resist plastic deformation from a standard source.

#### **Bending Test**

This test is conducted to check the pressure holding capacity of a pipe without any leakage.





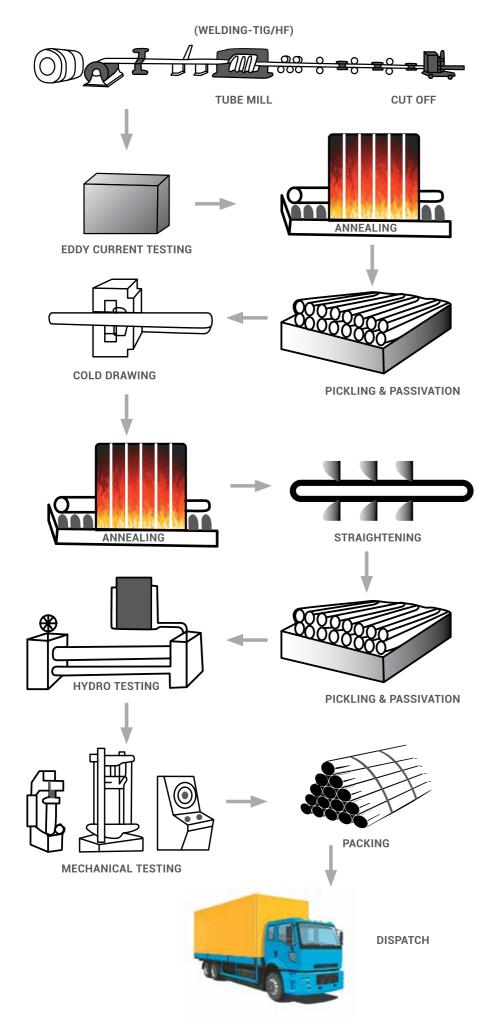
#### **Flattening Test**

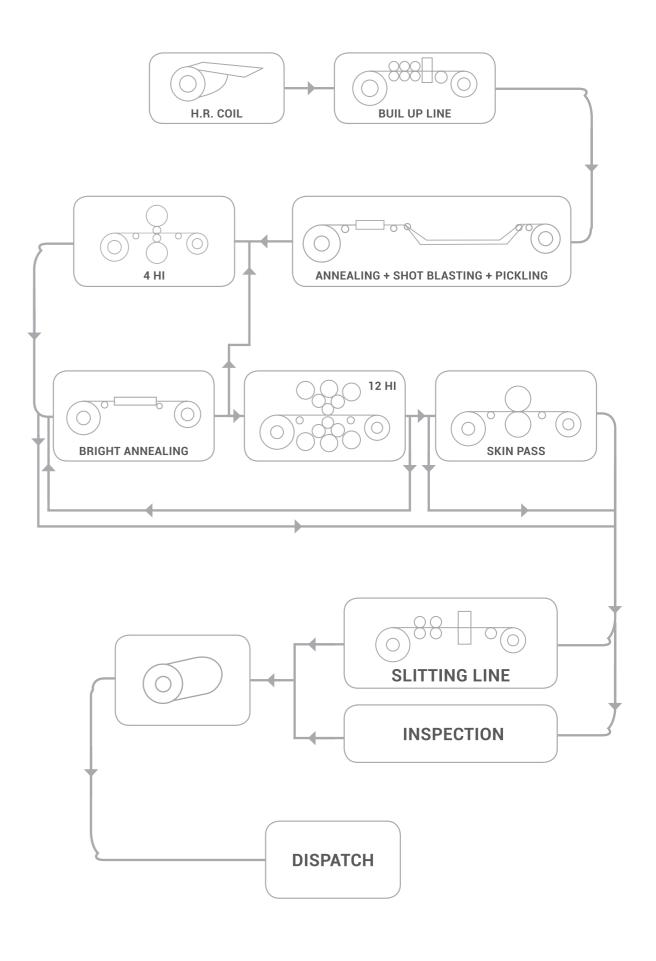
This test is conducted to check the strength of the welded section by subjecting it to extreme compression stress.

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# COIL FLOW CHART











# SNB PLANT







