

# COMPANY PROFILE

SHATRUNJAY SPECIAL ALLOYS IS AN INDEPENDENT, FULL LINE, STOCKING DISTRIBUTOR OF STEEL, PIPES, FITTINGS AND PIPING SPECIALTIES. ALL STOCK UNDER ONE ROOF, LOCATED IN INDIA, THE COMPANY FLEET SERVICES FROM A 10,000 SQUARE FOOT WAREHOUSE.

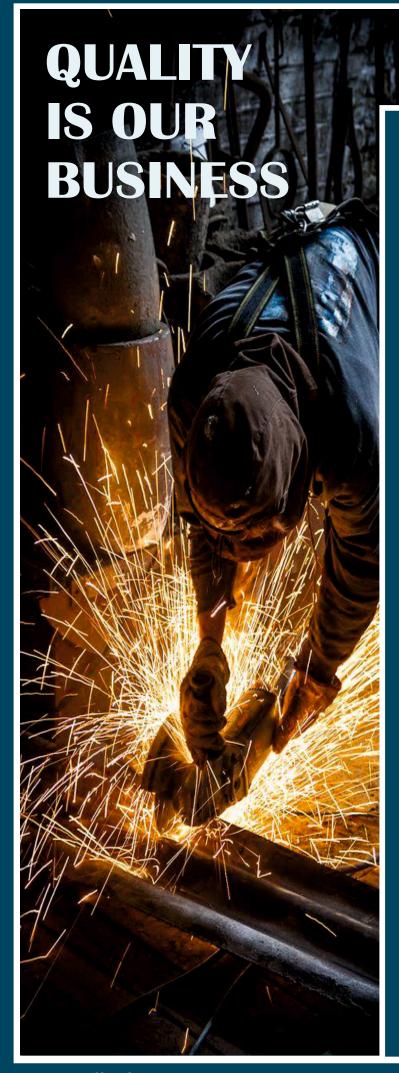
SHATRUNJAY SPECIAL ALLOYS IS A VETERAN IN MANUFACTURING AND EXPORTING STEEL MATERIALS TO DEVELOPED AND DEVELOPING COMPANIES IN THE FOLLOWING FIELDS: OIL&GAS, PHARMACEUTICAL, CHEMICALS, ENGINEERING MACHINES, PAPER INDUSTRY AND OTHER ALLIED INDUSTRY IN INDIA AND THE WORLD.

We shall provide you Material test certificate, Gate Pass and arrange necessary material inspection by any third party if required. Over the years we are supplying our products in Domestic markets to Government, Public Sector, Private Sector & Multinational Companies.

# **QUALITY POLICY**

Our agenda is to provide customer satisfaction in terms of quality at competitive price. Shatrunjay Special Alloys follows the six sigma approach from manufacturing to exporting which reduces product defects 99.99% and this has been approved by TPA (third party inspection). The entire organization has committed group of peoples who are expertise in their fields and are dedicated towards their duty in achieving company goals within time limit resulting in customer delight by providing quality products&services assuring international standards.

We also believe in continual improvement for effectiveness of Quality Management system through Team Work, Training and focus on Actions and Results.





STAINLESS STEEL

**DUPLEX STEEL** 

**SUPER DUPLEX** 

**CARBON STEEL** 

**ALLOYS STEEL** 

**INCONEL** 

**MONEL** 

**SMO** 

**HASTELLOY** 

**TITANIUM** 



# TYPES OF STAINLESS STEEL

Stainless Steel is a name given to a group of steel alloys that contain more than 10.5% Chromium. Chromium has a high affinity for oxygen and forms a stable oxide film on the surface of stainless steel. The film is called the "passive oxide layer" and forms instantaneously in ordinary atmospheres. The film is self-healing and rebuilds when it has been removed. It is this film that gives stainless steel its corrosion resistance.

# Description of Stainless Steel

201 / 202

201/202 stainless steel is an austentic chromium -nickelmanganese stainless steel which was developed to conserve nickel. Type 201/202 is a lower cost alternative to conventional Cr-Ni. Stainless steel Carbon 0.15 max, Manganese 5.50-7.50 max, Chromium 16.00-18.00, Nickel 3.50-5.50, Iron balance.

304

The most widely used stainless steel with the best all round performance. Its carbon content is lower and its corrosion resistance after welding is higher than T302. It is less susceptible to intergranular corrosion after welding. Non-magnetic but slightly magnetic when cold worked.

304L

A low carbon stainless steel with general corrosion resistance like T304, but with superior resistance to intergranular corrosion following welding or stress relieving. Highly recommended for parts which are fabricated by welding and which can not be annealed. Generally limited to temperatures up to 426°C. The physical properties and thermal treatments of T304L are similar but not identical to T304. Non-magnetic when annealed but slightly magnetic when cold-worked.



Has lower carbon than T316, with corrosion resistance similar to T316, but superior resistance to intergranular corrosion following welding or stress relieving. It is recommended for parts which cannot be subsequently annealed. Service temperatures up to 426°C. The physical properties and thermal treatments of type 316L are similar but not identical to type 316. Non-magnetic when annealed but slightly magnetic when cold-worked.

410

316L

Quality stainless steel products are a top priority at Best Stainless. Our Stainless Steel 410 is a basic martensitic grade which contains 11.5% chromiun, offering both exceptional wear and corrosion resistance. SS 410 is corrosion resistant to some chemicals, food, mild acids, water and air. Carbon 0.080-0.150, Chromium 11.50-13.50, phosphorus 1.0 Max, Sulfur 0.030 Max

430

A corrosion and heat resisting stainless steel with superior corrosion and heat resistance compared to type 410. Type 430 is non hardenable and possesses only mild cold-working properties due to the high chromium content. Its weldability is excellent and does not require subsequent annealing. Magnetic in all conditions.

www.ssalloy.in



# **Chemical Composition**

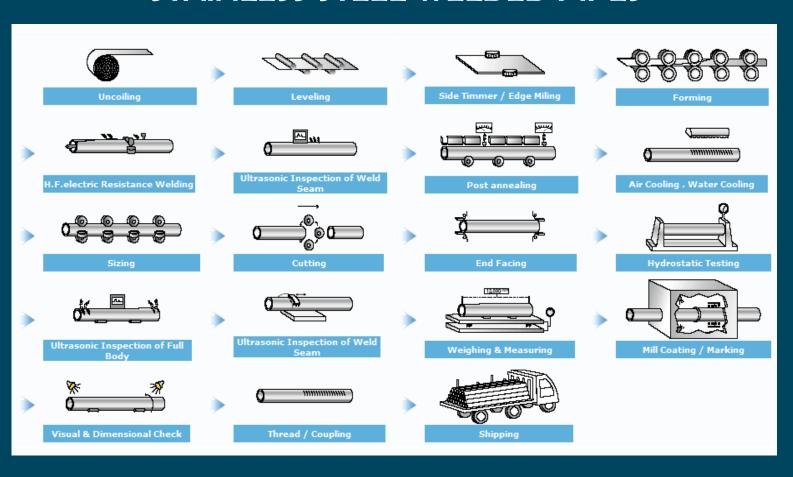
Alloy	С	Mn	P	S	Si	Cr	Ni	Mo	Others
201	0.15	6.50	0.060	0.030	1.00	17.00	4.50	1-	0.25N
202	0.15	9.00	0.060	0.030	1.00	18.00	5.00	-	0.25N
301	0.15	2.00	0.045	0.030	1.00	17.00	7.00	-	-0
302	0.15	2.00	0.045	0.030	1.00	18.00	9.00	-	
303	0.15	2.00	0.20	0.15	1.00	18.00	9.00	0.60	
303Se	0.15	2.00	0.20	0.06	1.00	18.00	9.00	0.60	0.15Se
304	0.08	2.00	0.045	0.030	1.00	19.00	9.25	-	-
304L	0.03	2.00	0.045	0.030	1.00	19.00	10.0	-	
309S	0.08	2.00	0.045	0.030	0.75	23.00	13.5	-	
310S	0.08	2.00	0.045	0.030	1.50	25.00	20.5	-	-
316	0.08	2.00	0.045	0.030	1.00	17.00	12.0	2.5	
316L	0.03	2.00	0.045	0.030	1.00	17.00	12.0	2.5	
317	0.08	2.00	0.045	0.030	1.00	19.00	13.0	3.5	-
317L	0.03	2.00	0.045	0.030	1.00	19.00	13.0	3.5	e.)
321	0.08	2.00	0.045	0.030	1.00	18.00	10.5	-	Ti 5 X C
329	0.10	2.00	0.045	0.030	1.00	27.50	4.5	1.50	
330	0.08	2.00	0.040	0.030	1.00	18.50	35.5	-	-
347	0.08	2.00	0.045	0.030	1.00	18.00	11.0	-	Cb+Ta 10 X C
409	0.08	1.00	0.045	0.045	1.00	11.50	-	-	Ti 6 x C
410	0.15	1.00	0.040	0.030	1.00	12.50	-	-	-
416	0.15	1.25	0.040	-	1.00	13.00	-	0.60	S=0.15 min
416Se	0.15	1.25	0.060	0.060	1.00	13.00	-	-	0.15 Se
420	0.15 min	1.00	0.040	0.030	1.00	13.00	-	-	-
430	0.12	1.00	0.040	0.030	1.00	17.00	-	-	-
440C	1.00	1.00	0.040	0.030	1.00	17.00	-	-	
904L	0.02	2.00	0.045	0.035	1.00	21.00	25.5	4.5	Cu 1.5



# PIPES & TUBES

STAINLESS STEEL WELDED (ERW) PIPES

# MANUFACTURING PROCESS OF STAINLESS STEEL WELDED PIPES



# STAINLESS STEEL WELDED (ERW) PIPES





## Grades

201/ 202/ 304L/ H/ 316L/H/Ti/ 317L/ 321H/ 347H/ 409L/ 410/ 430Ti/ 439

#### **Production Norms**

ASTM A249 - A269 - A312 - A358 - A409 - A554 - A778 - A789 - A790

## Size Range

Round —6.35mm OD to 127mm OD. 1/2'NB to 24'NB Square — 12.75X12.75 to 100X100 Rectangle — 10X20 to 50X100

## Length

Commericial Length -6000mm +/-30mm Fix length — From 1200mm up to 12000 mm with a tolerance of upto -0/+5mm

#### **Finish**

Welded

**Brushed** 

Pickled Solution annealed

and pickled up to 0.D. 219.1mm

Mirror Polish

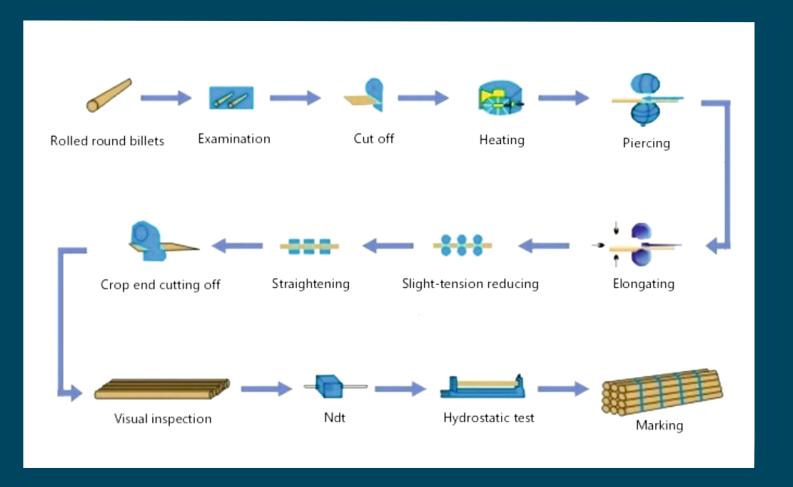
Polish Grit 120-1200



# PIPES & TUBES

STAINLESS STEEL SEAMLESS PIPES

# MANUFACTURING PROCESS OF STAINLESS STEEL SEAMLESS PIPES





# STAINLESS STEEL SEAMLESS PIPES



# Length

From 5mtes to 6.5mtrs Max length is 80'(24mtrs)

# Size Range

1/8"-48" (8mm - 1219mm)

# **Finish**

Export Finish Industrial Finish

## Grades

304/304L/310S/316/316L/ 316Ti/317/321/347/904/904L/ (S31803)SAF2205/(S32750) SAF2507. DIN 1.4301 - 1.4306 -1.4845 - 1.4401- 1.4404 -1.4571 -1.4438 - 1.4541 - 1.455

# Production Norms (Standards)

ASTM A312 - A213 - A269 - A376 - A511 - SA789 - SA790 ANSI/ASME B36.10M - B36.19M EN-10216-5 / DIN 17456 - 17458 JIS G3459, JIS G3463.





# STAINLESS STEEL SLOTTED PIPES

# (SINGLE SLOTTED PIPES)

Grades
ASTM 554

Standards

AISI 201/304/316L etc

**Thickness** 

from 1.0mm to 2.0mm

Length

6.1 meters

Surface (Finish)

Polish 320G Polish 400G Polish 600G Mirror

Hairline Descaled

Size Range

Single Slotted Pipes Round - 25.4mm to 100mm Square - 40X40 / 60X60 / 80X80 / 50X50 / 32X32 / 38X 38 Rectangle - 25X21 to 100X30 Oval - 60X40 to 110X40

# SLOTT (W X H)

14X14 / 5X5 / 13X17 / 13X15 / 18X15 / 15X15 / 23.5X13 / 19X23 / 19.7X26.2 / 20X15 / 24X24 / 19.7X31.8 / 27X30 / 30X27 / 28X21 / 13.8X15 / 19X38 / 20X20 / 20X25 / 25X25 / 25X40 / 34X34 / 23X24 / 38X45 / 23X27 / 26X17 / 33X26 / 40X20 / 45X40 / 15X5 / 7X17 / 20X15 / 28X5 / 25X15 / 18X18 / 35X28 / 42X6 / 15X12 / 34X50 / 34X19

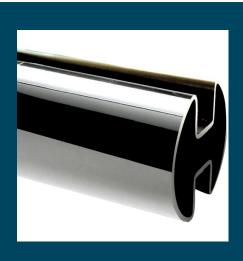




# STAINLESS STEEL SLOTTED PIPES

# (DOUBLE SLOTTED PIPES)





## Grades

AISI 201/304/316L etc

## **Standards**

**ASTM 554** 

# Length

6.1 meters

## Slott (WXH)

15X15 / 25X25 / 25X13/ 25X20

# Surface (Finish)

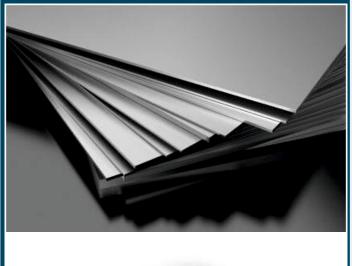
Polish 320G Polish 400G Polish 600G Mirror Hairline

Descaled

# Size Range

Doubles Slotted Pipes Round - 50.8 / 76 Square - 40X40 Rectangle - 85X40







# **SHEETS & PLATES**

#### **GRADES**

Stainless Steel: 200 Series, 300 Series, 400 Series, 904L, 17.4PH, 15.5PH, Duplex, Super Duplex, Carbon steel, Alloy steel etc.

#### **SPECIFICATIONS**

Surface: 2B, 2D, BA, NO.1, NO.4, NO.8, 8K, Mirror, Checkered, Embossed, HairLine, Sand Blast, Brush, Etching, Etc.

Thickness: 0.25mm -100mm
Width: 250mm - 2000mm
Length: 1000mm - 6000mm
Form: Plain Sheet, Shim Sheet, Perforated Sheet, Chequered Plate, etc.

Standards: ASTM, ASME, AISI, DIN, BS, EN, IS, JIS & Other International Standards

# **COILS & STRIPS**

#### **GRADES**

Stainless Steel: 200 Series, 300 Series, 400 Series, 904L, 17.4PH, 15.5PH, Duplex, Super Duplex, Carbon steel, Alloy steel etc.

#### **SPECIFICATIONS**

Surface: 2B, 2D, BA, NO.1, NO.4, NO.8, HL, etc.

Thickness: 0.31mm -12mm

Width: Strips - 3.2mm to 1500mm

Standards: ASTM, ASME, AISI, DIN, BS, EN, IS,

JIS & Other International Standards





# **COMMON FINISH MEANING**

HR — IT is a scaled finish with an ideal surface finish where finish is not a concern

2B — IT is given a subsequent light skin pass and cold rolling operation between polishing. This is the most common finishing applied for general use.

BA — IT is processed by Bright Annealing process after cold rolling. BA finish is carried out in a controlled atmoshphere furnce or vaccum in order that oxidation is reduced to minimum and the surface remains relatively bright. BA is used commonly in decorative purpose

No.4 — IT is a undirectional short linear finishing obtained by 150 to 240 grits abrasive polishing. It is fine decor finish.

Hairline — This is also an undirectional finish but differs from No.4 finish. These are straight long lines and share same usage.

No.8 Mirror(Super Mirror) — IT is polished by sophisticated and automatic mirror machine. The finishing looks exactly like mirror with high reflection!

No.8 Thicker Plate — No.8 thicker gauge polishing system. IT is for special customers requirements such as chemical containers, semiconductor equipments, etc

# **BARS & RODS**

#### **GRADES**

Stainless Steel: 200 Series, 300 Series, 400 Series, 904L, 17.4PH, 15.5PH, Duplex, Super Duplex, Carbon steel, Alloy steel etc.

#### **SPECIFICATIONS**

Bright Bars: From 5mm Dia upto 350mm Dia Black Bars: From 16mm Dia upto 350mm Dia Square Bars: From 5mm Dia upto 250mm Dia Hex Bars: From 5mm Dia upto 150mm Dia Wires: From 0.1mm Dia upto 5mm

<u>Dia Length</u>: 1 to 6 Meters, Custom Cut Lengths <u>Standards:</u> ASTM, ASME, AISI, DIN, BS, EN,IS, JIS

& Other International Standards





# **DECORATIVE SHEETS**

#### **GRADES**

Stainless Steel: 200 Series, 300 Series, 400 Series.

#### **SPECIFICATIONS**

Thickness: 0.3 to 5mm and more

Finish: No.8 Mirror, BA, No.4, Hairline

(Anti Fingure Also Available)

Types: Double, Single & Mix Colour, Wooden,

Marble, Sand Blast, Linen and more Colours: Gold, Rose Gold, Blue, Black,

Green, Purple, Pink & more

<u>Dimensions</u>: 8X4 / 4X10 / 5X10 and cut to size

Standards: ASTM, ASME, AISI, DIN, BS, EN, IS,

JIS & Other International Standards.



# **DECORATIVE PIPES**

#### **GRADES**

Stainless Steel: 200 Series, 300 Series, 400 Series.

#### **SPECIFICATIONS**

Thickness: 0.8 to 2mm and more Finish: Polish, Mirror, Mill fnish and More (Anti Fingure Also Available)
Types: Emboss, Curve, Slotted, Colour, Hairline, Sand Blast & Wooden.

Colours: Gold, Rose Gold, Rainbow,

Blue & more

Dimensions: Round - upto 102mm OD,

Rectangle - upto 100X80

<u>Standards</u>: ASTM, ASME, AISI, DIN, BS, EN,IS, JIS & Other International Standards.





# BUTTWELD

# **SOCKET WELD FITTINGS**







### GRADES

Stainless Steel: 200 Series, 300 Series, 400 Series, 904L, 17.4PH, 15.5PH, Duplex, Super Duplex, Carbon steel, Alloy steel etc.

#### **SPECIFICATIONS**

<u>Pipes</u>: 1/8" NB upto 48" NB in Sch. 5, 10, 20, 30, 40, 80, 120, 140, 160, XS, XXS <u>Tubes</u>: 1/8" OD upto 24" NB in 3000#, 6000#, 9000#

Types: Seamless & ERW Buttweld Pipes
Fittings: 45 Deg & 90 Deg Elbow (In Long
and Short Radius), Equal Tee, Unequal Tee,
Eccentric and Concentric Reduce, 'U' Bends,
Nipple, Coupling, Crosses, Caps etc.
Standards: ASTM, ASME, AISI, DIN, BS, EN,
IS, JIS & Other International Standards

#### **GRADES**

Stainless Steel: 200 Series, 300 Series, 400 Series, 904L, 17.4PH, 15.5PH, Duplex, Super Duplex, Carbon steel, Alloy steel etc.

#### **SPECIFICATIONS**

Pipes: 1/8" NB upto 48" NB in Sch. 5, 10, 20,

30, 40, 80, 120, 140, 160, XS, XXS

Tubes: 1/8" OD upto 24" NB in 3000#,

6000#, 9000#

Types: Socket Weld (Forged): 45 Deg & 90 Deg Elbow (In Long and Short Radius), Equal Tee, Unequal Tee, Eccentricand Concentric Reducer Nipple, Coupling,

Crosses, Caps, Weldolets, Sockolets,

Threadolets, etc.

Standards: ASTM, ASME, AISI, DIN, BS, EN, IS. JIS & Other International Standards



# **FASTENERS**



# **FERRULE FITTINGS**

#### **GRADES**

Stainless Steel: 200 Series, 300 Series, 400 Series, 904L, 17.4PH, 15.5PH, Duplex, Super Duplex, Carbon steel, Alloy steel etc.

#### **SPECIFICATIONS**

Types: Straight Union, Union Elbow, Union Tee, Union Cross, Reducing Union, Reducing Tee, Bulkhead Union, Bulkhead, Union Elbow, Quick Release Coupling, Coupling, Plug & Union, Cap, Connector NPT, Female Elbow, Female Run Tee, Female Branch Tee, Male Connector NPT, Male Elbow NPT, Male Run Tee, Male Bulkhead Connector, Male Branch, Tee, Swivel Adjustable Branch Tee, Swivel Adjustable Elbow, Swivel Adjustable Run Tee, Swivel Union, Swivel Union, Swivel Pipe Adaptor, Collar, etc.







# **WIRES & RODS**

#### **GRADES**

Stainless Steel: 200 Series, 300 Series, 400 Series, 904L, 17.4PH, 15.5PH, Duplex, Super Duplex, Carbon steel, Alloy steel etc.

#### **SPECIFICATIONS**

Range: Rods - 3.17mm to 350mm Dia, Wires: From 0.1mm Dia upto 5mm Dia Finish: Bright, Polish, Black, etc. Form: Round, Square, Hex (A/F), Rectangle, Wire (Coil Form), Wire-mesh, Billet, Ingot, Forging Etc.

<u>Condition</u>: Cold Drawn & Polished Cold Drawn, Centreless Ground & Polished Standards: ASTM, ASME, AISI, DIN, BS, EN, IS, JIS & Other International Standards.



# **FLANGES**



#### **GRADES**

Stainless Steel: 200 Series, 300 Series, 400 Series, 904L, 17.4PH, 15.5PH, Duplex, Super Duplex, Carbon steel, Alloy steel etc.

#### **SPECIFICATIONS**

<u>Size</u>: 1/8"NB upto 24"NB in 150#, 300#, 600#, 900#, 1200#, 1500#, 2500#, etc <u>Types</u>: Slip on Flanges (With & Without HUB), Weldneck Flanges, Socketweld Flanges, Lap Joint Flanges, Screwed Flanges, Long Weld Neck Flanges, Spectacle Flanges, Blind Flanges, Threaded Flanges, Orifce Flanges, Forged Flanges, Reducing Flanges, ANSI Flanges, ASME Flanges, API Flanges, BS Flanges, DIN Flanges, JIS Flanges, Industry Standard Flanges, EN 1092-1 Flanges Standards: ASTM, ASME, AISI, DIN, BS, EN, IS, JIS & Other International Standards.



# **ANGLE**

#### **GRADES**

AISI 201, 202, 204cu, 304, 304L, 316, 410, 420, 430

#### **SPECIFICATIONS**

Finish: Hot Rolled Annealed & Pickled (HRAP)

Length: 3 to 7 Meters / 12 to 24 feet

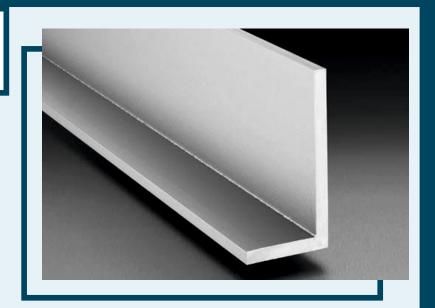
End Finish: Both ends are marked with special colors

Size tolerance: ASTM A276/484 / DIN 1028

Packing: Bars are packed in 500 to 1,000 kgs bundles in waterproof HDPE cloth

Standard Export Seaworthy.

Delivery: Within 60-70 Days from the order finalization



# U & C CHANNELS



#### **GRADES**

201, 202, 301, 304, 304L,304N,304LN, 309S,310S,316,316L, 316Ti,316N,316LN, 317,317L,347, 347H,etc

#### **SPECIFICATIONS**

Diameter (Round bar)4mm - 350mm Size (Square bar)6 x 6mm - 50 x 50mm Size (Flat Bar)2x10mm - 100x1000mm

Size (Channel Bar)40mm\*20mm~300mm\*300mm

Thickness (Flat Bar) 0.5mm - 150mm

Width (Flat Bar)100mm - 120mm

Thickness (Angle Bar)3.0mm - 120mm

Price termF0B/CIF/CNF or as required

Length- 3MTR, 4MTR, 5MTR, 6MTR, or Custom Cut Sizes

Shape- Stainless steel Channel/Round/Flat/Square/Angle/Hexagonal Bar StandardASTM A 276/A 276M, A 484/A 484M, A 564/A 564M, A 582/A582M,

A 638 /A 638M, A705/A705M

