

# BILLETS



Particulars	Continuous Cast (CC) Billets	Round Billets	Cornered Square (RCS) Billets	Black Bars
<b>Size Range</b>	100mm X 100mm, 120mm X 120mm, 140mm X 140mm, 160mm X 160mm, 200mm X 200mm	45mm to 122mm		25 to 120mm
<b>Supply Condition</b>	As Cast, Spot Ground, Fully Ground	Hot Rolled, Hot Rolled Pickled and Spot Ground		Hot Rolled, Hot Rolled Annealed & Pickled & Spot Ground
<b>Grade (AISI)</b>	302,303,304,304L, 309S,310S,316,316L, 316Ti,317L,321,410, 420,430	302,303,304,304L, 309S,310S,316,316L, 316Ti,317L,321,410, 420,430		302, 303, 304, 304L, 309S, 310S, 316, 316L, 316Ti, 317L, 321, 410, 420, 430
<b>Length</b>	Upto 10 Mtrs.	Upto 6 Mtrs.		Upto 6 Mtrs.
<b>Application</b>	Rolling, Forging.	Re-Rolling, Forging, Cold-drawing		Re-Rolling, Forging, Peeling, Cold-drawing

## Technical Info

### Technical Info : International Comparison of Standards

AISI	WNR	DIN	BS	JIS	AFNOR
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201				SUS201	
202				SUS202	
204Cu	1.4597				
301	1.4310	X 12 Cr Ni S 180	301 S 21	SUS301	Z 12 CN 17-07
302	1.4319	X3Cr Ni N 17-8	302 S 26	SUS302	
302HQ	1.4567	X3 CR Ni CU 18 9		SUS302HQ	Z 6 CNU 18 - 10
303	1.4305	X 12 Cr Ni S 18 9	303 S 31	SUS303	Z 10 C NF 18 09
304	1.4301	X 5 Cr Ni 1810	304 S 31	SUS304	Z 6 CN 18 09
304L	1.4306	X 12 Cr Ni 1911	304 S 15	SUS304L	Z 2 CN 18 10
304LN	1.4311	X 2 Cr Ni N18-10	304 S 61	SUS304LN	Z 3 CN 18-07AZ
305	1.4303	X 6 CR Ni 19 11	305 S 19	SUS305	Z 8 CNT 18 - 12
309	1.4828	X 5 Cr Ni Mo 17 12	309 S 24	SUS309	Z 10 CN 24 - 10
310S	1.4845	X 15 Cr Si 20 20	310 S 16	SUS310S	Z 12 CN 25 - 20
314	1.4841	X 15 Cr Ni Si 25 30	314 S 25	SUS310	Z 15 CNS 25 30
316	1.4401	X 5 Cr Ni Mo 17 22	316 S 31	SUS316	Z 6 CN D 17 11
316L	1.4404	X 2 Cr Ni Mo 17 13 2	316 S 13	SUS316L	Z 2 CND 17 12
316Ti	1.4571	X 6 Cr Ni Mo Ti 1712 2	320 S 18	SUS316Ti	X6 Cr Ni Mo Ti 1712 2
317	1.4949	X 5 Cr Ni Mo 17 13	317 S 16	SUS317	
317L	1.4435	X 2 Cr Ni No 18 14 3	317 S 12	SUS317L	Z 3 CND 17 - 12 - 03
321	1.4541	X 6 Cr Ni Ti 18 10	321 S 31	SUS321	Z 6 CNT 18 11
347	1.4550	X 6 Cr Ni Nb 18 10	347 S 31	SUS347	Z 6 CNB 18-10
410	1.4006	X 10 Cr 13	410 S 29	SUS410	Z 12 C 13
416	1.4005	X 12 Cr S 13	416 S 21	SUS416	Z 12 CF 13
420	1.4021	X 20 Cr 13	420 S 29	SUS420A	Z 20 C 13
430	1.4016	X 12 Cr 17	430 S 17	SUS430	Z 8 C 17
430F	1.4104	X 12 Cr Mo S 17		SUS430F	Z 10 CF 17
431	1.4057	X 20 Cr Ni 17 2	431 S 29	SUS431	Z 15 CN 16 02

## Tolerance chart

Technical Info : Tolerance chart

Size Range (mm)	h8	h9	h10	h11	h12	h13	k12/k13
Upto 6	-0.0180	-0.030	-0.048	-0.075	-0.120	-0.180	
Over 6 Upto 10	-0.022	-0.036	-0.058	-0.090	-0.150	-0.220	
Over 10 Upto 18	-0.027	-0.043	-0.070	-0.110	-0.180	-0.270	
Over 18 Upto 30	-0.033	-0.052	-0.084	-0.130	-0.210	-0.330	+0.10/+0.15
Over 30 Upto 50	-0.039	-0.062	-0.100	-0.160	-0.250	-0.390	+0.15/+0.20
Over 50 Upto 80	-0.046	-0.074	-0.120	-0.190	-0.300	-0.460	+0.20/+0.25
Over 80 Upto 120	-0.054	-0.084	-0.140	-0.220	-0.350	-0.540	+0.25/+0.30

### As per ASTM A484

Size Range (inch)	Tolerance
1/6" to less than 5/16"	+/-0.001
5/16" to less than 1/2"	+/-0.0015"
1/2" to less than 1"	+/-0.002"
1" to less than 1-1/2"	+/-0.0025"
1-1/2" to less than 4"	+/-0.003"