

BILLETS



Particulars	Continuous Cast (CC) Billets	Round Cornered Square (RCS) Billets	Black Bars
Size Range	100mm X 100mm, 120mm X 120mm, 140mm X 140mm, 160mm X 160mm, 200mm X 200mm	45mm to 122mm	25 to 120mm
Supply Condition	As Cast, Spot Ground, Fully Ground	Hot Rolled, Hot Rolled Pickled and Spot Ground	Hot Rolled, Hot Rolled Annealed & Pickled & Spot Ground
Grade (AISI)	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
Length	Upto 10 Mtrs.	Upto 6 Mtrs.	Upto 6 Mtrs.
Application	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"