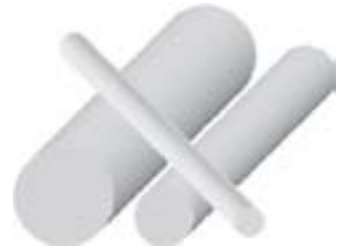


ROUND BAR

SPECIFICATIONS:	ASTM A276 / A484
LENGTHS:	4 METRE FIXED & RANDOMS
FINISH:	COLD DRAWN & POLISHED PEELED & REELED CENTRELESS/PRECISION GROUND
TOLERANCE:	H8 / H9 / H10 / H11 / K12



SIZE	303	304	316	431	2205	253MA	APPROX. WEIGHT
mm							kg/metre
3.18		★	★				0.062
3.96		★	★				0.1
4.76		★	★				0.14
5		★	★				0.155
6	☆	★	★			★	0.23
6.35	☆	★	★				0.25
7.94		★	★				0.39
8	★	★	★			★	0.4
9.53	☆	★	★	☆			0.56
10	★	★	★	☆		★	0.62
11.11		★	★				0.76
12	☆	★	★	☆	★	★	0.89
12.7	★	★	★				0.99
14.28		★	★				1.26
15		★					1.39
15.88	★	★	★	★			1.552
16		★	★			★	1.58
19.05	★	★	★	★	☆		2.235
20	☆	★	★	★	★	★	2.47
22.23	★	★	★	★			3.042
24		★	★				3.551
25	☆	★	★	☆		★	3.853
25.4	☆	★	★	★	★		3.973
28.58		★	★	★			5.03
30	★	★	★				5.55
31.75	★	★	★	★	★		6.21
34.93		★	★				7.512
35		★	★			★	7.553
36		☆	★				8
38.1		★	★	★	★		8.94
40		★	★			★	9.87
41.28		☆	★				10.5

ROUND BAR

SPECIFICATIONS:	ASTM A276 / A484
LENGTHS:	4 METRE FIXED & RANDOMS
FINISH:	COLD DRAWN & POLISHED PEELED & REELED CENTRELESS/PRECISION GROUND
TOLERANCE:	H8 / H9 / H10 / H11 / K12



SIZE	303	304	316	431	2205	253MA	APPROX. WEIGHT
mm							kg/metre
44.45		★	★	★	★		12.17
45		★					12.49
50		★	★			★	15.413
50.8		★	★	★	★		15.9
57.15		★	★	★	★		20.12
60		★	★				22.2
63.5		★	★	★	★		24.84
69.85		★	★	★			30.05
70						★	30.2
76.2		★	★	★	☆		35.76
80				★		★	39.46
82.55		★	★	★	☆		41.98
88.9		★	★	★			48.68
90						★	49.9
95.25			☆				55.88
101.6		★	★	★			63.59
108		★					73.2
110						★	74.6
114.3		★	★				81.9
120			★				89.2
127		★	★			☆	100.9
139.7			★				122.5
152.4		★	★			★	144.9
165.1			★				169.9
177.8			★				196.9
203.2		☆	★				256.8
228.6			☆				324.7
254			★				403
279.4			★				487.6
304.8			★				575.9

TECHNICAL DATA

Stainless steel bar is usually supplied to comply with ASTM A276 (or ASTM A582 for free-machining grades). Both specification refer to ASTM A484M for dimensional tolerances, except as noted below for round bar. Available tolerances will vary dependent upon bar section size, condition and finish.

ROUND BAR

Cold-finished round bar is usually supplied to ASTM A276/A484 OR A582/A484M

FINISH	DIAMETER TOLERANCE
DRAWN	H9
PEELED & REELED	H9 / H10
SMOOTH TURNED	H11 / K12
GROUND	H8 OR H9

NOMINAL BAR SIZE (mm)	TOLERANCE NUMBER								
	6	7	8	9	10	11	12	13	14
0 to 3	6	10	14	25	40	60	100	140	250
3 to 6	8	12	18	30	48	75	120	180	300
6 to 10	9	15	22	36	58	90	150	220	360
10 to 18	11	18	27	43	70	110	180	270	430
18 to 30	13	21	33	52	84	130	210	330	520
30 to 50	16	25	39	62	100	160	250	390	620
50 to 80	19	30	46	74	120	190	300	460	740
80 to 120	22	35	54	87	140	220	350	540	870
120 to 180	25	40	63	100	160	250	400	630	1000
180 to 250	29	46	72	115	185	290	460	720	1150
250 to 315	32	52	81	130	210	320	520	810	1300
315 to 400	36	57	89	140	230	360	570	890	1400
400 to 500	40	63	97	155	250	400	630	970	1550

Tolerance values given in microns = 0.001mm

H = all minus

J = equal

K = all plus

FLAT BAR

SPECIFICATIONS:	ASTM A276/A484M
LENGTHS:	4 METRE FIXED & RANDOMS
FINISH:	SLIT ROLLED EDGE (SRE) HOT ROLLED ANNEALED & PICKLED (HRAP)



SIZE mm	304		316		APPROX. WEIGHT kg/metre
	SRE	HRAP	SRE	HRAP	
3 x 12	★	☆	★	☆	0.317
3 x 20	★	☆	★	☆	0.48
3 x 25	★	★	★	☆	0.63
3 x 30	★	★	★	☆	0.79
3 x 40	★	★	★	☆	0.948
3 x 50	★	★	★	☆	1.3
3 x 65	★		★		1.53
3 x 75	★		★	☆	1.77
3 x 100	★		★		2.50
5 x 20	★	☆	★	☆	0.79
5 x 25	★	★	★	★	0.987
5 x 30	★	★	★	★	1.19
5 x 40	★	★	★	★	1.58
5 x 50	★	★	★	★	1.97
5 x 65	★	☆	★	☆	2.56
5 x 75	★	☆	★	☆	2.96
5 x 100	★		★		3.95
6 x 12		☆		★	0.648
6 x 20	★	★	★	☆	0.97
6 x 25	★	★	★	★	1.3
6 x 30	★	★	★	★	1.62
6 x 40	★	★	★	★	1.93
6 x 50	★	★	★	★	2.59
6 x 65	★	★	★	★	3.25
6 x 75	★	★	★	★	3.89
6 x 90	☆		☆		4.52
6 x 100	★	★	★	★	5.18
6 x 150	★	☆	★	☆	7.38
8 x 25	★				1.63
8 x 30	★				1.97
8 x 40	★		★		2.63
8 x 50	★	★	★	☆	3.28
8 x 65	★	★	★	☆	4.26
8 x 75	★	★	★	☆	4.92
8 x 100	★	★	★	☆	6.56

FLAT BAR

SPECIFICATIONS:	ASTM A276/A484M
LENGTHS:	4 METRE FIXED & RANDOMS
FINISH:	SLIT ROLLED EDGE (SRE) HOT ROLLED ANNEALED & PICKLED (HRAP)



SIZE mm	304		316		APPROX. WEIGHT kg/metre
	SRE	HRAP	SRE	HRAP	
10 x 20		★		★	1.58
10 x 25		★		★	1.97
10 x 30	☆	★	☆	★	2.43
10 x 40	☆	★	☆	★	3.16
10 x 50	☆	★	☆	★	3.96
10 x 65	☆	★	☆	★	5.13
10 x 75	☆	★	☆	★	5.93
10 x 100	☆	★	☆	★	7.9
10 x 125	☆	☆	☆	☆	10.16
10 x 150	☆	★	☆	★	11.83
12 x 25		★		★	2.59
12 x 30	☆	☆	☆	☆	3.25
12 x 40	☆	★	☆	★	3.89
12 x 50	☆	★	☆	★	5.18
12 x 65	☆	★	☆	★	6.48
12 x 75	☆	★	☆	★	7.77
12 x 100	☆	★	☆	★	10.36
12 x 150		★		★	15.50
16 x 40		★		☆	5.05
16 x 50		★		★	6.48
16 x 65		★		☆	8.21
16 x 75		★		★	9.35
16 x 100		★		☆	13.10
20 x 40		★		★	6.56
20 x 50		★		★	7.9
20 x 65		☆		☆	10.2
20 x 75		★		★	11.9
20 x 100		★		★	15.8
25 x 50		★		★	10.36
25 x 75		★		☆	15.48
25 x 100		★		☆	20.69

ANGLE BAR

SPECIFICATIONS: ASTM A276/A484M

LENGTHS: 6 METRE FIXED & RANDOMS

FINISH: HOT ROLLED ANNEALED
& PICKLED



SIZE	304	316	APPROX. WEIGHT
mm			kg/metre
3 X 20 X 20	★	★	0.9
3 X 25 X 25	★	★	1.21
3 X 30 X 30	★	★	1.53
3 X 40 X 40	★	★	1.86
3 X 50 X 50	★	★	2.5
4 X 30 X 30	☆	☆	1.95
4 X 40 X 40	☆	☆	2.6
5 X 25 X 25	★	★	1.77
5 X 30 X 30	★	★	2.25
5 X 40 X 40	★	★	2.98
5 X 50 X 50	★	★	3.79
6 X 25 X 25	★	★	2.26
6 X 30 X 30	★	★	2.92
6 X 40 X 40	★	★	3.56
6 X 50 X 50	★	★	4.95
6 X 65 X 65	★	★	6.16
6 x 50 x 75	☆	★	5.93
6 X 75 X 75	★	★	7.46
6 x 75 x 100	☆	★	8.35
6 X 100 X 100	★	★	10.05
8 x 75 x 75	★	☆	9.94
10 X 50 X 50	★	★	7.06
10 X 65 X 65	★	★	9.48
10 X 75 X 75	★	★	11.1
10 X 100 X 100	★	★	15
10 X 125 X 125	★	☆	20.1
10 X 150 X 150	☆	☆	23.7
12 x 100 x 100	☆	★	19.6

HEXAGON BAR

SPECIFICATIONS: ASTM A276/A582/A484M

LENGTHS: RANDOMS

FINISH: COLD DRAWN (CD)
HOT ROLLED (HR) &
ANNEALED (HRAP)



SIZE	304	316	AVG. WEIGHT
mm			kg/metre
6.35	☆	☆	0.28
7.92	☆	☆	0.44
8	☆	☆	0.45
9.53	☆	☆	0.65
11.3	☆	★	0.91
13.34	☆	★	1.25
15.24	☆	★	1.63
17	☆	☆	2.02
18.03	☆	★	2.27
19.05	☆	★	2.53
20	★	☆	3
20.83	☆	★	3.02
22.23	☆	★	3.36
23.37	☆	★	3.79
25.65	☆	★	4.56
28.58	☆	★	5.65
30.48	☆	★	6.42
31.75	☆	☆	6.86
33.05	☆	☆	7.54
37.59	☆	★	9.86
42.42	☆	☆	12.5
47.63	☆	☆	15.73
50.8	☆	☆	17.87
57.15	☆	☆	22.57
63.5	☆	☆	27.83

HOLLOW BAR

GRADE:	316 (FREE MACHINING)
SPECIFICATIONS:	ASTM A511
LENGTHS:	2 TO 6 METRES
TOLERANCE:	OUTSIDE DIAMETER +2 / -0% INSIDE DIAMETER +0 / -2%



SIZE		DIMENSIONS AFTER ROUGH MACHINING				AVERAGE WEIGHT	316
O.D.	I.D.	CHUCKED TRUE TO O.D.		CHUCKED TRUE TO I.D.			
mm	mm	MAX O.D. mm	MIN I.D. mm	MAX O.D. mm	MIN I.D. mm	kg/metre	
32	20	31	22	30	21	4.23	☆
	16	31	18	30	17	5.11	★
36	25	35	27	34	26	4.58	★
	20	35	22	34	21	5.96	★
	16	35	18.5	33.5	17	6.84	★
40	28	39	30	38	29	5.53	★
	25	39	27	38	26	6.51	★
	20	39	22.5	37.5	21	7.89	★
45	32	44	34	43	33	6.75	☆
	28	44	30.5	42.5	29	8.23	★
	20	44	22.5	42.5	21	10.6	★
50	36	49	38	48	37	8.08	☆
	32	49	34.5	47.5	33	9.75	★
	25	49	27.5	47.5	26	12.2	★
56	40	55	42	54	41	10.3	★
	36	55	38.5	53.5	37	12.1	★
	28	55	30.5	53.5	29	15.3	★
63	50	62	52	61	51	10	★
	40	62	42.5	60.5	41	15.6	★
	36	62	38.5	60.5	37	17.5	☆
	32	62	34.5	60.5	33	19.1	★
71	56	69.5	58	69	57	13	★
	45	69.5	47.5	68.5	46	19.8	★
	40	69.5	42.5	68.5	41	22.4	★
	36	69.5	38.5	68.5	37	24.3	★
75	40	73.5	42.5	72	41	26.2	★
80	63	78.5	65.5	77.5	64	16.5	★
	50	78.5	52.5	77	51	25.5	★
	45	78.5	47.5	77	46	28.5	☆
	40	78.5	43	77	41	31.1	★
85	45	83.5	48	82	46	33.7	★
90	71	88.5	73.5	87.5	72.5	20.8	★
	63	88.5	65.5	87	64	27.4	★
	56	88.5	58.5	87	57	32.5	☆
	50	88.5	53	87	51	36.4	★
95	50	93.5	52	91	51	42.3	☆
100	80	98.5	82.5	97	81.5	24.6	★
	71	98.5	73.5	97	72.5	32.9	★
	63	98.5	65.5	96.5	64	39.5	★
	56	98.5	59	96.5	57	44.6	★
106	80	104	82.5	103	81.5	32.5	★
	71	104	74	102.5	72.5	40.8	★
	63	104	66	102.5	64	47.4	★
	56	104	59	102.5	57	52.5	★

HOLLOW BAR

GRADE:	316 (FREE MACHINING)
SPECIFICATIONS:	ASTM A511
LENGTHS:	2 TO 6 METRES
TOLERANCE:	OUTSIDE DIAMETER +2 / -0% INSIDE DIAMETER +0 / -2%



SIZE		DIMENSIONS AFTER ROUGH MACHINING				AVERAGE WEIGHT	316
O.D.	I.D.	CHUCKED TRUE TO O.D.		CHUCKED TRUE TO I.D.		kg/metre	
mm	mm	MAX O.D. mm	MIN I.D. mm	MAX O.D. mm	MIN I.D. mm		
112	v	110	93	109	91.5	30.4	☆
	80	110	83	108.5	81.5	40.8	★
	71	110	74	108.5	72.5	49.2	★
	63	110	66	108	64	55.8	★
118	90	116	93	114.5	91.5	39.2	★
	80	116	83	114.5	81.5	49.7	★
	71	116	74	114	72.5	57.9	☆
	63	116	66	114	64	64.6	★
125	100	123	103	121.5	101.5	38.4	★
	90	123	93	121.5	91.5	50.1	★
	80	123	83	121	81.5	60.5	★
	71	123	74.5	121	72.5	68.9	★
132	106	130	109	128.5	108	42.3	★
	90	130	93.5	128	91.5	61.6	★
	80	130	83.5	128	81.5	72	★
	71	130	74.5	127.5	72.5	80.3	★
140	112	137.5	115	136.5	114	48.2	★
	100	137.5	103.5	136	101.5	63.8	★
	90	137.5	93.5	136	91.5	75.4	☆
	80	137.5	83.5	135.5	81.5	85.9	★
150	125	147.5	128.5	146	127	47.8	★
	106	147.5	109.5	146	108	74.7	★
	95	147.5	98.5	145.5	96.5	88.3	☆
	80	147.5	84	145	81.5	104.4	★
160	132	157.5	135.5	156	134	56.6	★
	122	157.5	125.5	156	124	72.1	☆
	112	157.5	115.5	155.5	114	86.5	★
	140	167	143.5	166	142.5	64.3	★
170	130	167	134	165.5	132	81	☆
	118	167	122	165.5	120	99.1	★
	150	177	154	175.5	152.5	68.9	☆
	140	177	144	175.5	142.5	86.6	★
180	125	177	129	175	127	111	★
	160	187	164	185.5	162.5	73.5	★
	150	187	154	185.5	152.5	92.4	☆
	132	187	136.5	185	134	123.6	★
200	160	197	164	195	162.5	98.4	☆
	150	197	154.5	195	152.5	117.3	☆
	140	197	144.5	194.5	142.5	135.2	★
	170	208.5	174.5	207	173	109.7	★
212	130	208.5	135	206	132	183.3	★
	180	220.5	184.5	218.5	183	121.6	☆
224	140	220.5	145	217.5	142.5	200.2	☆
	190	232	195	230.5	193	134.2	★
236	150	232	155.5	229.5	152.5	217.6	★
	200	246	205	244	203	153.7	★

SQUARE BAR

SPECIFICATIONS: ASTM A276/A582/A484M

LENGTHS: RANDOMS

FINISH: COLD DRAWN (CD), HOT ROLLED ANNEALED & PICKLED (HRAP)



SIZE	304	316	AVG. WEIGHT
mm			kg/metre
4	☆	☆	0.13
6	☆	★	0.33
6.35	☆	☆	0.34
8	★	★	0.53
9.52	☆	☆	0.75
10	★	★	0.8
12	★	★	1.27
12.7	☆	☆	1.32
15.88	☆	☆	2.03
16	★	★	2.05
19.05	★	☆	2.98
20	★	★	3.21
25	★	★	5.18
25.4	☆	☆	5.29
32	★	★	8.21
38.1	★	☆	11.9
40	★	★	12.83
45	☆	☆	16.24
50	★	★	20.05
50.8	☆	☆	21.2
63.5	☆	★	31.65

TECHNICAL DATA

Stainless steel bar is usually supplied to comply with ASTM A276 (or ASTM A582 for free-machining grades). Both specification refer to ASTM A484M for dimensional tolerances. Available tolerances will vary dependent upon bar section size, condition and finish.

FLAT BAR

Hot-finished (HRAP to ASTM A276 / A484M) These tolerances are for hot finished flat bars, rolled as bars, in HRAP condition. Note that different tolerances apply for flat bar cut from coil, sheet or plate.

WIDTH	THICKNESS TOLERANCE FOR THICKNESS mm			WIDTH TOLERANCE
mm	3.2 to 13	13 to 25	25 to 50	mm (SRE)
UP to 25	+/- 0.20	+/- 0.25	-	+/- 0.40
25 to 50	+/- 0.30	+/- 0.40	+/- 0.80	+/- 0.80
50 to 100	+/- 0.40	+/- 0.50	+/- 0.80	+ 1.6 to - 0.80
100 to 150	+/- 0.40	+/- 0.50	+/- 0.80	+ 2.40 to -1.60

SQUARE & HEXAGONAL BAR

Cold-finished to ASTM A276 / A582 / A484M)

SPECIFIED SIZE mm	SIZE TOLERANCE mm
3.00 to 8.00	+Nil, - 0.05
8.00 to 13.00	+Nil, - 0.08
13.00 to 25.00	+Nil, - 0.10
25.00 to 50.00	+Nil, - 0.15
50.00 to 75.00	+Nil, - 0.20
over 75.00	+Nil, - 0.25

ANGLE BAR

Hot-finished to ASTM A276 / A484M)

LENGTH OF LEG	LEG TOLERANCE
up to 150mm	+/- 3.0mm
over 150mm	+/- 5.0 - 3.0mm

CHANNEL

SPECIFICATIONS:	ASTM A276/A484M
LENGTHS:	6 METRES FIXED
FINISH:	HOT ROLLED, ANNEALED & PICKLED (HRAP)
GRADE:	304 / 316



SIZE mm	304	316
T x H x B		
3 x 40 x 20	☆	☆
3 x 50 x 25	☆	☆
4 x 60 x 30	☆	☆
4 x 35 x 70	☆	☆
4 x 80 x 40	☆	☆
4 x 90 x 45	☆	☆
4 x 100 x 50	☆	☆
5 x 60 x 30	☆	☆
5 x 70 x 35	☆	☆
5 x 80 x 40	☆	★
5 x 90 x 45	☆	☆
5 x 100 x 50	☆	☆
5 x 120 x 60	☆	☆
5 x 130 x 65	☆	☆
6 x 60 x 30	☆	☆
6 x 70 x 35	☆	☆
6 x 80 x 40	☆	☆
6 x 90 x 45	☆	☆
6 x 100 x 50	★	★
6 x 120 x 60	☆	☆
6 x 130 x 65	☆	☆
6 x 140 x 70	☆	☆
6 x 150 x 75	★	★
6 x 160 x 80	☆	☆
6 x 180 x 90	☆	☆
6 x 200 x 100	☆	☆
9 x 150 x 75		★
10 x 200 x 100		★

CHANNEL TOLERANCES - TECHNICAL DATA

UNIT WEIGHT KG/MTR

SIZE mm		THICKNESS T mm						
H x B	3	4	5	6	7	8	9	10
40 x 20	1.79							
50 x 25	2.27							
60 x 30		3.56	4.37	5.12				
70 x 35		4.21	5.17	6.08				
80 x 40		4.48	5.96	7.03				
90 x 45		5.55	6.83	8.05				
100 x 50		6.18	7.62	8.98	10.3	11.7	13.0	14.2
120 x 60			9.20	10.9	12.6	14.2		
130 x 65			10.1	11.9	13.8	15.5	17.3	19.1
140 x 70				12.9	14.9	16.8	19.8	20.7
150 x 75				13.8	16.0	18.1	20.2	22.2
160 x 80				14.8	17.1	19.3	21.6	23.8
180 x 90				16.7	19.4	22.0	24.5	27.0
200 x 100				18.6	21.6	24.5	27.4	30.2

SIZE TOLERANCES

SIZE mm				THICKNESS T mm							
H	Tolerance	B	Tolerance	3	4	5	6	7	8	9	10
40	±1.5	20	±1.5	±0.4							
50	±1.5	25	±1.5	±0.4							
60	±2.0	30	±1.5		±0.4	±0.4	±0.4				
70	±2.0	35	±1.5		±0.4	±0.4	±0.4				
80	±2.0	40	±1.5		±0.4	±0.6	±0.4				
90	±2.0	45	±1.5		±0.4	±0.4	±0.4				
100	±2.0	50	±2.0		±0.6	±0.6	±0.6	±0.4	±0.4	±0.4	±0.6
120	±3.0	60	±3.0			±0.4	±0.4	±0.4	±0.4		
130	±3.0	65	±3.0			±0.4	±0.6	±0.4	±0.4	±0.4	±0.6
140	±3.0	70	±3.0				±0.6	±0.6	±0.6	±0.6	±0.6
150	±3.0	75	±3.0				*±0.6	±0.6	±0.6	*±0.6	±0.6
160	±3.0	80	±3.0				±0.6	±0.6	±0.6	±0.6	±0.6
180	±3.0	90	±3.0				±0.6	±0.6	±0.6	±0.6	±0.6
200	±4.0	100	±3.0				±0.6	±0.6	±0.6	±0.6	±0.6

CHANNEL TOLERANCES - TECHNICAL DATA

UNIT WEIGHT KG/MTR

SIZE mm	THICKNESS T mm							
	3	4	5	6	7	8	9	10
40 x 20	1.79							
50 x 25	2.27							
60 x 30		3.56	4.37	5.12				
70 x 35		4.21	5.17	6.08				
80 x 40		4.48	5.96	7.03				
90 x 45		5.55	6.83	8.05				
100 x 50		6.18	7.62	8.98	10.3	11.7	13.0	14.2
120 x 60			9.20	10.9	12.6	14.2		
130 x 65			10.1	11.9	13.8	15.5	17.3	19.1
140 x 70				12.9	14.9	16.8	19.8	20.7
150 x 75				13.8	16.0	18.1	20.2	22.2
160 x 80				14.8	17.1	19.3	21.6	23.8
180 x 90				16.7	19.4	22.0	24.5	27.0
200 x 100				18.6	21.6	24.5	27.4	30.2

SIZE TOLERANCES

SIZE mm				THICKNESS T mm							
H	Tolerance	B	Tolerance	3	4	5	6	7	8	9	10
40	±1.5	20	±1.5	±0.4							
50	±1.5	25	±1.5	±0.4							
60	±2.0	30	±1.5		±0.4	±0.4	±0.4				
70	±2.0	35	±1.5		±0.4	±0.4	±0.4				
80	±2.0	40	±1.5		±0.4	±0.6	±0.4				
90	±2.0	45	±1.5		±0.4	±0.4	±0.4				
100	±2.0	50	±2.0		±0.6	±0.6	±0.6	±0.4	±0.4	±0.4	±0.6
120	±3.0	60	±3.0			±0.4	±0.4	±0.4	±0.4		
130	±3.0	65	±3.0			±0.4	±0.6	±0.4	±0.4	±0.4	±0.6
140	±3.0	70	±3.0				±0.6	±0.6	±0.6	±0.6	±0.6
150	±3.0	75	±3.0				*±0.6	±0.6	±0.6	*±0.6	±0.6
160	±3.0	80	±3.0				±0.6	±0.6	±0.6	±0.6	±0.6
180	±3.0	90	±3.0				±0.6	±0.6	±0.6	±0.6	±0.6
200	±4.0	100	±3.0				±0.6	±0.6	±0.6	±0.6	±0.6