

BS 5317 – Metric Length Bar Grades and Tolerances

Size mm	Grade 1 (μm)			Grade 2 (μm)		
	Flatness	Parallelism	Length	Flatness	Parallelism	Length
25	0.15	0.16	0.2	0.25	0.3	0.4
50	0.15	0.18	0.4	0.25	0.3	0.5
75	0.15	0.18	0.4	0.25	0.35	0.7
100	0.18	0.2	0.5	0.25	0.35	0.8
125	0.18	0.2	0.6	0.25	0.4	0.9
150	0.18	0.2	0.6	0.25	0.4	1
175	0.2	0.25	0.7	0.25	0.4	1.1
200	0.2	0.25	0.8	0.25	0.4	1.2
225	0.2	0.25	0.8	0.25	0.4	1.2
250	0.2	0.25	0.8	0.25	0.4	1.2
275	0.2	0.25	0.8	0.25	0.4	1.2
300	0.2	0.25	0.8	0.25	0.4	1.2
375	0.2	0.35	1.4	0.25	0.5	2.1
400	0.2	0.35	1.4	0.25	0.5	2.2
500	0.2	0.35	1.4	0.25	0.5	2.2
575	0.2	0.4	2	0.25	0.7	3.1
600	0.2	0.4	2.1	0.25	0.7	3.2
700	0.2	0.4	2.1	0.25	0.7	3.2
775	0.2	0.5	2.6	0.25	0.8	4.1

BS1790 – Inch Length Bar Grades and Tolerances

Size (inch)	Grade Inspection (μ inch)			Grade Workshop (μ inch)		
	Flatness	Parallelism	Length	Flatness	Parallelism	Length
1	5	5	0	7	10	0
2	5	5	7	7	10	10
3	7	7	10	10	15	10
4	7	7	20	10	15	20
5	7	10	20	10	15	20
6	7	10	20	10	15	30
7	7	10	30	10	15	30
8	7	10	30	10	15	40
9	-	-	-			
10	-	-	-			
11	-	-	-			
12	-	-	-			
15	7	20	60	10	20	70
18	-	-	-			
23	7	20	90	10	25	110

Please Note:

Intermediate size bars are made to the same tolerances as the next larger size