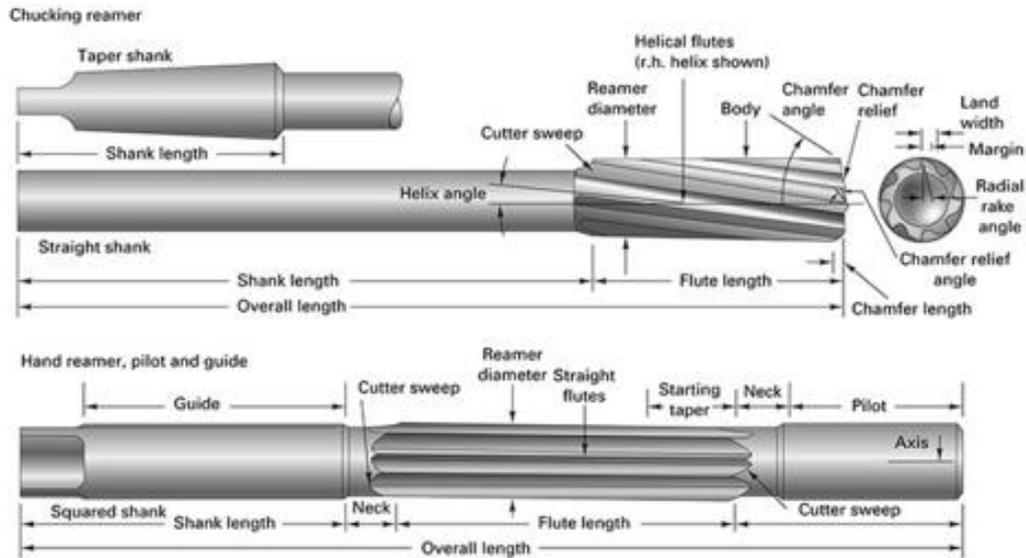


Reamers (Counterbores & Counter Sinks)

Nomenclature



- **Parallel Hand Reamers**
- **Machine Reamers**
- **Machine Jig Reamers**
- **Chucking Reamers**
- **Shell Reamers**
- **Shell Core Drills**
- **Shell Drills**
- **Socket Reamers**
- **Pin Reamers**
- **Machine Bridge Reamers**
- **Centre Reamers**
- **Counter Bores**
- **Counter Sinks**

Parallel Hand Reamers – Din 206



Diameters		Cutting Edge Length	Overall Length
mm	Inch		
3.0	-	31	62
-	1/8	33	66
3.5	-	35	71
4.0	5/32	38	76
4.5	-	41	81
5.0	3/16	44	87
5.5	7/32	47	93
6.0	-	47	93
-	1/4	50	100
7.0	9/32	54	107
8.0	5/16	58	115
9.0	11/32	62	124
10.0	3/8,13/32	66	133
11.0	7/16	71	142
12.0	15/32	76	152
13.0	1/2	76	152
14.0	9/16	81	163
15.0	-	81	163
16.0	5/8	87	175
17.0	-	87	175
18.0	11/16	93	188
19.0	-	93	188

Diameters		Cutting Edge Length	Overall Length
mm	Inch		
20.0	3/4	100	201
21.0	13/16	100	201
22.0	7/8	107	215
23.0	-	107	215
24.0	15/16	115	231
25.0	1	115	231
26.0	-	115	231
27.0	1.1/16	124	247
28.0	1.1/8	124	247
30.0	-	124	247
32.0	1.3/16,1.1/4,1.5/16	133	265
34.0	-	142	284
35.0	1.3/8	142	284
36.0	1.7/16	142	284
38.0	1.1/2	152	305
40.0	-	152	305
42.0	1.5/8	152	305
44.0	1.3/4	163	326
45.0	-	163	326
46.0	-	163	326
48.0	1.7/8	174	347
50.0	2	174	347

Diameters		Cutting Edge Length	Overall Length
mm	Inch		
52.00	2.1/16	174	347
55.00	2.1/8	184	367
56.00	2.3/16	184	367
58.00	2.1/4	184	367
60.00	2.5/16	184	367
62.00	2.3/8, 2.7/16	194	387
63.00	2.1/2	194	387
67.00	-	194	387
71.00	-	203	406



Machine Reamers



Diameter		Cutting Edge-length	Overall Length	Morse Taper No.
mm	Inch			
3.00	-	31.00	111	1
-	1/8	33.00	113	1
4.00	5/32	38.00	118	1
5.00	3/16	44.00	124	1
6.00	-	47.00	127	1
-	1/4	50.00	130	1
7.00	9/32	54.00	134	1
8.00	5/16	58.00	138	1
9.00	11/32	62.00	142	1
10.00	3/8,13/32	66	146	1
11.00	7/16	71	151	1
12.00	15/32	76	156	1
13.00	1/2	76	156	1
14.00	-	81	161	1
15.00	9/16	81	181	2
16.00	5/8	87	187	2
17.00	-	87	187	2
18.00	11/16	93	193	2
19.00	-	93	193	2
20.00	3/4	100	200	2
21.00	13/16	100	200	2
22.00	7/8	107	207	2
23.00	-	107	207	2
24.00	15/16	115	242	3
25.00	1	115	242	3
26.00	-	115	242	3

Diameter		Cutting Edge length	Overall Length	Morse Taper No.
mm	Inch			
27.00	1.1/16	124	251	3
28.00	1.1/8	124	251	3
30.00	-	124	251	3
-	1.3/16,1.1/4	133	260	3
32.00	1.5/16	133	293	4
34.00	-	142	302	4
35.00	1.3/8	142	302	4
36.00	1.7/16	142	302	4
38.00	1.1/2	152	312	4
40.00	-	152	312	4
42.00	1.5/8	152	312	4
44.00	-	163	323	4
45.00	1.3/4	163	323	4
46.00	-	163	323	4
48.00	1.7/8	174	334	4
50.00	2	174	334	4
52.00	-	174	371	5
55.00	-	184	381	5
56.00	-	184	381	5
58.00	2.1/4	184	381	5
60.00	-	184	381	5
62.00	-	194	391	5
63.00	2.1/2	194	391	5
67.00	-	194	391	5
71.00	-	203	400	5
-	3	212	409	5



Machine Jig Reamers



IS 11002

Diameter m6	Cutting Edge Length	Overall Length	Morse Taper No.
mm			
6.0	26	138	1
7.0	31	150	1
8.0	33	156	1
9.0	36	162	1
10.0	38	168	1
11.0	41	175	1
12.0	44	182	1
13.0	44	182	1
14.0	47	189	1
15.0	50	204	2
16.0	52	210	2
17.0	54	214	2
18.0	56	219	2
19.0	58	223	2
20.0	60	228	2
22.0	64	237	2
24.0	68	268	3

Diameter m6	Cutting Edge Length	Overall Length	Morse Taper No.
mm			
25.0	68	268	3
26.0	70	273	3
28.0	71	277	3
30.0	73	281	3
32.0	77	317	4
34.0	78	321	4
35.0	78	321	4
36.0	79	325	4
38.0	81	329	4
40.0	81	329	4
42.0	82	333	4
44.0	83	336	4
45.0	83	336	4
46.0	84	340	4
48.0	86	344	4
50.0	86	344	4

BS 122

Diameter m6	Cutting Edge Length	Overall Length	Morse Taper No
1/4	7/8	5.5/8	1
5/16	1	5.15/16	1
3/8	1.1/8	6.1/4	1
7/16	1.5/16	6.11/16	1
1/2	1.5/16	6.11/16	1
9/16	1.1/2	7.13/16	2
5/8	1.1/2	7.13/16	2
11/16	1.3/4	8.7/16	2
3/4	1.3/4	8.7/16	2
13/16	1.3/4	8.7/16	2
7/8	2	8.7/8	2
15/16	2	9.15/16	3
1	2	9.15/16	3

Diameter m6	Cutting Edge Length	Overall Length	Morse Taper No
1.1/6	2.3/8	10.3/4	3
1.1/8	2.3/8	10.3/4	3
1.3/16	2.3/8	10.3/4	3
1.1/4	2.3/8	10.3/4	3
1.5/16	2.3/8	12	4
1.3/8	2.3/4	13.1/8	4
1.7/16	2.3/4	13.1/8	4
1.1/2	2.3/4	13.1/8	4
1.5/8	2.3/4	13.1/8	4
1.3/4	3.1/8	14.5/16	4
1.7/8	3.1/8	14.5/16	4
2	3.1/8	14.5/16	4

Chucking Reamers – Parallel & Taper Shank

BS 328



Diameter		Dia of Shank	Cutting Edge Length	Overall Length
mm	inch			
3.0	-	3.0	15	61
-	1/8	3.175	16	65
3.2	-	3.2	16	65
3.5	-	3.5	18	70
4.0	5/32	4.0	19	75
4.5	-	4.5	21	80
5.0	3/16	5.0	23	86
5.5	7/32	5.6	26	93
6.0	-	5.6	26	93
-	1/4	6.3	28	101
7.0	9/32	7.1	31	109
8.0	5/16	8.0	33	117

Diameter		Dia of Shank	Cutting Edge Length	Overall Length
mm	inch			
9.0	11/32	9.0	36	125
10.0	-	10.0	38	133
11.0	7/16	10.0	41	142
12.0	15/32	10.0	44	151
13.0	1/2	10.0	44	151
14.0	-	12.5	47	160
15.0	9/16	12.5	50	162
16.0	5/8	12.5	52	170
17.0	-	14.0	54	175
18.0	-	14.0	56	182
19.0	-	16.0	58	189
20.0	-	16.0	60	195



Diameter		Cutting Edge length	Overall Length	Morse Taper No
mm	inch			
3.0	-	15	122	1
3.2	-	16	124	1
3.5	-	18	126	1
4.0	5/32	19	128	1
4.5	-	21	130	1
5.0	3/16	23	133	1
5.5	-	26	138	1
6.0	-	26	138	1
-	1/4	28	144	1
7.0	-	31	150	1
8.0	5/16	33	156	1
9.0	-	36	162	1
10.0	3/8	38	168	1
11.0	7/16	41	175	1
12.0	-	44	182	1
13.0	1/2	44	182	1
14.0	-	47	189	1
15.0	9/16	50	204	2
16.0	5/8	52	210	2
17.0	-	54	214	2
18.0	11/16	56	219	2
19.0	-	58	223	2

Diameter		Cutting Edge length	Overall Length	Morse Taper No
mm	inch			
20.0	3/4	60	228	2
-	13/16	62	232	2
22.0	7/8	64	237	2
24.0	15/16	68	268	3
25.0	-	68	268	3
26.0	1	70	273	3
28.0	1,1/16	71	277	3
30.0	1,1/8	73	281	3
-	1,3/16	75	285	3
-	1,1/4	77	290	3
32.0	1,5/16	77	317	4
34.0	-	78	321	4
35.0	1,3/8	78	321	4
36.0	1,7/16	79	325	4
38.0	1,1/2	81	329	4
40.0	-	81	329	4
42.0	1,5/8	82	333	4
44.00	-	83	336	4
45.00	1,3/4	83	336	4
46.00	-	84	340	4
48.00	1,7/8	86	344	4
50.00	2	86	344	4

Shell Reamers – DIN 219 – IS 5926 – (mm)



Diameter	Large End Dia of Taper Bore	Cutting Edge Length	Overall Length
21	10	28	40
22	10	28	40
23	10	28	40
24	13	32	45
25	13	32	45
26	13	32	45
27	13	32	45
28	13	32	45
29	13	32	45
30	13	32	45
31	16	36	50
32	16	36	50
33	16	36	50
34	16	36	50
35	16	36	50
36	19	40	56
37	19	40	56
38	19	40	56
39	19	40	56
40	19	40	56
41	19	40	56
42	19	40	56

Diameter	Large End Dia of Taper Bore	Cutting Edge Length	Overall Length
43	22	45	63
44	22	45	63
45	22	45	63
46	22	45	63
47	22	45	63
48	22	45	63
49	22	45	63
50	22	45	63
51	27	50	71
52	27	50	71
53	27	50	71
54	27	50	71
55	27	50	71
56	27	50	71
57	27	50	71
58	27	50	71
59	27	50	71
60	27	50	71
61	32	56	80
62	32	56	80
63	32	56	80
64	32	56	80

Diameter	Large End Dia of Taper Bore.	Cutting Edge Length	Overall Length
65	32	56	80
66	32	56	80
67	32	56	80
68	32	56	80
69	32	56	80
70	32	56	80
71	32	56	80
72	40	63	90
73	40	63	90
74	40	63	90
75	40	63	90
76	40	63	90
77	40	63	90
78	40	63	90
79	40	63	90
80	40	63	90
81	40	63	90
82	40	63	90

Diameter	Large End Dia of Taper Bore.	Cutting Edge Length	Overall Length
83	40	63	90
84	40	63	90
85	40	63	90
86	50	71	100
87	50	71	100
88	50	71	100
89	50	71	100
90	50	71	100
91	50	71	100
92	50	71	100
93	50	71	100
94	50	71	100
95	50	71	100
96	50	71	100
97	50	71	100
98	50	71	100
99	50	71	100
100	50	71	100

Shell Reamers – BS 328 – (inches)



Diameter m6	Cutting Edge Length	Overall Length	Diameter* of large End of Taper Bore
1	2.1/4	2.3/4	0.625
1.1/16	2.1/4	2.3/4	0.625
1.1/8	2.1/4	2.3/4	0.625
1.3/16	2.1/4	2.3/4	0.625
1.1/4	2.1/4	2.3/4	0.625
1.5/16	2.3/8	3	0.750
1.3/8	2.3/8	3	0.750
1.7/16	2.3/8	3	0.750
1.1/2	2.3/8	3	0.750
1.9/16	2.3/8	3	0.750
1.5/8	2.3/8	3	0.750
1.11/16	2.3/4	3.1/2	1.000
1.3/4	2.3/4	3.1/2	1.000
1.13/16	2.3/4	3.1/2	1.000
1.7/8	2.3/4	3.1/2	1.000
1.15/16	2.3/4	3.1/2	1.000
2	2.3/4	3.1/2	1.000
2.1/16	3	3.3/4	1.250
2.1/8	3	3.3/4	1.250

Diameter m6	Cutting Edge Length	Overall Length	Diameter* of large End of Taper Bore
2.3/16	3	3.3/4	1.250
2.1/4	3	3.3/4	1.250
2.5/16	3	3.3/4	1.250
2.3/8	3	3.3/4	1.250
2.7/16	3	3.3/4	1.250
2.1/2	3.1/4	4	1.500
2.5/8	3.1/4	4	1.500
2.3/4	3.1/4	4	1.500
2.7/8	3.1/4	4	1.500
3	3.1/4	4	1.500
3.1/8	3.3/4	4.1/2	1.750
3.1/4	3.3/4	4.1/2	1.750
3.3/8	3.3/4	4.1/2	1.750
3.1/2	3.3/4	4.1/2	1.750
3.5/8	4.1/4	5	2.000
3.3/4	4.1/4	5	2.000
3.7/8	4.1/4	5	2.000
4	4.1/4	5	2.000



Shell Core Drills

DIN 222 (mm)



Diameter h8	Dia of Large end of Taper Bore	Overall Length
25	13	45
26	13	45
27	13	45
28	13	45
29	13	45
30	13	45
31	13	45
32	13	45
33	13	45
34	13	45
35	13	45
36	16	50
37	16	50
38	16	50
39	16	50
40	16	50
42	16	50
44	16	50
45	16	50

Diameter h8	Dia of Large end of Taper Bore	Overall Length
46	19	56
47	19	56
48	19	56
50	19	56
52	19	56
55	22	63
58	22	63
60	22	63
62	22	63
65	27	71
70	27	71
72	27	71
75	27	71
80	32	80
85	32	80
90	32	80
95	40	90
100	40	90





Shell Drills

(inches)



Diameter h8	Cutting Edge length	Overall Length	Diameter* of large end of Taper bore	Diameter h8	Cutting Edge length	Overall Length	Diameter* of large end of Taper bore
1	2.1/4	2.3/4	0.625	2.3/16	3	3.3/4	1.250
1.1/16	2.1/4	2.3/4	0.625	2.1/4	3	3.3/4	1.250
1.1/8	2.1/4	2.3/4	0.625	2.5/16	3	3.3/4	1.250
1.3/16	2.1/4	2.3/4	0.625	2.3/8	3	3.3/4	1.250
1.1/4	2.1/4	2.3/4	0.625	2.7/16	3	3.3/4	1.250
1.5/16	2.3/8	3	0.750	2.1/2	3.1/4	4	1.500
1.3/8	2.3/8	3	0.750	2.5/8	3.1/4	4	1.500
1.7/16	2.3/8	3	0.750	2.3/4	3.1/4	4	1.500
1.1/2	2.3/8	3	0.750	2.7/8	3.1/4	4	1.500
1.9/16	2.3/8	3	0.750	3	3.1/4	4	1.500
1.5/8	2.3/8	3	0.750	3.1/8	3.3/4	4.1/2	1.750
1.11/16	2.3/4	3.1/2	1.000	3.1/4	3.3/4	4.1/2	1.750
1.3/4	2.3/4	3.1/2	1.000	3.3/8	3.3/4	4.1/2	1.750
1.13/16	2.3/4	3.1/2	1.000	3.1/2	3.3/4	4.1/2	1.750
1.7/8	2.3/4	3.1/2	1.000	3.5/8	4.1/4	5	2.000
1.15/16	2.3/4	3.1/2	1.000	3.3/4	4.1/4	5	2.000
2	2.3/4	3.1/2	1.000	3.7/8	4.1/4	5	2.000
2.1/16	3	3.3/4	1.250	4	4.1/4	5	2.000
2.1/8	3	3.3/4	1.250				



Socket Reamers – Parallel Shank

BS 328 (mm)



Designation	Cutting Edge length	Overall Length	Dia. of Shank
Morse No.0	61	93	8
Morse No.1	66	102	10
Morse No.2	79	121	14
Morse No.3	96	146	20

Designation	Cutting Edge length	Overall Length	Dia. of Shank
Morse No.4	119	179	25.0
Morse No.5	150	222	31.5
Morse No.6	208	300	45.0

Socket Reamers – Taper Shank

BS 328 (mm)



Designation	Cutting Edge Length	Overall Length	Morse Taper No.
Morse No.0	61	137	1
Morse No.1	66	142	1
Morse No.2	79	173	2
Morse No.3	96	212	3

Designation	Cutting Edge Length	Overall Length	Morse Taper No.
Morse No.4	119	263	4
Morse No.5	150	331	5
Morse No.6	208	389	5

Pin Reamers – Hand Taper Shank

DIN 9 (mm)



Nom. Diameter	Cutting Edge Length	Overall Length
3	58	80
4	68	93
5	73	100
6	105	135
8	145	180
10	175	215
12	210	255

Nom. Diameter	Cutting Edge Length	Overall Length
16	230	280
20	250	310
25	300	370
30	320	400
40	340	430
50	360	460

Pin Reamers – Hand Taper Shank

BS 328 (inches)



Nom. Diameter	Cutting Edge Length	Overall Length	Large End Dia. and Dia. of Shank	Small End Dia.
1/8	1.3/4	2.3/4	0.127	0.0905
9/64	1.7/8	2.7/8	0.143	0.1039
5/32	2	3	0.158	0.1163
11/64	2.1/4	3.1/2	0.174	0.1271
3/16	2.3/4	4	0.195	0.1377
7/32	2.3/4	4	0.220	0.1627
1/4	3.3/8	4.5/8	0.253	0.1827
9/32	4.1/8	5.5/8	0.292	0.2061
5/16	4.1/8	5.5/8	0.316	0.2301
11/32	4.1/2	6	0.347	0.2533
3/8	5	6.1/2	0.381	0.2768
13/32	5.3/4	7.1/2	0.412	0.2922
7/16	5.3/4	7.1/2	0.443	0.3232
1/2	6.1/2	8.1/4	0.506	0.3706
9/16	6.3/4	8.1/2	0.571	0.4304
5/8	7.1/2	9.1/4	0.633	0.4768
3/4	8.3/4	10.3/4	0.760	0.5777
7/8	9.1/2	12	0.885	0.6871

Pin Reamers – Machine Taper Shank (mm)



Nom. Diameter	Cutting Edge length	Overall Length	Morse Taper No.
3	58	140	1
4	68	150	1
5	73	155	1
6	105	187	1
8	145	227	1
10	175	257	1
12	210	315	2

Nom. Diameter	Cutting Edge length	Overall Length	Morse Taper No.
16	230	335	2
20	250	377	3
25	300	427	3
30	320	475	4
40	340	495	4
50	360	550	5

Pin Reamers – Machine Taper Shank (inches)



Nom. Diameter	Cutting Edge Length	Overall length	Large End Dia.	Small End Dia.	Morse Taper No.
3/16	3.1/8	6.1/16	0.199	0.1337	1
7/32	3.3/16	6.1/8	0.225	0.1581	1
1/4	3.7/8	6.13/16	0.258	0.1775	1
9/32	4.5/8	7.5/8	0.297	0.2009	1
5/16	4.5/8	7.5/8	0.321	0.2249	1
11/32	5.3/32	8.3/32	0.353	0.2471	1
3/8	5.13/16	8.7/8	0.389	0.2683	1
13/32	6.9/16	9.5/8	0.420	0.2837	1
7/16	6.11/16	9.3/4	0.453	0.3134	1
1/2	7.7/16	10.1/2	0.516	0.3608	1
9/16	7.3/4	11.1/2	0.581	0.4200	2
5/8	8.1/2	12.1/4	0.643	0.4664	2
3/4	9.3/4	13.1/2	0.770	0.5673	2
7/8	10.1/2	14.1/4	0.895	0.6767	2

Bridge Reamers – Machine

DIN 311 (mm/inches)



Diameter k11		Cutting Edge Length	Overall Length	Morse Taper No.
mm	inch			
6.4	1/4	75	151	1
7.4	—	80	156	1
8.4	5/16	85	161	1
9.4	—	90	166	1
10.0	3/8	95	171	1
11.0	7/16	100	176	1
11.5	—	100	176	1
12.0	—	105	199	2
13.0	1/2	105	199	2
13.5	—	115	209	2
14.0	—	115	209	2
15.0	9/16	125	219	2
—	5/8	135	229	2
17.0	—	136	251	3
17.5	—	145	261	3
18.0	—	145	261	3
19.0	11/16	145	261	3
20.0	3/4	155	271	3
21.0	13/16	155	271	3
21.5	—	165	281	3
22.0	—	165	281	3
23.0	7/8	165	281	3
23.5	—	165	281	3
24.0	15/16	180	296	3
25.0	—	180	296	3
26.0	1	180	296	3
27.0	1.1/16	195	311	3
28.0	—	195	311	3
29.0	1.1/8	195	311	3
30.0	—	195	311	3
31.0	1.3/16	210	326	3
32.0	1.1/4	210	354	4
33.0	1.5/16	210	354	4
34.0	—	220	364	4
35.0	1.3/8	220	364	4
36.0	1.7/16	220	364	4
37.0	—	220	364	4
40.0	1.1/2	230	374	4
43.0	—	240	384	4
49.0	—	250	394	4

Centre Reamers – (60° to 90°)

(inches)



Body Diameter	Overall Length	Length of Shank	Diameter of Shank
1/4	1.1/2	3/4	3/16
3/8	1.3/4	7/8	1/4
1/2	2	1	3/8
5/8	2.1/4	1	3/8
3/4	2.5/8	1.1/4	1/2

Counter Bores

BS 122

(inches)



Diameter	Cutting Edge Length	Overall Length	Morse Taper No.	Pilot Dia.
1/4	3/8	3.3/4	1	1/8
5/16	7/16	4	1	3/16
3/8	1/2	4.1/4	1	7/32
7/16	5/8	4.1/2	1	1/4
1/2	3/4	4.3/4	1	5/16
9/16	13/16	5.3/8	2	3/8
5/8	7/8	5.5/8	2	7/16
11/16	15/16	5.7/8	2	7/16
3/4	1	5.15/16	2	1/2
13/16	1.1/16	6.3/16	2	9/16
7/8	1.1/8	6.7/16	2	5/8
15/16	1.1/4	7.7/16	3	5/8
1	1.3/8	7.1/2	3	3/4
1.1/8	1.1/2	7.3/4	3	3/4
1.1/4	1.5/8	8	3	3/4
1.3/8	1.3/4	9	4	13/16
1.1/2	1.7/8	9	4	7/8
1.5/8	2	9	4	15/16
1.3/4	2.1/8	9	4	1
1.7/8	2.1/4	9	4	1.1/8
2	2.1/2	9	4	1.1/4



Counter Sinks – (60°, 90°, 120°) – Parallel & Taper Shank **BS 328** (mm/inches)



Diameter z9	Dia. of Shank h9	Cutting Edge Length	Over all Length
10.0	8.0	18	80
11.0	8.0	18	80
12.0	8.0	18	80
12.5	8.0	18	80
13.0	12.5	22	100
14.0	12.5	22	100
15	12.5	22	100
16	12.5	22	100
17	12.5	22	100
18	12.5	22	100
19	12.5	22	100
20	12.5	22	100

