

# Hardened & Ground linear shafting

## Tolerance Guide

Metric (mm dimensions unless otherwise specified)

Nominal Diameter	Class h6 / Class M		Class g6		Class g5		Min. Depth of Hardness
	Lower	Upper	Lower	Upper	Lower	Upper	
2	1.992	2.000	1.988	1.996	1.991	1.996	1.0
3	2.992	3.000	2.988	2.996	2.991	2.996	1.0
4	3.992	4.000	3.988	3.996	3.991	3.996	1.0
5	4.992	5.000	4.988	4.996	4.991	4.996	1.0
6	5.991	6.000	5.986	5.995	5.989	5.995	1.0
8	7.991	8.000	7.986	7.995	7.989	7.995	1.0
10	9.989	10.000	9.983	9.994	9.986	9.994	1.0
12	11.989	12.000	11.983	11.994	11.986	11.994	1.6
13	12.989	13.000	12.983	12.994	12.986	12.994	1.6
14	13.989	14.000	13.983	13.994	13.986	13.994	1.6
15	14.989	15.000	14.983	14.994	14.986	14.994	1.6
16	15.989	16.000	15.983	15.994	15.986	15.994	1.6
20	19.987	20.000	19.980	19.993	19.984	19.993	2.2
25	24.987	25.000	24.980	24.993	24.984	24.993	2.2
30	29.984	30.000	29.975	29.991	29.980	29.991	2.2
40	39.984	40.000	39.975	39.991	39.980	39.991	3.5
50	49.981	50.000	49.971	49.990	49.997	49.990	3.5
60	59.981	60.000	59.971	59.990	59.997	59.990	3.5
80	79.978	80.000	79.966	79.988	79.973	79.988	3.5
100	99.978	100.000	99.966	99.988	99.973	99.988	4.0
120	119.975	120.000	119.961	119.986	119.968	119.986	4.0
150	149.975	150.000	149.961	149.986	149.968	149.986	4.0

## Hardness and Depth of Hardness

As one of the more critical elements in shafting selection, the appropriate choice of material hardness and the depth of hardness (for case hardened material) will ensure an appropriate resistance to wear, higher strength, and increased load-carrying capacity. The result is an improved resistance against deformation, bending, and rotational fatigue, as well as the ability to maintain critical dimensions over a longer period of time which will extend the life of your applications.

CRD Devices Ltd offers shafts ranging in hardness from:

- Rockwell 50-55C (Stainless Steels and 440C)
- Rockwell 60-65C (Solid and hollow/tube)
- Hard chrome and plated steels, typically plated to a standard plating depth of .015 ±.005mm micro-crack structure