

CASE HARDENED PRECISION LINEAR SHAFTING

Visit us on the Internet at:
www.rotoprecision.ca

Imperial (inch dimensions unless specified otherwise)

| Nominal Diameter (inch) | Class L | | Class S | | Class R / Class N | | Class D (Oversize) | | Min.Depth of Hardness | Weight lb / inch |
|-------------------------|---------|--------|---------|--------|-------------------|--------|--------------------|--------|-----------------------|------------------|
| | Lower | Upper | Lower | Upper | Lower | Upper | Lower | Upper | | |
| 1/8 | 0.1240 | 0.1245 | 0.1235 | 0.1240 | 0.1248 | 0.1250 | | | 0.040 | 0.004 |
| 3/16 | 0.1865 | 0.1870 | 0.1860 | 0.1865 | 0.1873 | 0.1875 | | | 0.040 | 0.008 |
| 1/4 | 0.2490 | 0.2495 | 0.2485 | 0.2490 | 0.2498 | 0.2500 | | | 0.040 | 0.014 |
| 3/8 | 0.3740 | 0.3745 | 0.3735 | 0.3740 | 0.3748 | 0.3750 | | | 0.040 | 0.031 |
| 1/2 | 0.4990 | 0.4995 | 0.4985 | 0.4990 | 0.4998 | 0.5000 | | | 0.060 | 0.056 |
| 5/8 | 0.6240 | 0.6245 | 0.6235 | 0.6240 | 0.6248 | 0.6250 | | | 0.060 | 0.087 |
| 3/4 | 0.7490 | 0.7495 | 0.7485 | 0.7490 | 0.7498 | 0.7500 | | | 0.085 | 0.125 |
| 7/8 | 0.8740 | 0.8745 | 0.8735 | 0.8740 | 0.8748 | 0.8750 | | | 0.085 | 0.170 |
| 1 | 0.9990 | 0.9995 | 0.9985 | 0.9990 | 0.9998 | 1.0000 | 1.0000 | 1.0003 | 0.085 | 0.223 |
| 1-1/8 | 1.1240 | 1.1245 | 1.1235 | 1.1240 | 1.1248 | 1.1250 | | | 0.085 | 0.282 |
| 1-1/4 | 1.2490 | 1.2495 | 1.2485 | 1.2490 | 1.2498 | 1.2500 | 1.2500 | 1.2503 | 0.085 | 0.348 |
| 1-3/8 | 1.3740 | 1.3745 | 1.3735 | 1.3740 | 1.3747 | 1.3750 | | | 0.085 | 0.421 |
| 1-1/2 | 1.4989 | 1.4994 | 1.4984 | 1.4989 | 1.4997 | 1.5000 | 1.5000 | 1.5003 | 0.140 | 0.501 |
| 1-5/8 | 1.6240 | 1.6245 | 1.6235 | 1.6240 | 1.6247 | 1.6250 | | | 0.140 | 0.588 |
| 1-3/4 | 1.7490 | 1.7495 | 1.7485 | 1.7490 | 1.7497 | 1.7500 | | | 0.140 | 0.682 |
| 2 | 1.9987 | 1.9994 | 1.9980 | 1.9987 | 1.9997 | 2.0000 | 2.0000 | 2.0003 | 0.140 | 0.890 |
| 2-1/2 | 2.4985 | 2.4993 | 2.4977 | 2.4985 | 2.4996 | 2.5000 | | | 0.140 | 1.391 |
| 3 | 2.9983 | 2.9992 | 2.9974 | 2.9983 | 2.9996 | 3.0000 | | | 0.140 | 2.003 |
| 3-1/2 | 3.4980 | 3.4990 | 3.4974 | 3.4983 | 3.4996 | 3.5000 | | | 0.160 | 2.726 |
| 4 | 3.9976 | 3.9988 | 3.9964 | 3.9976 | 3.9996 | 4.0000 | | | 0.160 | 3.560 |

Metric (mm dimensions unless specified otherwise)

| Nominal Diameter (mm) | Class h6 / Class M | | Class g6 | | Class g5 | | Min.Depth of Hardness | Weight lb / inch |
|-----------------------|--------------------|---------|----------|---------|----------|---------|-----------------------|------------------|
| | Lower | Upper | Lower | Upper | Lower | Upper | | |
| 2 | 1.992 | 2.000 | 1.988 | 1.996 | 1.991 | 1.996 | 1.0 | 0.001 |
| 3 | 2.992 | 3.000 | 2.988 | 2.996 | 2.991 | 2.996 | 1.0 | 0.003 |
| 4 | 3.992 | 4.000 | 3.988 | 3.996 | 3.991 | 3.996 | 1.0 | 0.006 |
| 5 | 4.992 | 5.000 | 4.988 | 4.996 | 4.991 | 4.996 | 1.0 | 0.009 |
| 6 | 5.991 | 6.000 | 5.986 | 5.995 | 5.989 | 5.995 | 1.0 | 0.013 |
| 8 | 7.991 | 8.000 | 7.986 | 7.995 | 7.989 | 7.995 | 1.0 | 0.022 |
| 10 | 9.989 | 10.000 | 9.983 | 9.994 | 9.986 | 9.994 | 1.0 | 0.035 |
| 12 | 11.989 | 12.000 | 11.983 | 11.994 | 11.986 | 11.994 | 1.6 | 0.050 |
| 13 | 12.989 | 13.000 | 12.983 | 12.994 | 12.986 | 12.994 | 1.6 | 0.058 |
| 14 | 13.989 | 14.000 | 13.983 | 13.994 | 13.986 | 13.994 | 1.6 | 0.068 |
| 15 | 14.989 | 15.000 | 14.983 | 14.994 | 14.986 | 14.994 | 1.6 | 0.083 |
| 16 | 15.989 | 16.000 | 15.983 | 15.994 | 15.986 | 15.994 | 1.6 | 0.088 |
| 20 | 19.987 | 20.000 | 19.980 | 19.993 | 19.984 | 19.993 | 2.2 | 0.138 |
| 25 | 24.987 | 25.000 | 24.980 | 24.993 | 24.984 | 24.993 | 2.2 | 0.216 |
| 30 | 29.984 | 30.000 | 29.975 | 29.991 | 29.980 | 29.991 | 2.2 | 0.311 |
| 40 | 39.984 | 40.000 | 39.975 | 39.991 | 39.980 | 39.991 | 3.5 | 0.553 |
| 50 | 49.981 | 50.000 | 49.971 | 49.990 | 49.977 | 49.990 | 3.5 | 0.862 |
| 60 | 59.981 | 60.000 | 59.971 | 59.990 | 59.977 | 59.990 | 3.5 | 1.243 |
| 80 | 79.978 | 80.000 | 79.966 | 79.988 | 79.973 | 79.988 | 3.5 | 2.212 |
| 100 | 99.978 | 100.000 | 99.966 | 99.988 | 99.973 | 99.988 | 4.0 | 3.455 |
| 120 | 119.975 | 120.000 | 119.961 | 119.986 | 119.968 | 119.986 | 4.0 | 4.973 |
| 150 | 149.975 | 150.000 | 149.961 | 149.986 | 149.968 | 149.986 | 4.0 | 7.784 |

ASK US ABOUT

- Sameday delivery services
- Pre-drilled shafting
- Rails, supports and shaft assemblies
- Material options including stainless steel and special coatings
- Custom grinding to any size
- Special precision tolerances



Toronto
1-800-387-7494

Montreal
1-800-495-4395

Vancouver
1-800-680-7686

Rotoprecision Inc.
Precision in Motion

CASE-HARDENED PRECISION LINEAR SHAFTING

RotoPrecision offers a full range of precision ground, case-hardened linear shafting from our Canadian inventories and supported by in-house cutting facilities.



www.rotoprecision.ca

When ordering case-hardened linear shafting, please consider the following. . .

1) NOMINAL SHAFT DIAMETER

We offer the widest range of standard inch and metric diameters and tolerances in Canada ranging from 1/8" to 4" and 2mm to 150mm (see reverse side for additional information). Custom diameters and special precision tolerances are also available.

2) LENGTH

We offer single length shafts up to 300" for most diameters including 3/4" and above, and 188" for diameters below 3/4". Our standard length tolerance is $\pm 1/16"$ for diameters including 2" and above, and $\pm 1/32"$ for diameters below 2". Extra-long lengths and tighter tolerances are also available.

3) MATERIAL OPTIONS

Our standard material is induction case-hardened carbon steel with a Rockwell hardness of 60-65C. Other materials available include stainless steel (Rockwell 50-55C), chrome-plated steel, tubular carbon and tubular stainless steel. Other special materials can be supplied if required.

4) QUANTITY AND DELIVERY

For regular stock, shafts can be cut and shipped from one of our multiple stocking locations on the same day that the order is received. All shafts are coated with a corrosion inhibitor and packaged in cardboard tubes or wooden crates for protection and to ensure that straightness tolerances are maintained during transport. Alternative packaging methods are available. Customized delivery times and schedules can be arranged if requested.

DID YOU KNOW?

We offer full Application Support Services to assist you with your shafting inquiries including design information, technical drawings, deflection calculations, and helpful advice when you need to consider creative solutions to difficult applications.

DID YOU KNOW?

We can supply a wide range of pre-drilled linear shafting and support rails for any number of configurations and applications. Ask us about our same day delivery!

DID YOU KNOW?

Our European machining facility can custom grind linear shafting to any diameter and tolerance that your customer may require. At RotoPrecision, we make special shafts and challenging applications standard.

DID YOU KNOW?

We offer a full range of machining services including special chamfers, straightness tolerances and surface finishes as well as custom drilling, tapping, flats and keyways. Let us help you simplify your ordering process by managing your machining requirements.

DID YOU KNOW?

We stock one of the largest ranges of linear bearings, bushings and housings in Canada. Why manage multiple orders from multiple vendors when you can get it all at one place?

At RotoPrecision, we have a dedicated division specifically to serve and respond to the needs of the Distribution Sector. We do not sell end-use. We support OEM business through Distribution.

Why not try us today?
Our products, support and service are second-to-none!



Toronto
1-800-387-7494

Montreal
1-800-495-4395

Vancouver
1-800-680-7686

/// RotoPRECISION Inc.
Precision in Motion