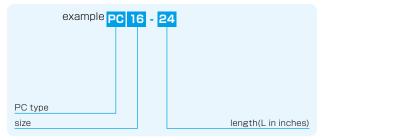
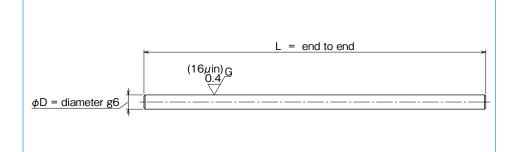




part number structure





| | Outer D | jameter | Length | | | | | | | | Mass |
|--------------|---------|---------|--------|-------|-------|-------|-----|-------|--------|--------|----------|
| Part | | | L | | | | | | | | |
| Number | D | g6 | inch | | | | | | | | lbs/inch |
| | inch/mm | inch/mm | mm | | | | | | | | kg/m |
| PC 4 | 1/4 | 0002 | 6 | 12 | 18 | 24 | | | | | 0.014 |
| | 6.350 | 0006 | 152.4 | 304.8 | 457.2 | 609.6 | | | | | 0.25 |
| PC 6 | 3/8 | -5 | 6 | 12 | 18 | 24 | | | | | 0.031 |
| | 9.525 | -14 | 152.4 | 304.8 | 457.2 | 609.6 | | | | | 0.56 |
| PC 8 | 1/2 | 0002 | | 12 | 18 | 24 | 30 | 36 | | | 0.056 |
| | 12.700 | 0007 | | 304.8 | 457.2 | 609.6 | 762 | 914.4 | | | 0.99 |
| PC 10 | 5/8 | -6 | | 12 | 18 | 24 | 30 | 36 | | | 0.086 |
| | 15.875 | -17 | | 304.8 | 457.2 | 609.6 | 762 | 914.4 | | | 1.55 |
| PC 12 | 3/4 | 0003 | | | 18 | 24 | 30 | 36 | 42 | 48 | 0.125 |
| | 19.050 | 0008 | | | 457.2 | 609.6 | 762 | 914.4 | 1066.8 | 1219.2 | 2.24 |
| PC 16 | 1 | -7 | | | 18 | 24 | 30 | 36 | 42 | 48 | 0.222 |
| | 25.400 | -20 | | | 457.2 | 609.6 | 762 | 914.4 | 1066.8 | 1219.2 | 3.98 |
| PC 20 | 1-1/4 | 0004 | | | 18 | 24 | 30 | 36 | 42 | 48 | 0.348 |
| | 31.750 | 0010 | | | 457.2 | 609.6 | 762 | 914.4 | 1066.8 | 1219.2 | 6.22 |
| DO 04 | 1-1/2 | -9 | | | 18 | 24 | | 36 | | 48 | 0.500 |
| PC 24 | 38.100 | -25 | | | 457.2 | 609.6 | | 914.4 | | 1219.2 | 8.95 |

material: Equivalent to SUJ2

hardness: 60 HRC or more

tolerances: g6 or to be specified

Product of NB Corporation of America

SPINDLE SHAFT & SPINDLE UNIT

NB Spindle Shaft is back by decades of precision manufacturing experience as well as up to date manufacturing facility to meet the demands. NB is capable of handling all your spindle needs such as manufacturing of bearing case and spindle base, design and manufacturing of spindle unit, and overhauling of spindles.

ADVANTAGES

Spindle Unit

NB provides overhauling, engineering services as well as manufacturing of spindle unit.

Ultra Precision Machining

Spindle manufacturing facility is controlled to a constant temperature throughout the year for precision manufacturing of spindles.

Various Machining Solution Available

BT, BBT, HSK inner tapers, gauge and bearing matching, thread grinding, and many other spindle related machining are available.

Surface Treatments

Various surface treatments are available such as hard chrome and ceramic coating. Repairing a damaged spindle with replating and grinding is also available.

EXAMPLE OF SPINDLE UNIT DESIGN AND MACHINING



Example of spindle unit specification Machine used Machining center Mounting orientation Vertical Rotational Speed Max. 10,000 rpm (Max. 700 rpm without tooling attached) Spindle taper size #30 Lubrication methods Grease lubrication Lubricant ISOFLEX NBU15 (NOK Corporation) Tool clamping power 400 kgf (theoretical) 3.5kW Estimated drive power Estimated weight 31kg