OUR LATHES
SOME TERMINOLOGY
WORKHOLDING
TOOLING
TOOL POST
TURNING & FACING

CARBIDE INSERT

GROUND HSS
PARTING OFF

WORKPIECE

CHUCK

90°

PARTING TOOL & TOOLHOLDER.
DRILLING, TAPPING, ETC.

Image: http://www.frets.com/HomeShopTech
FEEDS & SPEEDS
SPINDLE SPEED

\[ \text{SPINDLE SPEED} = \frac{4 \times \text{CUTTING SPEED}}{\text{PART DIAMETER}} \]

GIVES

SPINDLE SPEED IN RPM

FOR

CUTTING SPEED IN FEET PER MINUTE (FPM)

AND

PART DIAMETER IN INCHES
FEED RATE

0.005” PER REVOLUTION FOR ROUGHING

0.001-0.002” PER REVOLUTION FOR FINISHING
Note: .125 spacing from center to center. 5X

Detail B
Scale 8:1

Note: .686 dia to ID of cylinder barrel for slip fit

Section A-A
Scale 2:1

Note: Fit .686 dia to ID of cylinder barrel for slip fit

UNLESS OTHERWISE SPECIFIED:

DIMENSIONS ARE IN INCHES

TOLERANCES:
ANGULAR: MACH ± 1 BEND ± 0.1
TWO PLACE DECIMAL ± 0.01
THREE PLACE DECIMAL ± 0.005
FOUR PLACE DECIMAL ± 0.0005
FRACTIONAL ± 1/64

INTERPRET GEOMETRIC TOLERANCING PER:

MATERIAL:

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COLLET BLOCKS