

PRODUCTION LATHE MODULE SYLLABUS

This one day class of lecture & hands-on exercises will take you through GibbsCAM Production Lathe

<p><u>DOCUMENT BOX</u> Setting up a filing structure Creating and naming new folders Creating and naming new files Selecting Machine type Selecting material to be used Selecting alloys Selecting harness Programming using inch or millimeter Programming using Radius or Diameter Opening and closing existing folders Saving files Saving as older versions Describing Part Stock and Origin Tool Change Position Auto Clearance Setting a clearance Plane Insert Comments at the beginning of prog.</p> <p><u>DRAWING</u> <i>Point</i> Center Point Mid Point Point on an arc Mouse point <i>Lines</i> Between two points Point angle Parallel Angle and tangent circle Parallel Perpendicular Axis line-horizontal or vertical Mouse line <i>Circles</i> Radius and center point Point and center point Radius and two points Three features <i>Shapes</i> Offset Splines <i>Chamfer</i> Fillet \ Radius Side Chamfer Depth Chamfer Length Chamfer <i>Connect</i> Connecting and disconnecting <i>Geometry Expert</i> Drawing square Drawing using fillets and Chamfers Drawing angles and radius Short cut keys Reloading Modify Dimensions</p> <p><u>TOOLS</u> Selecting tools Describing tools Selecting tool material Selecting spindle direction Setting tool offsets Using multiple tool offsets Inserting Tool comments Finding and moving tools</p>	<p><u>HOLES</u> FI-RO Feed in Rapid out FI-FO Feed in Feed out Tap Rigid tap Peck, Full out Peck, Chip Breaker Canned Cycles Clearances Retracts Peck amount Dwell</p> <p><u>CONTOUR</u> For OD-ID and Front Face For roughing and finishing Cut-Off \ Part-Off Breaking Corners Using Cutter Comp Entry and exit moves CSS vs. RPM Material only cutting Constraining an axis Selecting Machining Markers Direction of cut Side of line Starting feature Ending feature Starting point Ending point</p> <p><u>ROUGHING</u> For OD, ID and front faces For roughing and finishing Turning Plunging Pattern shift Breaking corners Using cutter comp Entry and exit moves CSS vs. RPM Material only cutting Using Canned cycles Auto Finish Constraints an axis Setting Machining markers Direction of cut Side of line Starting feature Ending feature Starting point Ending point</p> <p><u>TREADING</u> Internal threads External threads Tapered threads Left and right hand Higby's \ Blunt starts Canned cycles Spring passes Multiple lead threads Thread angle</p>	<p><u>DIMENSIONING</u> Checking dimensions by: Annotation palette Mouse position Workgroup summary Show \ hide dimensions Printing Dimensions</p> <p><u>MATERIALS</u> Creating new family of materials Creating new alloys & materials Entering SFM vs. RPM Entering IPT vs. IPM Modifying existing material data base</p> <p>Communications Setup & selecting Machine Sending VNC, TXT files Receiving VNC< TXT files</p> <p><u>FILE MENU</u> Preferences Communication ser-up Changing file extensions Setting up AutoSave Changing graphics settings Changing interface level & machine pref. Post processor settings Printing Importing or Exporting DXF or IGES</p> <p><u>EDIT</u> Undo, cut, copy, paste, select all, selecting by, points, lines, circles, curves</p> <p><u>VIEWS</u> View palette Drop down menu Short cut keys Trackball Dynamic rotation</p> <p><u>MODIFY</u> Duplicate Duplicate And Force Depth Mirror 2D Rotate Scale Translate Segment Spline Sort & Shrinkage Reverse Arc Toggle feed status Move Part Origin</p> <p><u>PROCESSES</u> Saving & Loading processes Setting up folders & Directory</p> <p><u>PLUG INS</u> Cleanup Setup pose editor Reporter 97 & 2000 Show Position Transform toolpath</p> <p><u>HELP</u> Balloons, Prompting, Tool tips, shortcuts About Virtual Gibbs</p>
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