

Module Five: Milling Operations

Introduction to Fabrication

Hands on Activity

Below are a few activities you will need to complete for the milling operation module. You are also required to create a simple part. Find those instructions toward the end of this document. A supplementary video and instruction manual is online.

Activity one: Mill Cutting Operations

This activity will ask you to draw cutting operations. Make sure to label axis clearly and draw rotation of the cutter and the feed direction. An example of these drawings is found in the online presentation, they can be very basic. Use the space below to draw to the best of your ability the operations specified.

SLOT MILLING:

PLUNGE MILLING :

END MILLING:

Activity two: Milling Cutter Identification

Found inside the toolkit will be two milling cutters, labelled “A” and “B.” You will need to identify the type of cutter with its basic name and then give a very brief description of what that type of cutter might be used for IE, end milling, cutting contours, and basic plunging operations.

Cutter Identification	Type of Cutter	Brief Description of cutter and where it might be used
A		
B		

Activity 3: Use a Wiggler and Create a Part

On the next page is a part you are required to create for this class. Detailed instruction are included on the mill module page in another presentation. This activity will be completed in Shiley110 using the miniature mill. Use safe practices!

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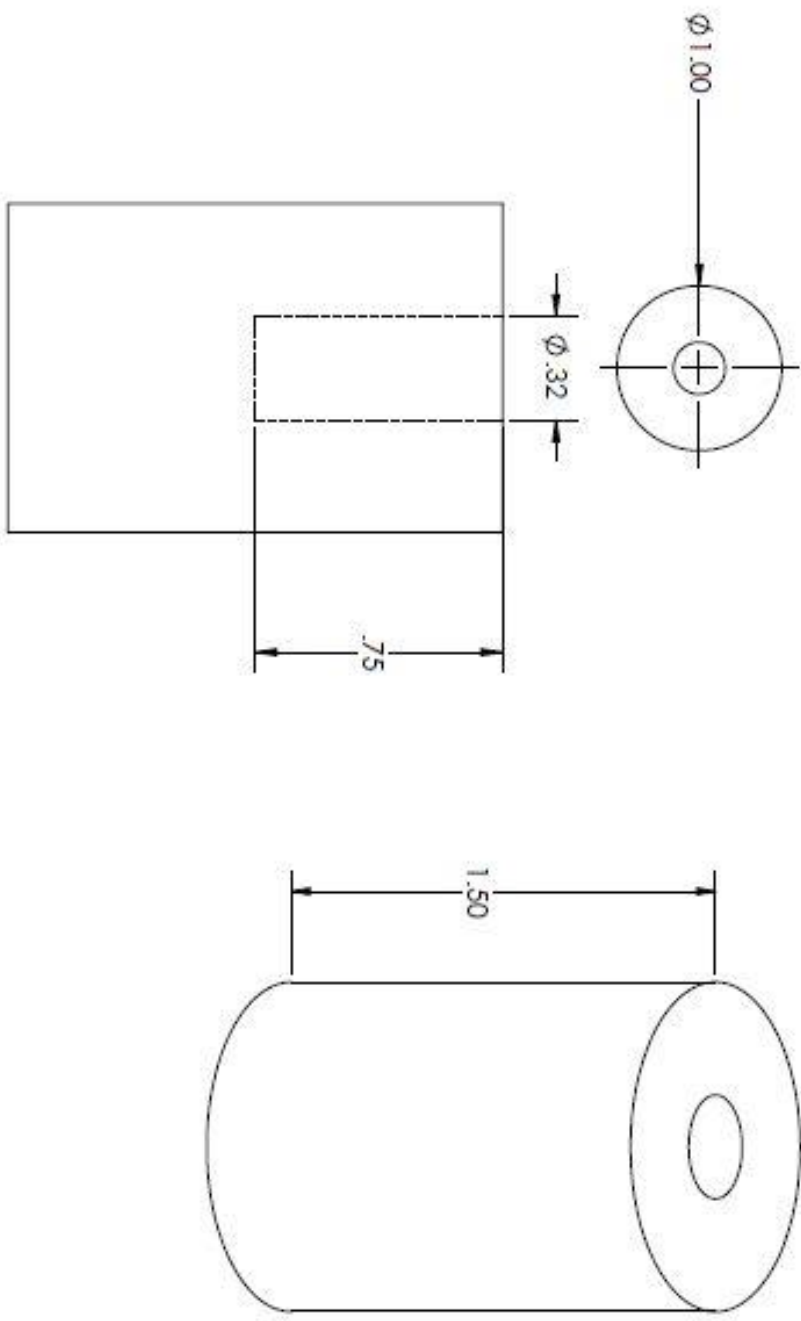
1

B

B

A

A



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UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL: ± ANGULAR: MATCH ± BEND ± TWO PLACE DECIMAL: ± THREE PLACE DECIMAL: ±		DRAWN	NAME	DATE
MATERIAL: Aluminum		CHECKED		
NITRATED GEOMETRIC TOLERANCING PER:		ENG APPR.		
NITRATED GEOMETRIC TOLERANCING PER:		MFG APPR.		
NITRATED GEOMETRIC TOLERANCING PER:		Q.A.		
COMMENTS:		TITLE: Part for module 5 mill project. Center part using wiggler, then drill		
APPLICATION:		SIZE DWG. NO.	REV	
USED ON:		A Wiggler part		
DO NOT SCALE DRAWING		SCALE: 1:1	WEIGHT:	SHEET 1 OF 1

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1

Once you've completed all of your tasks, please sign the bottom of this paper and leave it in the designated bin. Please put all tools back inside their proper cases.

I have completed the tasks and module to the best of my ability on my own:

_____ Signature

_____ Date