

## PROCESS SHEET

<b>Part Name:</b> Bearing Housing	<b>Material:</b> Aluminium
<b>Stock Size:</b>	<b>Checked By:</b>
<b>Prepared By:</b>	<b>Date:</b>

S. No.	Machine	Operation Description	Machine/Tool required	Operation time (min)	Credit
1.	Vertical Milling Centre	Clamp the workpiece and set the machine	-	20	
2.		Face milling -Finish on the top surface.	Milling machine /face mill cutter	10	
3.		End milling-Finish the sides of block	End mill cutter	20	
3.		Face milling – finish on the bottom surface	Milling machine / face mill cutter	10	
4.		Drill a pilot hole for a large through hole 8 mm.	VMC / drill press (dia -8mm)	10	
5.		Drill through hole 15 mm	VMC / drill press (dia -15mm)	10	
6.		Drill through hole 18 mm	VMC / drill press (dia -18mm)	10	
7.		End milling large counter bore (dia - 24 mm).	VMC / milling machine , end mill (dia -24mm)	10	
8.		(For opposite face) Drill pilot hole for large through hole 8 mm.	VMC / drill press (dia -8mm)	10	
9.		Drill through hole 18 mm	VMC / drill press (dia -18mm)	10	
10.		End milling a large counterbore (diameter - 24 mm).	VMC / milling machine , end mill (dia -24mm)	10	
11.		Drill tap hole for M5 internal thread ( first drill 4.2 mm , 4 holes).	VMC / drill press (dia -4.2mm)	10	

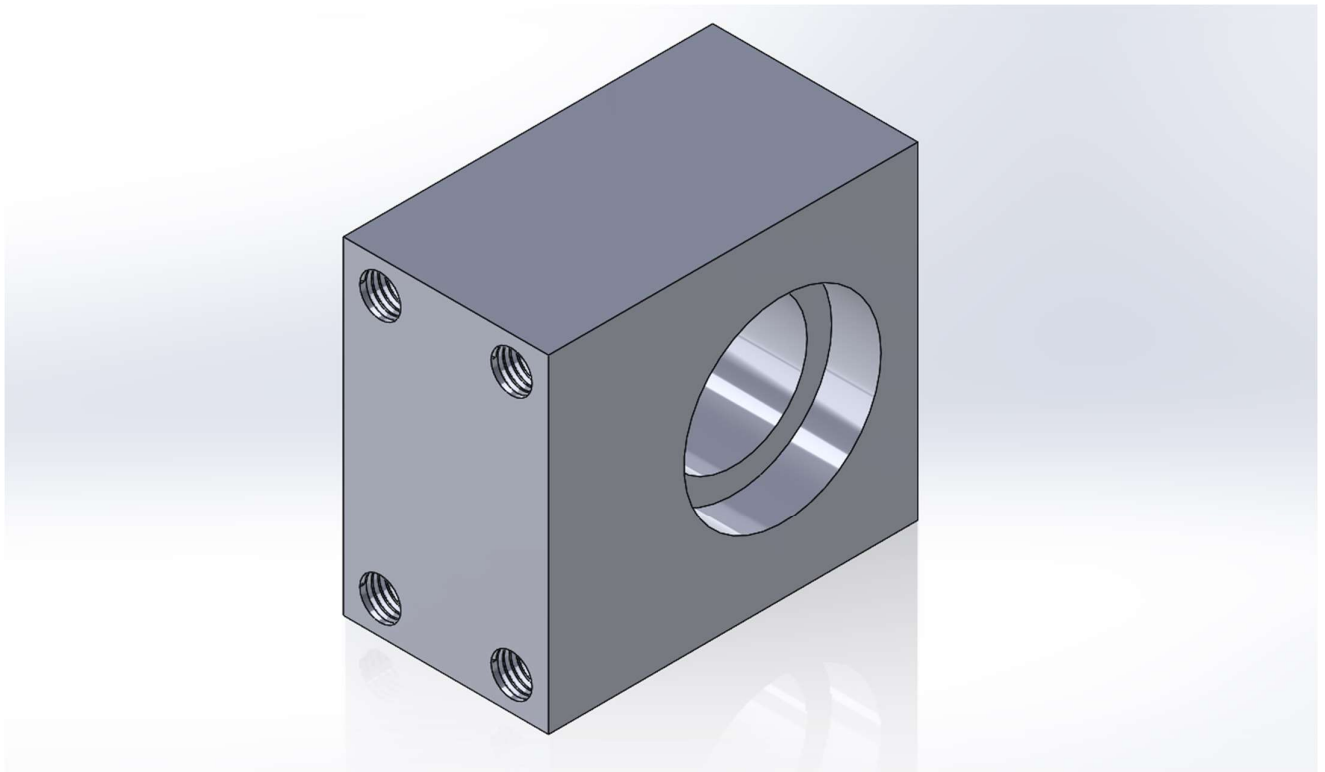
12.		Tap internal thread M5 (4 holes ).	VMC/ tapping machine, M5 tap	10	
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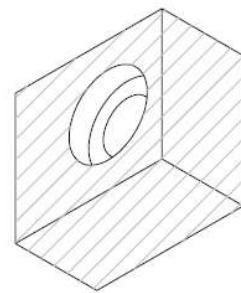
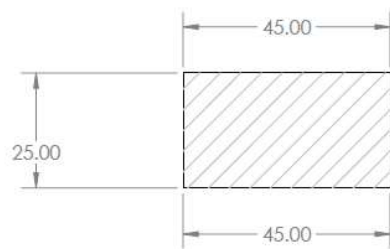
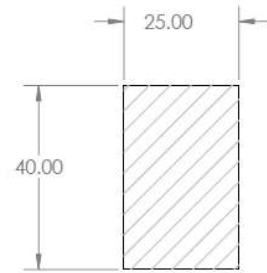
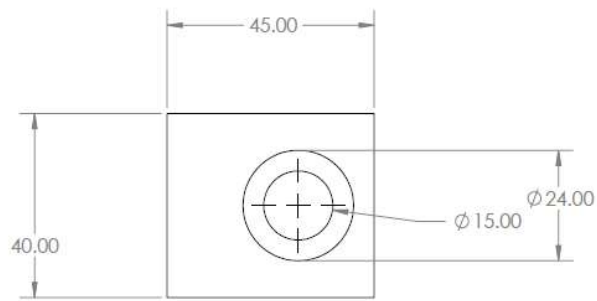
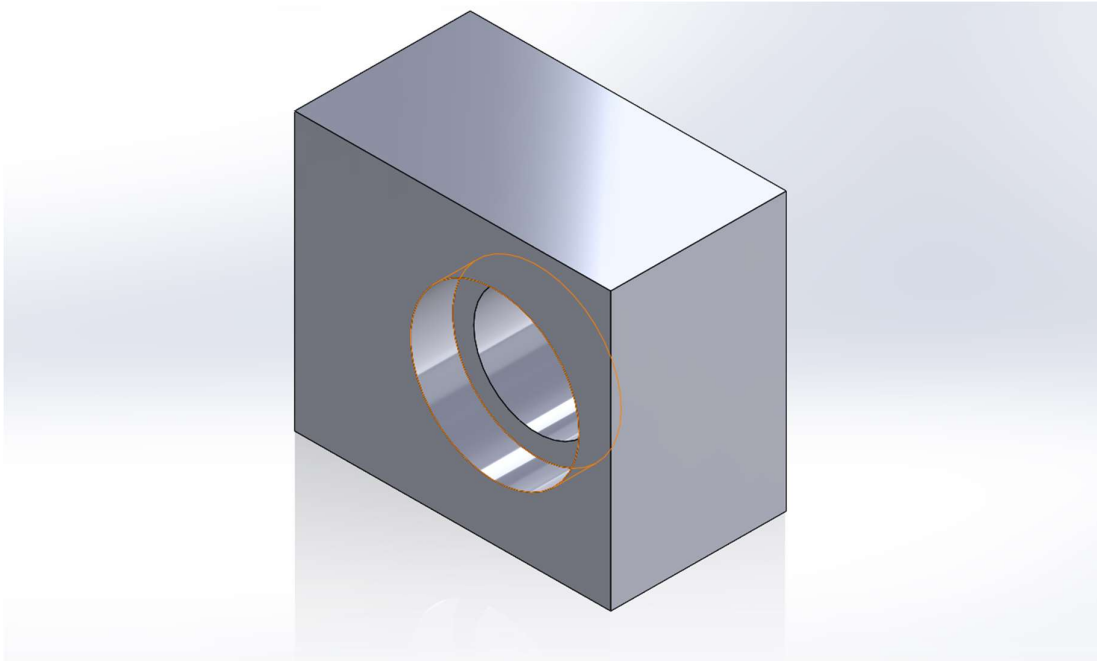
**\*For measurement, Vernier Calipers are used.**

Learning outcome:

- Proper use of marking and hand tools
- Workpiece alignment
- How to use VMC?
- Face milling
- End milling
- Drilling and tapping

Student Signature: \_\_\_\_\_





1 UNIT = 1mm