

Thread Turning Jig Plan

By Robert Carlson

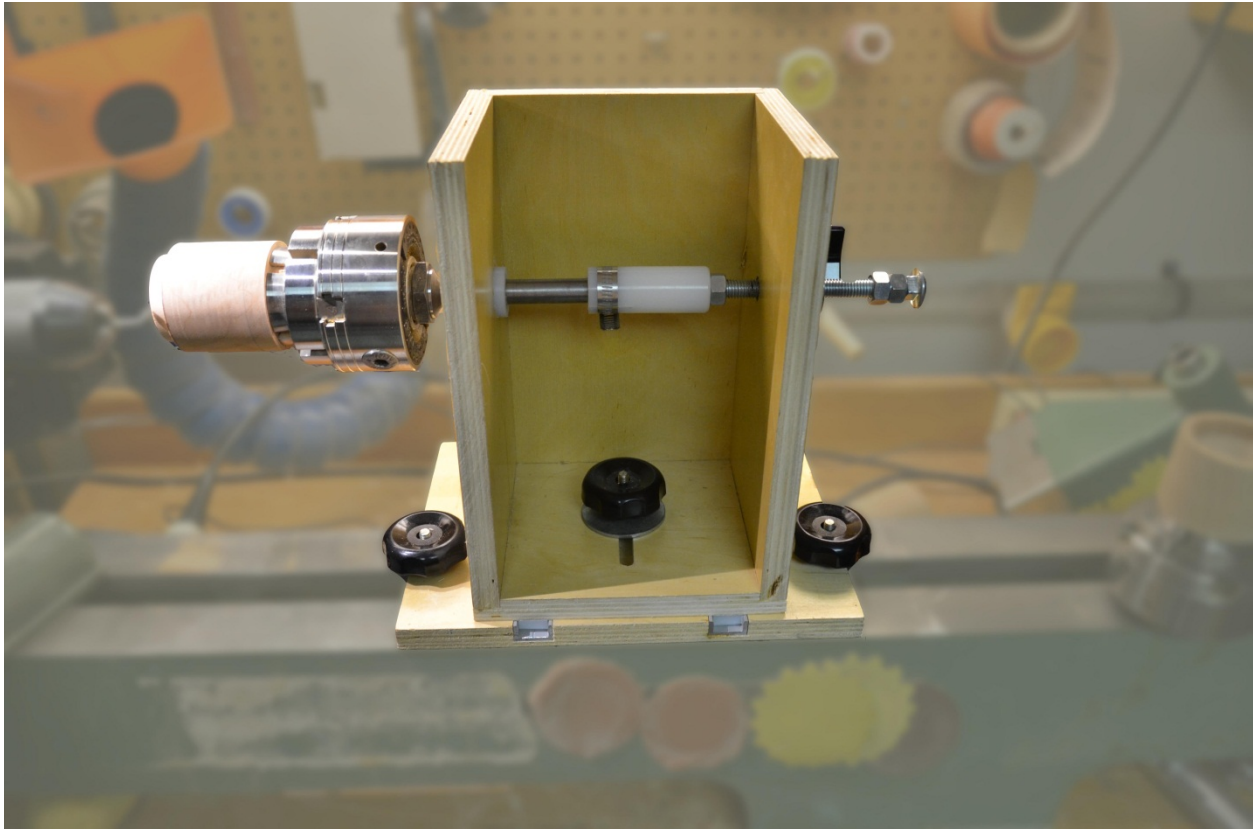
For the

Greater

Vancouver

Woodturning

Guild



Thread Turning Jig Mark 1

The following parts list and plans should aid you in creating your own “Thread Turning Jig Mark 2”.

Some portions of the plans are incomplete like drilling the arbour hole in the front of the slide. This is specific to your particular lathe spindle height. To accomplish this, mount a drill chuck on the lathe spindle with the appropriate sized drill bit (for the arbour shaft) and gently move the completed jig forward along the bed ways into the drill bit. This should give you the appropriate hole placement. It is important to have as little play as possible in the arbour hole and if you have any problems with it you may have to drill it oversized and place a bushing in the hole that is drilled to the correct size.

The other consideration is the height of the slide box. This plan will handle lathes with swings from 10 to 18 inches. The slide box sides will have to be extended for lathes with a greater spindle height.







Have fun and be safe in the work shop.







Robert...

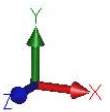
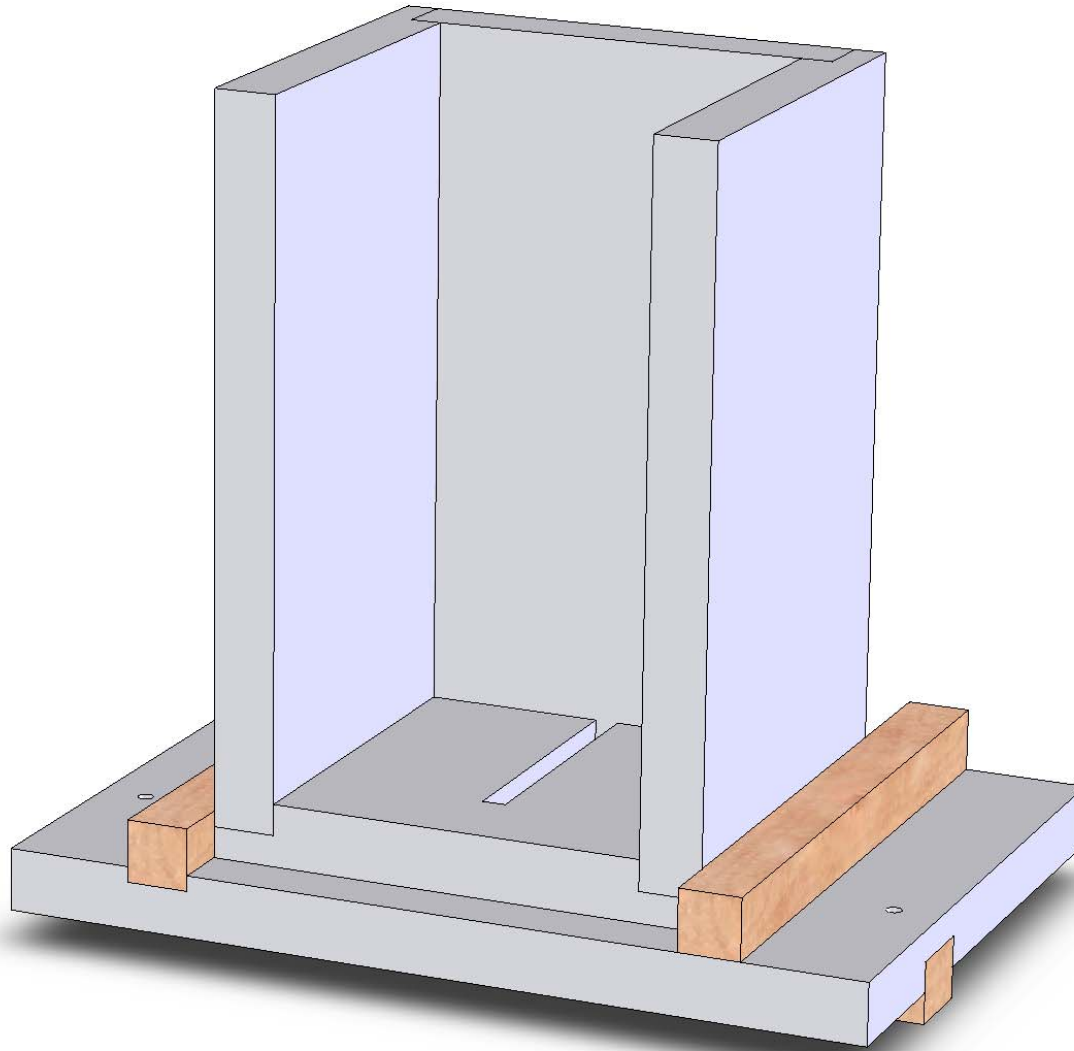
Thread cutting jig.

By Robert Carlson for
GVWG

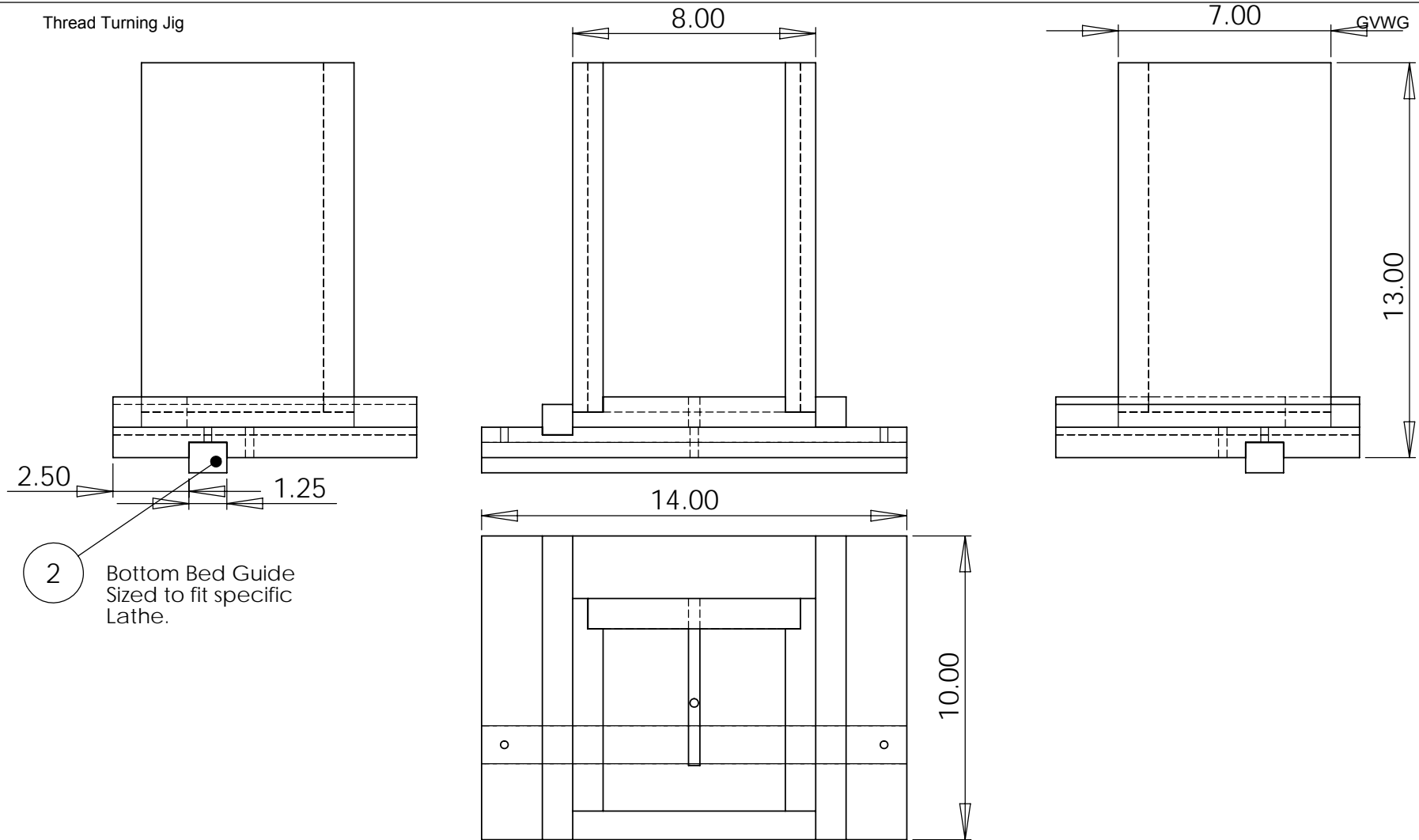
Hardware & Tools:

Part	Description	Part Number	Source	Picture
Spindle	Spindle for holding the chuck	05G20.10	Lee Valley Tools	
Slide Hold Down Bolt	5/16" x 3" T bolt	N/A	Pacific Fastener	
Bed Hold Down Bolt	5/16" x 3" carriage bolts		Home Depot	
Locking knob	2" x 5/16" plastic knob		KMS, Lee Valley Tools and Busy Bee Tools	
"T" nuts	5/16" T Nut		Lee Valley Tools, Home Depot	
UHMW Plastic	Plastic for adapters and bushings	Off cut pile, Pay cash	Redwood Plastics (Aldergrove)	
Tools:				
Jacobs Chuck	Drill Chuck either keyed or keyless		KMS, Busy Bee Tools, etc.	
MT2/3 to JT adapter	Adapter for mounting the drill chuck in the spindle, must accept a draw bar		KMS, Busy Bee Tools	See above

Part	Description	Part Number	Source	Picture
Draw bar	Threaded rod of appropriate size for MT to JT adapter and extend through the headstock spindle		Home Depot, Pacific Fastener	
Draw bar nut	"T" nut and block		Make yourself	
Fly Cutter	3/16" Allan wrench ground with 60 Degree angle and negative rake angle		Make yourself	
Calipers	6 or 8" dial or digital caliper		KMS, Lee Valley Tools, etc.	
Thread Gauge	Thread form gauge		Busy Bee Tools	
Brush	Thread cleaning brush		Miscellaneous	

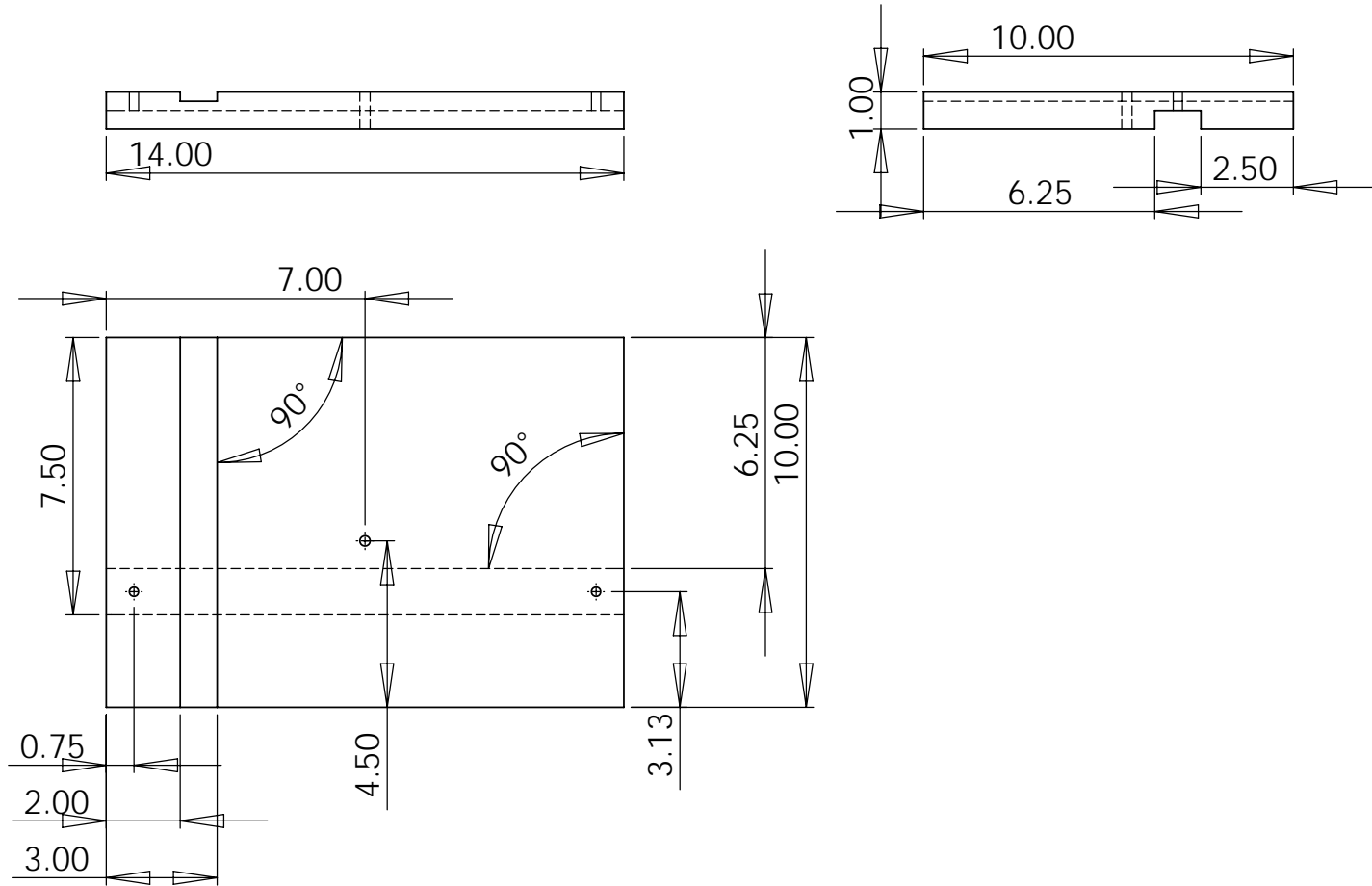


Thread Turning Jig



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		FRACTIONAL ±		ENG APPR.		SIZE	DWG. NO.	REV
		ANGULAR: MACH ± BEND ±		MFG APPR.		A	Jig 1	
		TWO PLACE DECIMAL ±		Q.A.		SCALE: 1:5		
		THREE PLACE DECIMAL ±		COMMENTS:		WEIGHT:		
		INTERPRET GEOMETRIC TOLERANCING PER:		Material: 1" MDF		SHEET 1 OF 1		
		MATERIAL						
		FINISH						
NEXT ASSY	USED ON							
APPLICATION		DO NOT SCALE DRAWING						

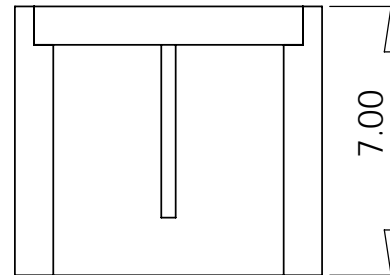
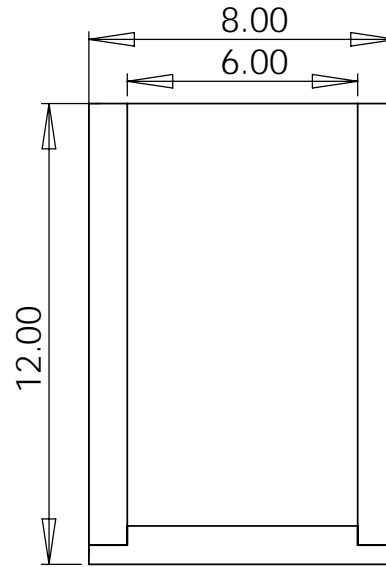
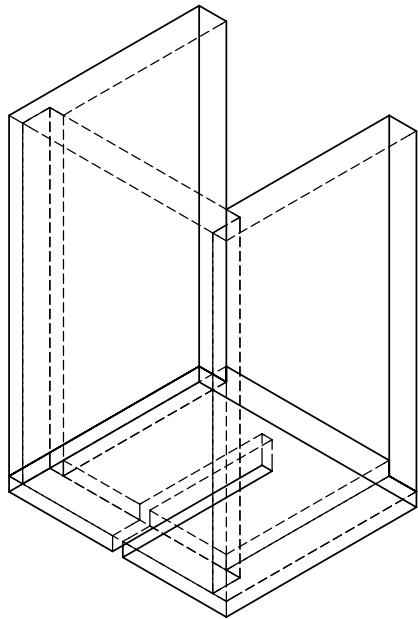


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		TOLERANCES:		CHECKED		Thread Turning Jig		
		FRACTIONAL ±		ENG APPR.		SIZE	DWG. NO.	
		ANGULAR: MACH ± BEND ±		MFG APPR.		A	BasePlate1	
		TWO PLACE DECIMAL ±		Q.A.		SCALE: 1:5	WEIGHT:	
		THREE PLACE DECIMAL ±		COMMENTS:			SHEET 1 OF 1	
		INTERPRET GEOMETRIC TOLERANCING PER:		Material: 1" MDF				
		MATERIAL						
		FINISH						
	NEXT ASSY	USED ON						
	APPLICATION		DO NOT SCALE DRAWING					

Thread Turning Jig

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		ANGULAR: MACH ± BEND ±		CHECKED				
		TWO PLACE DECIMAL ±		ENG APPR.				
		THREE PLACE DECIMAL ±		MFG APPR.				
		INTERPRET GEOMETRIC TOLERANCING PER:		Q.A.				
		MATERIAL		COMMENTS:		SIZE	DWG. NO.	REV
NEXT ASSY	USED ON	FINISH		Material: 1" MDF		A	Slide	
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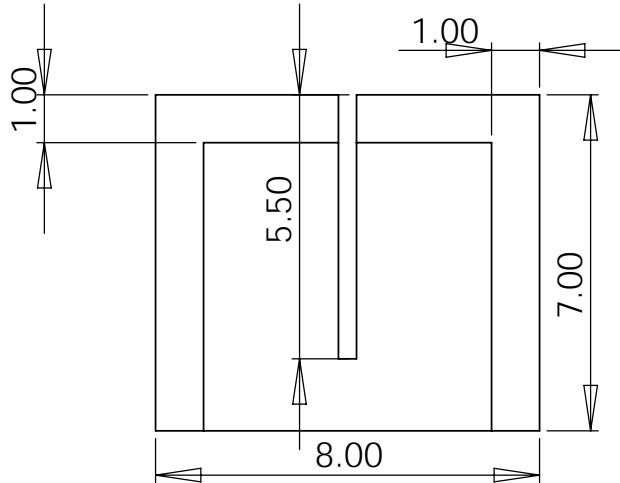
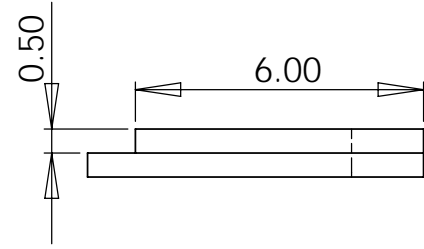
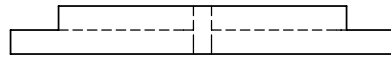
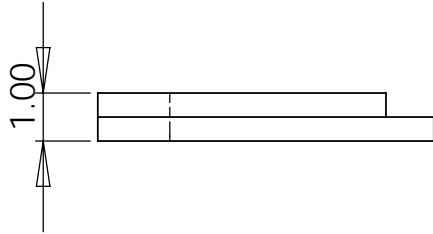
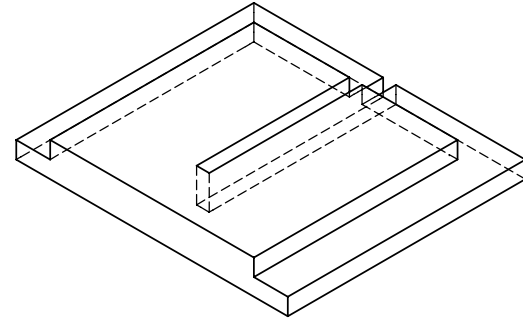
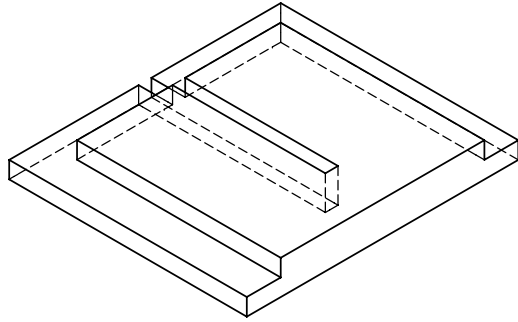
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Thread Turning Jig

GVWG



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		TOLERANCES:		CHECKED		Thread Turning Jig			
		FRACTIONAL ±		ENG APPR.		SIZE DWG. NO. REV			
		ANGULAR: MACH ± BEND ±		MFG APPR.		A Slide Base			
		TWO PLACE DECIMAL ±		Q.A.		SCALE: 1:4		WEIGHT:	
		THREE PLACE DECIMAL ±		COMMENTS:		SHEET 1 OF 1			
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NEXT ASSY	USED ON								
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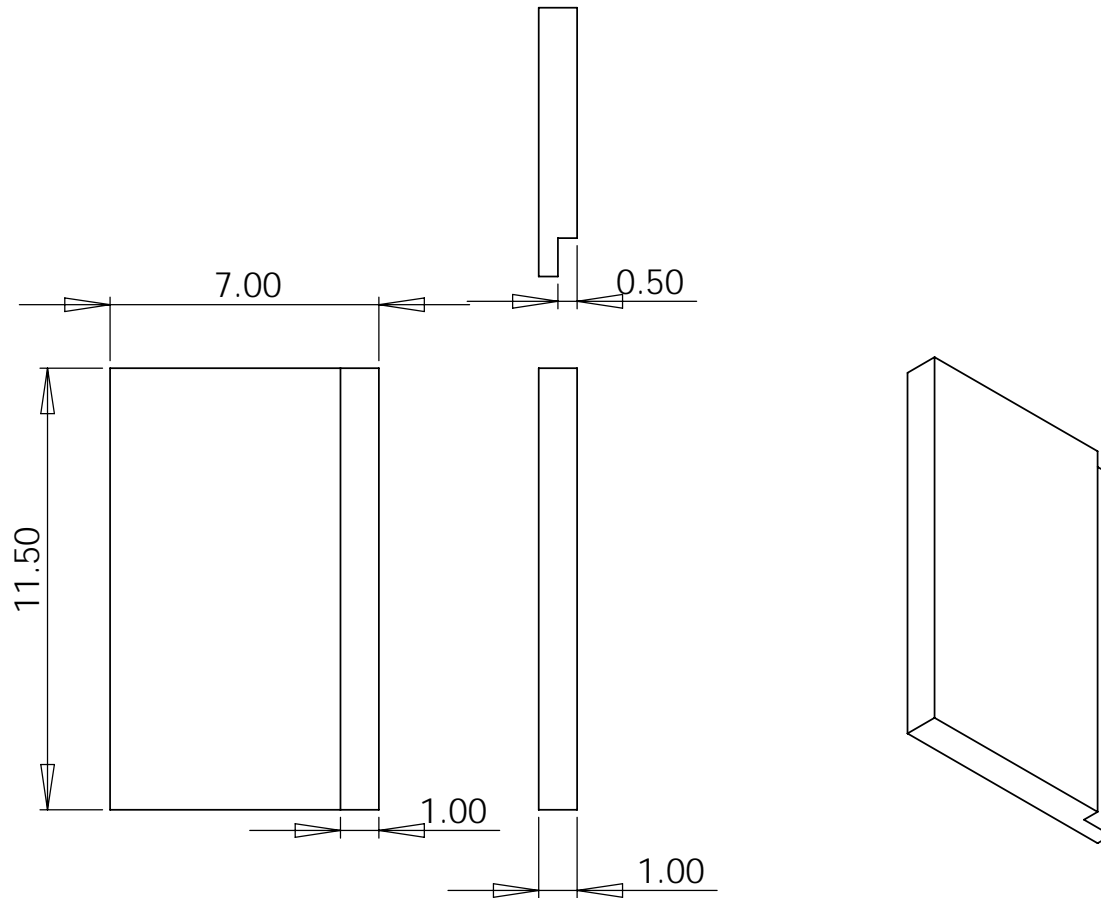
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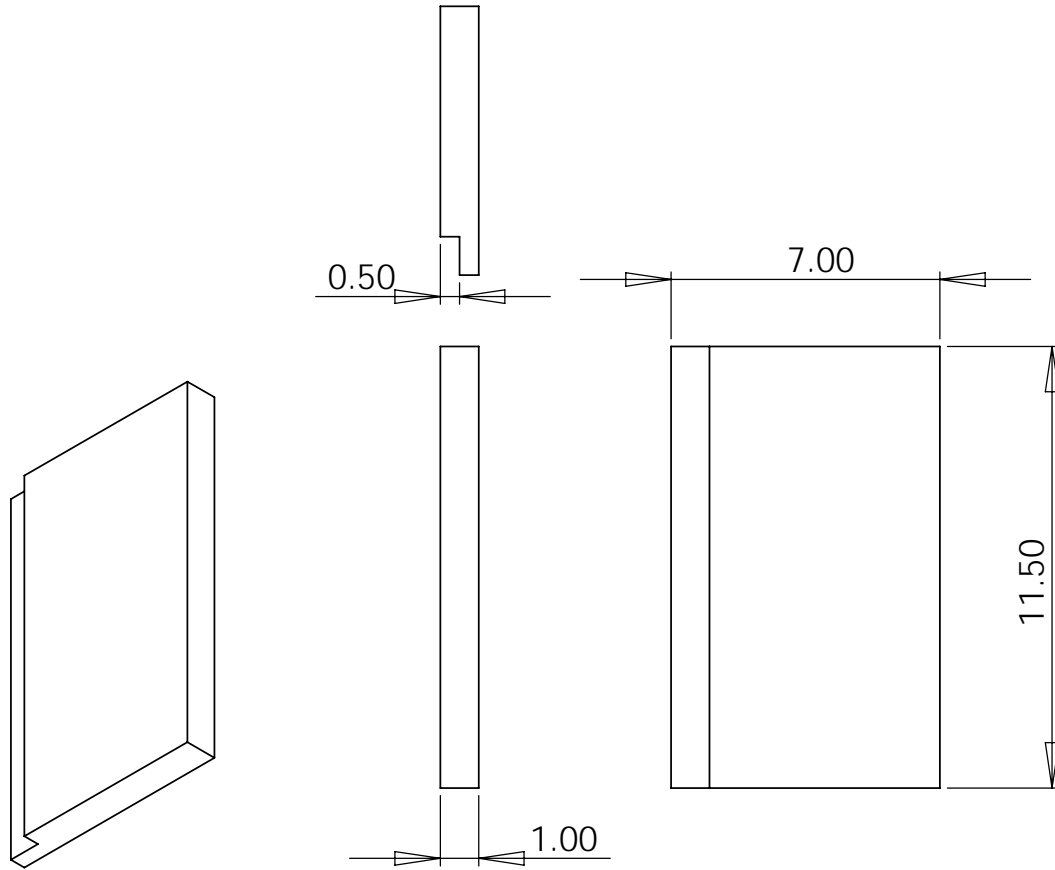
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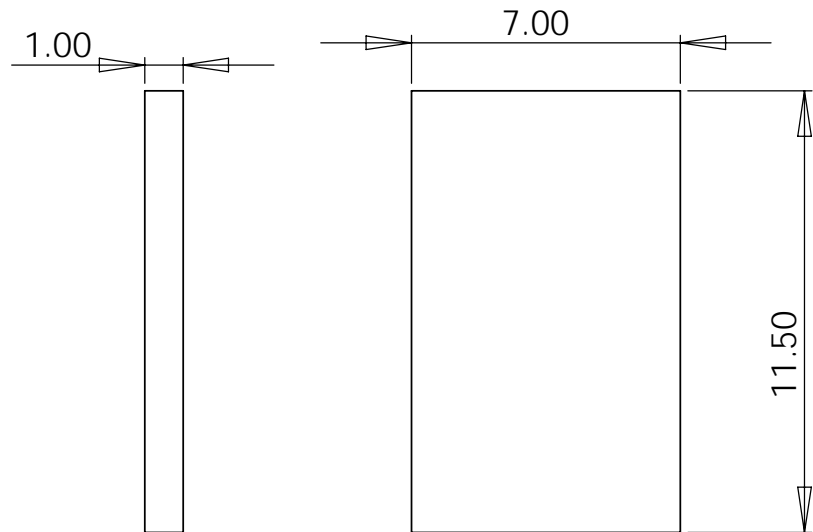
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		TOLERANCES:				Thred Turning Jig		
		FRACTIONAL ±				SIZE	DWG. NO.	REV
		ANGULAR: MACH ± BEND ±				A	Slide Left	
		TWO PLACE DECIMAL ±				SCALE: 1:5 WEIGHT: SHEET 1 OF 1		
		THREE PLACE DECIMAL ±						
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		MATERIAL						
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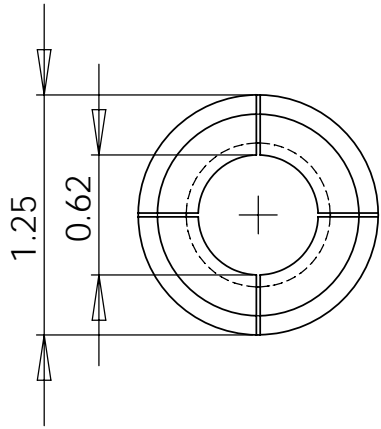
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		TOLERANCES:		CHECKED		Thread Turning Jig		
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		ANGULAR: MACH ± BEND ±		MFG APPR.		A	Slide Right	
		TWO PLACE DECIMAL ±		Q.A.		SCALE: 1:5	WEIGHT:	SHEET 1 OF 1
		THREE PLACE DECIMAL ±		COMMENTS:	Material: 1" MDF			
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		MATERIAL						
		FINISH						
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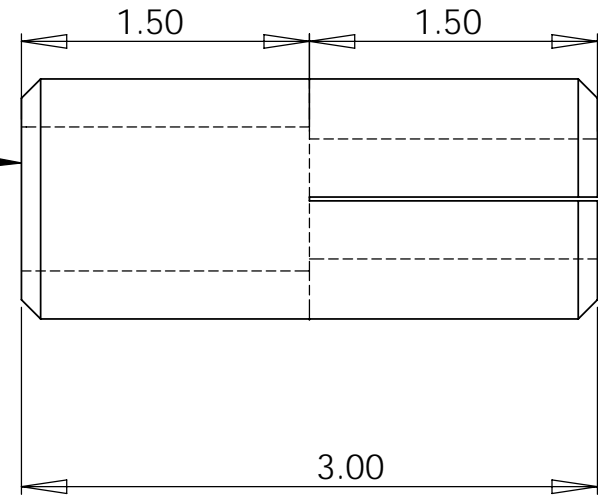


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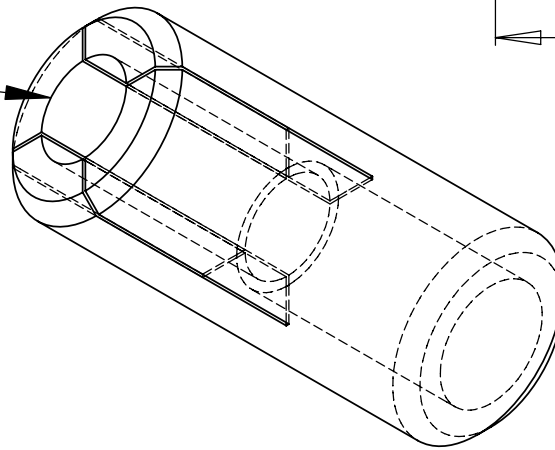
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		FRACTIONAL ±	ENG APPR.			SIZE	DWG. NO.	REV
		ANGULAR: MACH ± BEND ±	MFG APPR.			A	Slide Back	
		TWO PLACE DECIMAL ±	Q.A.			SCALE: 1:5	WEIGHT:	SHEET 1 OF 1
		THREE PLACE DECIMAL ±	COMMENTS:					
		INTERPRET GEOMETRIC TOLERANCING PER:	Material:					
		MATERIAL	1" MDF					
NEXT ASSY	USED ON	FINISH						
APPLICATION		DO NOT SCALE DRAWING						



Drill and Threaded to Master screw dementions



Drill Diamiter of Arbour shaft 5/8"



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		TOLERANCES:		CHECKED		Thread Cutting Jig		
		FRACTIONAL ±		ENG APPR.		SIZE	DWG. NO.	REV
		ANGULAR: MACH ± BEND ±		MFG APPR.		Arbour coupler		
		TWO PLACE DECIMAL ±		Q.A.		SCALE: 1:1	WEIGHT:	SHEET 1 OF 1
		THREE PLACE DECIMAL ±		COMMENTS:				
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		MATERIAL						
		FINISH						
NEXT ASSY	USED ON							
APPLICATION		DO NOT SCALE DRAWING						