

## Tool list for 25 x 25 Dual Leadscrew Machine

### Required

Hacksaw

Wood saw

Drill

Drill bits: 1/16 to 1/2 inch

Forstner or paddle bits: 5/8, 3/4, 7/8, 1, 1-1/8  
(1-1/8 bit only for 1/2 inch leadscrews)

Screwdrivers: Phillips and flat

Socket wrench: 1/2 inch

Open wrenches: 11/32, 3/8, 7/16, 1/2 inch

Adjustable wrench: (for nuts on leadscrews)

Allen wrenches: (for pulleys, couplers, clamps)

Rat tail file or Dremel: (to clean slotted holes)

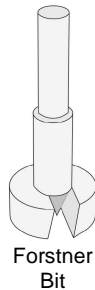
File

Measuring tape or rule

Center punch

Scribe or pencil

Square



## Sizes of Materials

Wood	Named Size USA	Actual* Inch	Actual** Millimeter
	1x2	3/4 x 1-1/2	19 x 38
	1x4	3/4 x 3-1/2	19 x 89
	1x6	3/4 x 5-1/2	19 x 140
	2x4	1-1/2 x 3-1/2	38 x 89
	2x6	1-1/2 x 5-1/2	38 x 140
Aluminum Angle	1/8 x 3/4	1/8 x 3/4	3.1 x 19
Aluminum Flat Bar (Optional)	1/8 x 1	1/8 x 1	3.3 x 25.6
Steel Pipe (Black - Gas Pipe)	1/2 ID (Inside Diameter)	0.6 ID 0.85 OD ~7/8 inch	15.3 ID 21.6 OD
Plastic Cutting Board	1/4	0.26	6.7
	3/8 (Preferred)	0.38	9.7
Bolts & Screws	#8	0.162 ~11/64	4.1 ~4
	#10	0.186 ~3/16	4.7 ~5
	1/4	1/4	6.35 ~6
	5/16	5/16	7.94 ~8

\*Actual Inch is the size that the board is supposed to be. However, wood's variation due to moisture etc. can be as much as 1/4 inch, and 1/16 to 1/8 inch variation is common.

Metal will also vary, but not to this extreme.

\*\*Actual Millimeter is the measurement taken from actual stock, the dimensions are rounded. These values are not necessarily the metric dimension that the stock is called by the supplier.

### Tools that are helpful, but not required.

Power miter saw or arm saw

Power hacksaw

Power screwdriver

Drill press

1-1/2 inch hole saw

Brad point drill bits

Nut drivers

Power sander: disk, belt or orbital

Grinding wheel

Vise