

Home machine shop built up over years for sale, preferably as a complete unit. Sold as-is, where-is; Owner will unwire but moving is up to the buyer. Drive up access to within ~10 feet of door in dry weather via walk-out basement.'

Overall description:

Metal Lathe; 2 hp 220v 1 phase lathe on stand with drawers for tooling. Multiple accessories

Milling Machine; 3 hp 220v 3 phase with DRO, variable speed X and Y power feed. Power Cutting oil feed system. Vises,

Rotary Phase converter; 5 hp 220v

Radial Arm Saw; 12" 110/220v, blades

Work Bench with Drill Press; variable height with X/Y table; Belt Sander; Bench Grinder; Wire Brush on 1/3 hp motor. Drills and Taps

Surface Plate and Scrapers

Metal Cutting Band saws; one horizontal, one vertical

Milling cutter/drill sharpener on stand

Workbench with Arbor press, vise, two swivel stools

Portable hydraulic engine hoist

Tooling Cart for Lathe and Mill

Metal cabinet with shop supplies, tools

Stand with various metal; steel, aluminum, brass, plastic, sheet metal & miscellaneous materials.

Stand with miscellaneous nuts/bolts, mechanisms, motors, switches, etc..

Stand with Milling Cutters, R-8 and XX holders for Lathe and Mill

Stand with CD player, CD's and Machinist reference books

Roll-around tool cabinet with various indicators, precision level



All fluorescent lights turn on with switch on column by workbench. Pictures below organized turning in circle to left from facing workbench.

## Work Bench.



4X4 legs, top/bottom shelf framed with 2X4; plywood shelf. Top is laminated Oak from semi-trailer. Wired with one outlet at end by vise. Vise Craftsman with homemade inserts.

Bottom Shelf



Dremel tool kit, miscellaneous small tools



## Arbor Press



Surplus from Kroger Mfg; used to cut ice cream. Base cut off and shelf added to give room for cutter. Various aluminum extrusions for height, etc. Extension cords.

## Tool Sharpening



Homemade fixture for sharpening Milling cutters and drill bits. Dedicated grinder on top and various tooling on lower shelf. Capable of very precise angles – takes patience.



## Metal Saws

Craftsman Bandsaw drive modified to slow down blade for metal cutting. Note jackshaft, etc. behind plexiglass guard under saw. Easy change back to high speed. 80" blade.



Chinese metal saw with table, backstop and guard added. 60" Blade.



## Surface Plate and Scrapers



Height gage is a Digimatic electronic caliper mounted in aluminum block with hard steel pointer/scribe. Base and pointer can be removed to return to caliper function. Scrapers and surface scribe on lower shelf.



## Supply Cabinet



Surplus from Kroger Mfg. Miscellaneous shop supplies.

Straps, Come-Along, various tools, tooling

## Drill Press



Dunlap Press with speed reduction and guard added. Gear teeth cut into back of column for height adjustment via crank on right. X-Y table and clamp mounted on base.

Drill set 1/16 to 1/2 by 1/32s; Silver & Deming drills and Tap sets in block on shelf below

Belt Sander



Craftsman, bought new.



## Grinder



Grinder with regular stone on left, green stone (for carbide) on right.

## Wire Brush, Break & Tapping Fixture



Wire brush on motor; box below has extra brushes.

Column behind is a tapping fixture; base has holes for clamping work, chuck for holding round work. Height and location adjustable by clamp on column.

On left is small sheet metal break.

## Misc. Tools



On left is assortment of dies;

Center is assortment of taps, tap handles. Blue block next to it is a set of taps and drill sizes for tapping and body clearance holes.

Next to right is a set of transfer punches.

Next to right is a set of Silver & Deming drills 9/16 – 1 1/8 by 1/16ths.

Finally some odds/ends spare taps and drills.



## Mill



Ex-Cell-O circa 1960. Shop manual on table by Lathe.

3 hp, 3phase 240/460v motor. Power drives added to X, Y table feeds. Homemade DRO with X,Y,Z scales accurate to 0.001". Vise and Rotary table removable. Bed reground.

## Rotary Table



Indexer bought new, additional dividing plates in supply cabinet.

Homemade rotary table on tooling cart

## Phase Converter



5 hp rotary phase converter



## Tooling Cabinet, Coolant Pump



Tooling cabinet on top has Miscellaneous Milling cutters and Ball mills and collets in filing cabinet on top

White bucket is flood coolant reservoir; can be used with either Mill or Lathe

## Collets



. 5-C collets for lathe in rack on top, as well as R-8 collets for Mill. Carbide insert fly cutters and slitter for Mill at the back.



## Milling Cutters



Top drawer

Bottom drawer has roughing cutters, miscellaneous special mills, extended length drills (aircraft drills)



## Air Compressor



Small pancake type compressor bought new from Harbor Freight. Assorted chucks and fittings in Tool box above left in wooden machinist cabinet.

## Tool Boxes



Wooden tool box bought new at Harbor Freight; Base Cabinet is Craftsman. Note mag bases on left. Detail pic's below....

## Top of Machinist Tool Box



Starrett Master Precision Level (green) on left; mag base precision gage set on right; odds/ends-



## Large Drawers



Various Dial Indicators, top large drawer



Dial Indicators, bottom large drawer. Apparatus on left is for tramming the Mill; chuck the shaft (left) in head, rotate dial indicator on a flat surface on mill bed to check tilt of head.

## Small drawers



Laser Center and Wobbler bottom, diameter Micrometer top



Micrometers 0 – 1 bottom, 1 – 2 top. Both Starrett.





Roll Around Tooling Cart





Corner Cabinet



Parallel Set, Machinist Square Set

Over/Under & Standard Reamer Sets

## Lathe



Enco Lathe with 3-jaw and 4-jaw Chucks, Collets, face plate,

Collet closer and 3-jaw chuck mounted. 4-jaw chuck on bottom shelf; details below

Tools mounted on back wall.



## Bottom Shelf



Right to left

Old 4-way Tool Post replaced with Aloris quick change

Face Plate with Collet chuck, nose wheel on top. Breaker bar for nose wheel to right of nose wheel

Wood base for 3-Jaw, 4-Jaw chuck on it's base, 2 wrenches for 4-jaw

Tool Post Grinder with Q/C mounting

Steady Rests, fixed and travelling

Pan and drain hose for flood coolant system; for use with coolant system by Mill



## Top Drawer in Lathe



Left to Right; Left Side

Clamp set for Mill

#6 Taper reamer for Lathe

Various diameter HSS centers

HSS TG&P shafts for setups in Lathe and Mill

Left to Right; Right Side

Allen wrenches for Lathe

Various size center drills

QC Lathe tooling and various lathe cutters

Bottom Drawer in Lathe



Mixed Lathe, Mill and Layout tooling; detailed descriptions below



## Bottom Drawer Left Side



Left to Right, Top to bottom

QC Clamp Knurling tool; 2 Clamp on fixed stops; Q/C center finder for centering 4-jaw work; #2 centering pad for drilling across round stock; Center punch for round stock end

4 and 6 side 5C clamp, nut and cam lock for 5C collets; Chuck and key on  $\frac{1}{2}$ " shaft; Die Holder for ram; die floats while cutting threads; centering guide for drilling across round stock; Torque arm for ??; clamp on fixture for drill in ram for use with dial indicator; center scribe for flat stock of various width; dead center; live center

Rotating chuck for Lathe Ram; 0-3/8 chuck for Ram; Center drill in Chuck for Ram; 1/8-1/2 chuck for ram; set of various heads for live center.



## Bottom Drawer Right Side



Left to Right, Top to bottom

Ball Turning attachment for Q/C tool post; R-8 1/8-1/2 drill chuck and key for Mill

Removing wedges for Collet closer nose; R-8 0-3/8 drill chuck and key for Mill

Center punch fitting for end of round stock; Ball turning attachment for mounting on cross slide; boring bars for Boring Head; Boring Head for Mill

Taper turning attachment for Lathe Ram; set of outside jaws for 3-jaw chuck; change gears in plastic bags; old Vee block, new Vee blocks and clamps



## Radial Arm Saw



Craftsman 12" Radial Arm Saw, 2 Carbide blades, Dado blade

Shop Vac; wet/dry





Miscellaneous material storage

Steel, Aluminum, Brass, Plastic, Sheet metal



Nuts, Bolts, Wiring stuff, miscellaneous



Various bar and beam clamps to right of shelves

Engine Hoist

