

# BenchMark

## Setting Up Shop

Usually every year one or more of the woodworking magazines will come out with some sort of list of tools they suggest for equipping a woodworking shop. The quality of these vary from useless to marginal; the tools selected usually leaves some major gap in the basic consist and most likely includes a few items most woodworkers consider second tier options instead of a minimum requirement. The magazine lists usually totals up to some ridiculously low cost as well.

Some form of the "setting up shop" question is asked more frequently on several of the woodworking forums. Due to space and time constraints, most responses are shorter than an answer to such a broad question deserves; this article is an attempt to fill that gap.

The data that made this article easy to write for me was a shop inventory I did some time ago for my own purposes. After I had completed the inventory, I was curious myself what the basic (IMO) woodworking shop would contain and its' approximate cost. To that end I simply edited my existing inventory to arrive at the list displayed below.

In order for an item to be placed on the list it had to meet this simple criteria, "is this item required to build a furniture project in a reasonable amount of time to an acceptable level of quality?". There is some overlap in function between a few items on the list however several were never included if a particular task could be accomplished with an existing item on the list without too much extra effort. When I look at the attached list, I see the MINIMUM inventory I could build furniture with without a significant loss in quality or time.

The list provided is not meant to be a recommendation for a specific brand or model number of tool, the brands and model numbers listed are representative of certain quality levels or capabilities. The list is also geared towards furniture building or home improvement projects, as such it does not contain some specialty items.

I have included a couple of items worth specific mention on the list. I have listed a certain level of the contractor type tablesaw. While it is possible to complete projects using lower grade equipment, this type of machine should present fewer problems in operation particularly in its' usability and alignment. However, in this "shop" (like most), the tablesaw is the core power tool, any improvements made to this item will have LARGE positive impact upon the whole shop in terms of capability, accuracy, and usefulness.

I have also included a planer and jointer, to me they are two halves of the same machine. While I can (and have) built projects without them, the capability these tools bring to the shop far outweigh their cost. While it is possible to purchase stock S4S or S2S-r1e, compared to the level of flatness and straightness you can achieve using your own tools, stock material is neither flat nor straight. By beginning with flat stock of consistent thickness, a large amount of frustration can be avoided. It would also be possible to forgo the power jointer and planer and use hand planes instead. The only drawback to this is that it takes much more skill and time to prepare stock.

Since this is a "minimum" list, there are (by definition) some notable absences; such as a circular saw, shop vac, miter saw, air compressor, and spray gun to name a few. While these items would be welcome additions, they are not absolutely required (your circumstances may dictate otherwise).

## Minimal Shop Inventory

No.	Qty	Item	Type	Unit Cost	Total
1	1	dovetail jig (set) PC 12"	accessory	100.00	100.00
2	1	drum sander, 2" with bearing	accessory	15.00	15.00
3	1	drum sanders, 1" and 3"	accessory	18.00	18.00
4	1	router edge guide, bosch	accessory	34.95	34.95
5	1	sanding belt cleaner with handle	accessory	5.00	5.00
6	8	clamp, 1/2" pipe, 48 long	clamp	12.00	96.00
7	2	clamp, bessy 31, long	clamp	38.00	76.00
8	2	clamp, bessy 50, long	clamp	44.00	88.00
9	4	clamp, quick grip 18" long	clamp	20.00	80.00
10	1	drill bit set, plug cutter, 3pc set	cutter	28.00	28.00
11	1	drill bit set, spade 8pc set	cutter	9.99	9.99
12	1	drill bit set, twist, 29pc	cutter	79.75	79.75
13	1	drill bit, forstner set, HSS, 7pc	cutter	27.50	27.50
14	1	drill bit, set counter bores, 5 pc	cutter	32.50	32.50
15	1	drill bit, vix #1	cutter	8.00	8.00
16	1	router bit set, 1/4", 3/8", 1/2" roundover, Freud	cutter	79.00	79.00
17	1	router bit set, raised panel, Freud	cutter	145.00	145.00
18	1	router bit, 1/2" mortising with bearing, Freud	cutter	21.00	21.00
19	1	router bit, 1/2" od flush trim, Freud	cutter	18.00	18.00
20	1	router bit, 1/2" up spiral, 1 1/4"	cutter	42.36	42.36
21	1	router bit, 1/4 up spiral, 1"	cutter	15.16	15.16
22	1	router bit, rabbet kit, Freud	cutter	35.00	35.00
23	1	saw blade, Forrest WW2	cutter	100.00	100.00
24	1	saw blade, Freud safety dado, 8"	cutter	116.00	116.00
25	1	saw blade, thin kerf rip, 24t, lm72-10	cutter	39.00	39.00
26	1	crosscut sled, large (shop built)	fixture	25.00	25.00
27	1	crosscut sled, small (shop built)	fixture	20.00	20.00
28	2	extension cord, 25'	fixture	8.91	17.82
29	5	organizers	fixture	12.37	61.85
30	1	router table (shop built)	fixture	150.00	150.00
31	1	work bench, main with vise (shop built)	fixture	400.00	400.00
32	1	adjustable wrench set, 3pc	hand tool	28.00	28.00
33	1	awl	hand tool	6.00	6.00
34	1	bench brush	hand tool	8.00	8.00
35	1	center punch, self centering strike	hand tool	4.95	4.95
36	12	driver bits, average	hand tool	2.00	24.00
37	1	dust broom, push	hand tool	12.00	12.00
38	1	ear protectors	hand tool	20.00	20.00
39	1	files, 6pc set	hand tool	30.00	30.00
40	1	hammer, 16 oz rip	hand tool	22.50	22.50
41	1	hammer, rubber face	hand tool	11.00	11.00
42	1	hand saw, dozuki	hand tool	30.00	30.00
43	1	honing guide	hand tool	15.00	15.00
44	1	nail set 3pc set	hand tool	9.75	9.75
45	1	panel carrier	hand tool	15.00	15.00
46	1	plane, block low angle, veritas	hand tool	69.50	69.50
47	1	plane, jack, record #5	hand tool	67.50	67.50
48	1	pliers, channel lock, 10"	hand tool	10.40	10.40
49	1	pliers, diag cutter, electrician	hand tool	12.30	12.30

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No.	Qty	Item	Type	Unit Cost	Total
50	1	pliers, end cutter	hand tool	14.25	14.25
51	1	pliers, lineman	hand tool	16.55	16.55
52	1	pliers, needle nose	hand tool	13.65	13.65
53	1	prybar, flat	hand tool	7.00	7.00
54	3	putty knives, small, med., large	hand tool	2.00	6.00
55	1	safety glasses	hand tool	15.00	15.00
56	1	scissors	hand tool	6.00	6.00
57	1	screw driver set, Irwin, insulated	hand tool	25.00	25.00
58	1	screwdriver, #0 square	hand tool	3.00	3.00
59	1	screwdriver, #1 square	hand tool	3.00	3.00
60	1	screwdriver, #2 square	hand tool	3.00	3.00
61	1	socket set, inch / metric, Sears	hand tool	100.00	100.00
62	1	utility knife	hand tool	5.00	5.00
63	1	wood chisel set, 4 piece, 1/4" to 1"	hand tool	20.00	20.00
64	1	wrench set, allen, inch, 13pc	hand tool	8.25	8.25
65	1	wrench set, allen, metric, 9pc	hand tool	7.85	7.85
66	1	wrench set, combination, inch, sears	hand tool	40.00	40.00
67	1	wrench set, combination, metric, sears	hand tool	40.00	40.00
68	1	drill press, Delta, 16 1/2", 17-900	machine	350.00	350.00
69	1	jointer, Delta 6" 37-195	machine	500.00	500.00
70	1	planer, Delta 22-560k benchtop type	machine	320.00	320.00
71	1	tablesaw, Delta 36-444k contractor type	machine	600.00	600.00
72	1	compass	measure	12.00	12.00
73	1	level, 48" Starrett	measure	40.00	40.00
74	1	rule, 24" stainless steel	measure	7.00	7.00
75	1	rule, 6" stainless steel	measure	2.40	2.40
76	1	square, framing, 24"	measure	5.86	5.86
77	1	square, machinist, tri, 12"	measure	67.50	67.50
78	2	tape measure	measure	9.94	19.88
79	1	drill, Dewalt 3/8 electric, dw106k	power tool	70.00	70.00
80	1	jigsaw, bosch 1587avsk	power tool	155.00	155.00
81	1	router, bosch 1613evs	power tool	195.00	195.00
82	1	sander, bosch 5" orbital, 3107dvsk	power tool	120.00	120.00
83	1	sander, bosch belt 3x24, 1275dvs	power tool	220.00	220.00
			Sub Total		\$5,398
			Tax and/or shipping at 7.25%		\$391
			<b>Grand Total</b>		<b>\$5,789</b>