

Components (by category)

Hardware		Quantity	Notes
<b>Baseplate</b>			
12mm ply baseplate	1 sheet 1210x596 mm exterior grade or marine ply	1	
M5 x 75mm bolts		4	For turntable
M5 x 35mm bolts		15	For guides/brackets
M10 nuts		3	Cover brackets
M10 wingbolts		3	Upper cover
M8 x 40mm bolts		12	Lower cover brackets
12" Lazy susan		1	
<b>Tower</b>			
M5 x 35mm bolts		6	Tower to baseplate
M5 x 75mm bolts		14	Tower bolts
M5 x 20mm bolts		4	Y junction bolts
4g x 12mm screws		2	Large gear
M3 x 20mm bolts		4	Motor and microswitch bracket
M2 x 12mm bolts		2	Microswitch
8mm silicone hose	650mm long	3	Monthly
1m of 15mm PVC			
<b>Tipping Bucket</b>			
M3 x 20mm bolts		4	Support stand to baseplate
M5 x 20mm bolts		2	Tipping bucket adjuster screws
4G x 12mm screws		6	Pinions and magnet arm
<b>Electronics</b>			
Reed switch		1	
FE magnet (10 x 10 x 3mm)		1	
Stepping motor and board		2	
Arduino nano		1	
Breakout board		1	
DS3231 RTC		1	
SD Card reader		1	
Ribbon cables	100mm or shorter	20	
Solar panel		1	
DC Converters		2	1 from 12v to Arduino, 1 from solar to battery
Reset switch		1	
M5 x 50mm bolts		3	
8g x 12mm screws		6	
4g x 12mm screws		4	Electronics brackets and grommet
M3 x 20mm bolts		4	Motor
608 bearings		2	Gears
<b>Platter</b>			
Turntable		1	
M5 x 20mm bolts		4	Turntable attachment
7g x 20mm screws		19	V-brackets and support legs
8g x 12mm screws		65	outer and inner rim, and vent tube holders
<b>Monthly Bottles</b>			
2L HDPE bottles		3	
<b>Daily Bottles</b>			
225ml HDPE bottles (synergy)		60	
<b>Outer Casing</b>			
M8 x 40mm bolts	Galvanised	4	Handles
M8 washers	Galvanised	8	Handles
M5 x 35mm bolts	Stainless	21	Funnel and funnel base. Portholes
<b>Tools</b>			

Components by quantity

Hardware	Quantity	Cost	Example
4g x 12mm screws	12	4	<a href="https://www.bunning.com.au">https://www.bunning.com.au</a>
7g x 20mm screws	19	2	<a href="https://www.bunning.com.au">https://www.bunning.com.au</a>
8g x 12mm screws	71	7	<a href="https://www.bunning.com.au">https://www.bunning.com.au</a>
M10 nuts	3	2	<a href="https://www.bunning.com.au">https://www.bunning.com.au</a>
M10 wingbolts	3	5.20	<a href="https://www.bunning.com.au">https://www.bunning.com.au</a>
M2 x 12mm bolts	2		
M3 x 20mm bolts	10	1	<a href="https://core-electronics.com.au">https://core-electronics.com.au</a>
M5 x 20mm bolts	10	3.30	<a href="https://www.bunning.com.au">https://www.bunning.com.au</a>
M5 x 35mm bolts	42	16.25	<a href="https://www.bunning.com.au">https://www.bunning.com.au</a>
M5 x 50mm bolts	3	4	<a href="https://www.bunning.com.au">https://www.bunning.com.au</a>
M5 x 75mm bolts	18	8	<a href="https://www.bunning.com.au">https://www.bunning.com.au</a>
M8 x 40mm bolts	16	12.65	<a href="https://www.bunning.com.au">https://www.bunning.com.au</a>
Plywood	1 sheet 1210x596 mm exterior grade or marine ply	34	<a href="https://www.bunning.com.au">https://www.bunning.com.au</a>
608 bearings	2	7	<a href="https://au.rs-online.com">https://au.rs-online.com</a>
12" Lazy susan	1	18	<a href="https://www.carbater.com.au">https://www.carbater.com.au</a>
15mm pvc	1	2.20	<a href="https://www.bunning.com.au">https://www.bunning.com.au</a>
200L plastic drum	1	33	<a href="https://www.gumtree.com.au">https://www.gumtree.com.au</a>
Varnish	1	10	<a href="https://www.bunning.com.au">https://www.bunning.com.au</a>
		169.6	
<b>Electronics</b>			
Reed switch	1	2	<a href="https://www.jaycar.com.au">https://www.jaycar.com.au</a>
FE magnet (10 x 10 x 3mm)	1	2	<a href="https://www.jaycar.com.au">https://www.jaycar.com.au</a>
Stepping motor and board	2	20	<a href="https://www.jaycar.com.au">https://www.jaycar.com.au</a>
Arduino nano	1	15	<a href="https://core-electronics.com.au">https://core-electronics.com.au</a>
Breakout board	1	12	<a href="https://www.ebay.com.au">https://www.ebay.com.au</a>
DS3231 RTC	1	4	<a href="http://www.ebay.com.au">http://www.ebay.com.au</a>
SD Card reader	1	3	<a href="https://www.ebay.com.au">https://www.ebay.com.au</a>
Ribbon cables	20	3.50	<a href="https://core-electronics.com.au">https://core-electronics.com.au</a>
Solar panel	1	23	<a href="https://www.jaycar.com.au">https://www.jaycar.com.au</a>
DC Converters	2	7	<a href="https://www.ebay.com.au">https://www.ebay.com.au</a>
Battery	1	24	<a href="https://www.jaycar.com.au">https://www.jaycar.com.au</a>
Reset Switch	1	2	<a href="https://www.jaycar.com.au">https://www.jaycar.com.au</a>
Wires		5	<a href="https://www.jaycar.com.au">https://www.jaycar.com.au</a>
		122.5	
<b>Laser Cutting</b>			
Tower, platter, V-braces, gears. 6mm acrylic	3	75	FabLab prices for 3 sheets
		75	
<b>3D Printing</b>			
ABS	2 spools	40	
PETG	1 spool	40	
ASA	1 spool	40	
		120	
<b>Bottles</b>			
Vent tubes	135m	65	<a href="https://www.bunning.com.au">https://www.bunning.com.au</a>
		65	
Bottles 225ml	60	30	
Bottles 2L	3	15	
<b>Total</b>			
Build		552.1	
Bottles		45	