

List of parts for IndyMill by Nikodem Bartnik

Electronics

Part name	Quantity	BangGood	Aliexpress	Amazon	Comment
Nema23 Stepper motor	4	https://bit.ly/2Y0Bnrl	https://bit.ly/3iBTGvk	https://amzn.to/3DeE641	
IndyShield	1	-	-	-	You can buy it here: https://indystry.cc/store/
TB6600 stepper drivers	4	https://bit.ly/33VQFSs	https://bit.ly/2PSt2IG	https://amzn.to/3gB2Ycu	
Arduino UNO	1	https://bit.ly/3gVqtLs	https://bit.ly/2FeDxxo	https://amzn.to/3zo98Uw	
Power supply	1	https://bit.ly/30RaqZA	https://bit.ly/3kJOtDu	https://amzn.to/2WkwLPR	
AC Socket	1	https://bit.ly/30Tk2mr	https://bit.ly/30REsfK	https://amzn.to/3mveo5k	
Cables	-	https://bit.ly/2PQ2qlc	https://bit.ly/3kH9TBh	-	
4 pin connectors	4	https://bit.ly/30UUpSi	https://bit.ly/3am7dUU	https://amzn.to/3zm0OVw	I used that to connect stepper motors through electronics case, use other connectors if you want
500W Spindle	1	https://bit.ly/3gVpcnx	https://bit.ly/3iCR4NJ	https://amzn.to/3kqVz0z	Choose a spindle that will work best for you. I recommend 500W spindle for beginners, if you are already experienced or not afraid to go BIG go with 1.5kW spindle (that's some serious power!). For 1.5kW spindle you will also need an inverter.
1.5kW Spindle	1	https://bit.ly/3kGN4O7	https://bit.ly/2PMiLHE	https://amzn.to/3mzGw7i	
Inverter for 1.5kW Spindle	1	https://bit.ly/2E0aHQO			

Mechanics

Part name	Quantity	BangGood	Aliexpress	Amazon	Comment
Aluminium profile 20x40 mm 600 mm	2	https://bit.ly/3iGgfDM	https://bit.ly/30VoyRv	https://amzn.to/3B9BG4G	You will most likely need to buy longer pieces of aluminium profiles and cut them to a proper length, if you want to build, bigger machine you just have to change lengths of those items, everything else stay the same
Aluminium profile 20x40 mm 666 mm	2	https://bit.ly/2XYn3QE	https://bit.ly/3kC0ZoJ	https://amzn.to/3B9BG4G	
Aluminium profile 20x80 mm 600 mm	2	https://bit.ly/2Y03gQL	https://bit.ly/2PRw7Cs	https://amzn.to/3B9BthU	
Trapezoidal lead screw 220 mm	1	https://bit.ly/2PS5r4C	https://bit.ly/31Nef0Z	https://amzn.to/3zpXgS4	Buy longer piece of trapezoidal lead screw and cut to 220mm
Ball Screw SFU1605 650 mm	1	https://bit.ly/3fR7yQJ	https://bit.ly/33X9uET	https://amzn.to/3mBfTyM	
Ball Screw SFU1605 600 mm	2	https://bit.ly/2PQIXkg	https://bit.ly/33X9uET	https://amzn.to/3yeHyrH	
Linear Rail MGN12 650 mm	2	https://bit.ly/2DSsF85	https://bit.ly/2XY4ADA	https://amzn.to/2UQD0dp	X axis
Linear Rail MGN12 600 mm	2	https://bit.ly/2DSsF85	https://bit.ly/2XY4ADA	https://amzn.to/3yjJ7o4	Y axis
Linear Rail MGN12 200 mm	2	https://bit.ly/2DSsF85	https://bit.ly/3fWvn9N	https://amzn.to/3zmz3Mj	Z axis
Linear Rail Block MGN12H	12	https://bit.ly/3gVz94w	https://bit.ly/3gVSOBm	https://amzn.to/3zmosBh	If you buy each rail with one block you need just 6 additional blocks (the total of 12)
600RS bearing	3	https://bit.ly/30RjJsl	https://bit.ly/30Uv0by	https://amzn.to/3BtqgsX	
6201RS bearing	6	https://bit.ly/3h7TWSF	https://bit.ly/2E44Tpj	https://amzn.to/2Y0GRWv	
608RS bearing	1	https://bit.ly/33Wh6Hz	https://bit.ly/2XYrk6t	https://amzn.to/3kvRVCz	
8 to 10mm coupler	3	https://bit.ly/30SUCoV	https://bit.ly/3gWQAS3	https://amzn.to/3gAvYB5	Make sure that the diameter of the coupler will work with your motor
Closed GT2 Belt 200mm	1	https://bit.ly/3aoq69M	https://bit.ly/2YfwmfI	https://amzn.to/3Dgle3z	
GT2 8 mm Pulleys	2	https://bit.ly/31Ms1RH	https://bit.ly/31KuTym	https://amzn.to/3BfyXXv	
Trapezoidal lead screw lock collar	3	https://bit.ly/2Fn9y6E	https://bit.ly/3gVOySf	https://amzn.to/3koSoX7	That locks the Z axis lead screw in place
Corner connectors	2	https://bit.ly/3fVVIvC	https://bit.ly/3kGldfQ	https://amzn.to/3mEnug2	
M3x16 mm screws	14	https://bit.ly/31QrePG	https://bit.ly/3fUVyh1	https://amzn.to/3DhWYyZ	You can also buy a kit of screws at https://indystry.cc/store/
M3x10 mm screws	60	https://bit.ly/31QrePG	https://bit.ly/2PSy3e0	https://amzn.to/3Bf5rRQ	
M3x8 mm screws	26	https://bit.ly/31QrePG	https://bit.ly/30TJGHN	https://amzn.to/3krYgyL	
M3 Nut	4	https://bit.ly/3DgTkpf	https://bit.ly/3B9NtzS	https://amzn.to/3mCoMlu	
M3 T nut	22	https://bit.ly/2E5v3rN	https://bit.ly/30WttBP	https://amzn.to/3Dkl6jr	
M5x20 mm screws	8	https://bit.ly/31PSNZh	https://bit.ly/2CnrOvo	https://amzn.to/3mxdEg0	
M5x16 mm screws	22	https://bit.ly/31PSNZh	https://bit.ly/2CnrOvo	https://amzn.to/3mBVaLs	
M5x12 mm screws	28	https://bit.ly/31PSNZh	https://bit.ly/2CnrOvo	https://amzn.to/3mx2RT7	
M5x10 mm screws	4	https://bit.ly/31PSNZh	https://bit.ly/2CnrOvo	https://amzn.to/3jluM6y	
M5 T nut	20	https://bit.ly/2FnQDIX	https://bit.ly/30WttBP	https://amzn.to/3mBuNW2	
M5 nut	24	https://bit.ly/31SI3KX	https://bit.ly/2PSv710	https://amzn.to/3sN7hGB	
M6x12 mm screws	20	https://bit.ly/3fWm2yL	https://bit.ly/2E1ev4t	https://amzn.to/3y0LbLr	
M12x1 fine thread nut	3	-	https://bit.ly/2FhzHDH	https://amzn.to/3mAdhRL	

Steel Plates				
Part name	Quantity	Thickness		
500W Spindle Plate.dxf	1	6 mm	You can find all DXF files at indystry.cc	
Motor Support Left.dxf	1	6 mm		
Motor Support Right.dxf	1	6 mm		
Screw Support Left.dxf	1	6 mm		
Screw Support Right.dxf	1	6 mm		
X Axis.dxf	1	6 mm		
Y Axis Left.dxf	1	6 mm		
Y Axis Right.dxf	1	6 mm		
Z Axis Motor Support.dxf	1	6 mm		
Z Axis Rail Support1.dxf	1	8 mm		
Z Axis Rail Support2.dxf	1	8 mm	And you can also buy a kit of plates at https://indystry.cc/store/	
3D printed				
Part name	Quantity			
6000 holder.stl	3	You can find all STL files at indystry.cc	And you can also buy a kit of 3D printed parts at https://indystry.cc/store/	
Ball screw block X axis flap.stl	1			
Ball screw block X axis.stl	1			
Ball screw block Y axis flap.stl	2			
Ball screw block Y axis.stl	2			
X axis nut holder.stl	1			
Y axis nut holder left.stl	1			
Y axis nut holder right.stl	1			
Z axis bearing holder.stl	1			
Z axis nut holder.stl	1			
Tools				
Part name	BangGood	Aliexpress	Amazon	Comment
3D printer	https://bit.ly/2PMaOSO	https://bit.ly/3gTA19S	https://amzn.to/3gAkfm8	Some useful tools that you may need while building the IndyMill
Tap	https://bit.ly/3iAsTzB	https://bit.ly/2E5QR6D	https://amzn.to/2Y1q0CT	
Cordless drill	https://bit.ly/2DYbVMs	https://bit.ly/2PPQ8t1	https://amzn.to/3DIBwZV	
Angle grinder	https://bit.ly/2XW7Dw4	https://bit.ly/3iwmXHQ	https://amzn.to/3jlq4W4	
Crimper tool	https://bit.ly/3fWr7HI	https://bit.ly/31OtKWC	https://amzn.to/3gCxenq	
Soldering iron	https://bit.ly/3gZFxYs	https://bit.ly/2DOij9e	https://amzn.to/3gCmDIV	
Milling bit for wood	https://bit.ly/3g2AWDL	https://bit.ly/3aktoLe	https://amzn.to/3gAmFkw	Milling bits that I often use
milling bit for aluminium/acrylic	https://bit.ly/31Ok1zA	https://bit.ly/33WKTQx	https://amzn.to/38dbSs0	
6mm single flute	https://bit.ly/3alCHup	https://bit.ly/33WKTQx	https://amzn.to/3gHwDAF	