

List of parts for IndyMill by Nikodem Bartnik

Electronics

Part name	Quantity	BangGood	Aliexpress	Comment
Nema23 Stepper motor	4	https://bit.ly/2Y0Bnrl	https://bit.ly/3lBTGvk	
IndyShield	1	-	-	
TB6600 stepper drivers	4	https://bit.ly/33VQFSs	https://bit.ly/2PSl2lG	
Arduino UNO	1	https://bit.ly/3gVqtlS	https://bit.ly/2FeDxxo	
Power supply	1	https://bit.ly/30RaqZA	https://bit.ly/3kJOtDu	
AC Socket	1	https://bit.ly/30Tk2mr	https://bit.ly/30REsfK	
Cables	-	https://bit.ly/2PQ2qlc	https://bit.ly/3kH9TBh	
4 pin connectors	4	https://bit.ly/30UUpSi	https://bit.ly/3am7dUU	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/3lCR4NJ	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/3kGN4OZ	https://bit.ly/2PMlHE	
Inverter for 1.5kW Spindle	1	https://bit.ly/2E0aHQO		

Mechanics

Part name	Quantity	BangGood	Aliexpress	Comment
Aluminium profile 20x40 mm 600 mm	2	https://bit.ly/3lGGfdM	https://bit.ly/3lVoyRv	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	
Aluminium profile 20x80 mm 600 mm	2	https://bit.ly/2Y03gQL	https://bit.ly/2PRw7Cs	
Trapezoidal lead screw 220 mm	1	https://bit.ly/2PS5r4C	https://bit.ly/3lNef0Z	
Ball Screw SFU1605 650 mm	1	https://bit.ly/3lR7yQJ	https://bit.ly/33X9uET	
Ball Screw SFU1605 600 mm	2	https://bit.ly/2PQlXkg	https://bit.ly/33X9uET	
Linear Rail MGN12 650 mm	2	https://bit.ly/2DSsF85	https://bit.ly/2XY4ADA	
Linear Rail MGN12 600 mm	2	https://bit.ly/2DSsF85	https://bit.ly/2XY4ADA	
Linear Rail MGN12 200 mm	2	https://bit.ly/2DSsF85	https://bit.ly/3fWvn9N	
Linear Rail Block MGN12H	12	https://bit.ly/3gVz94w	https://bit.ly/3gVSOBm	
600RS bearing	3	https://bit.ly/30RJJsI	https://bit.ly/30Uv0by	I counted every single screw that you need for this project, but just in case it's always a good idea to buy some more :)
51101 thrust bearing	3	-	https://bit.ly/30TeQil	
6201RS bearing	3	https://bit.ly/3h7TWSE	https://bit.ly/2E44Tjp	
608zz bearing	1	https://bit.ly/33Wh6Hz	https://bit.ly/2XYrk6t	
8 to 10mm coupler	3	https://bit.ly/30SUCoV	https://bit.ly/3gWQAS3	
Closed GT2 Belt 200mm	1	https://bit.ly/3aoq69M	https://bit.ly/2YfwmfI	
GT2 8 mm Pulleys	2	https://bit.ly/31Ms1RH	https://bit.ly/31KuTym	
Trapezoidal lead screw lock collar	3	https://bit.ly/2Fn9y6E	https://bit.ly/3gVOySf	
Corner connectors	2	https://bit.ly/3fVlVlc	https://bit.ly/3kGldfO	
M3x16 mm screws	10	https://bit.ly/31QrePG	https://bit.ly/3fUvYh1	
M3x10 mm screws	48	https://bit.ly/31QrePG	https://bit.ly/2PSy3e0	
M3x8 mm screws	26	https://bit.ly/31QrePG	https://bit.ly/30TJGHN	
M3 T nut	22	https://bit.ly/2E5v3rN	https://bit.ly/30WttBP	
M5x20 mm screws	8	https://bit.ly/31PSNZh	https://bit.ly/2CnrOvo	
M5x16 mm screws	22	https://bit.ly/31PSNZh	https://bit.ly/2CnrOvo	
M5x12 mm screws	28	https://bit.ly/31PSNZh	https://bit.ly/2CnrOvo	
M5x10 mm screws	4	https://bit.ly/31PSNZh	https://bit.ly/2CnrOvo	
M5 T nut	20	https://bit.ly/2FnQDlX	https://bit.ly/30WttBP	
M5 nut	24	https://bit.ly/31Sl3KX	https://bit.ly/2PSv710	
M6x12 mm screws	20	https://bit.ly/3fWm2yL	https://bit.ly/2E1ev4t	
M12x1 fine thread nut	3	-	https://bit.ly/2FhzHDH	

Steel Plates

Part name	Quantity	
X Axis.dxf	1	You can find all DXF files at industry.cc
Y Axis Right.dxf	1	
Y Axis Left.dxf	1	
Z Axis Motor Support.dxf	1	
Z Axis Rail Support1.dxf	1	
Z Axis Rail Support2.dxf	1	
Motor Support Right.dxf	1	
Motor Support Left.dxf	1	
Screw Support Right.dxf	1	
Screw Support Left.dxf	1	
500W Spindle Plate	1	

3D printed

Part name	Quantity	
6000 holder.stl	3	You can find all STL files at industry.cc
X axis ball screw holder.stl	1	
X axis nut holder.stl	1	
Y axis ball screw holder.stl	2	
Y axis nut holder left.stl	1	
Y axis nut holder right.stl	1	
Z axis nut holder.stl	1	
Z axis bearing holder.stl	1	

Tools

Part name	BangGood	Aliexpress	Comment
3D printer	https://bit.ly/2PMaOSO	https://bit.ly/3gTA19S	Some useful tools that you may need while building the IndyMill
Tap	https://bit.ly/3lAsTzB	https://bit.ly/2E5QR6D	
Cordless drill	https://bit.ly/2DYbVMs	https://bit.ly/2PPQ8t1	
Angle grinder	https://bit.ly/2XW7Dw4	https://bit.ly/3lwmXHQ	
Crimper tool	https://bit.ly/3fW7Hl	https://bit.ly/3lOIKWC	
Soldering iron	https://bit.ly/3gZFxyS	https://bit.ly/2DOij9e	Milling bits that I often use
Milling bit for wood	https://bit.ly/3g2AWDL	https://bit.ly/3aktoLe	
milling bit for aluminium/acrylic	https://bit.ly/31Ok1zA	https://bit.ly/33WKTQx	
6mm single flute	https://bit.ly/3alCHup	https://bit.ly/33WKTQx	