

3D printed parts				
No.	Name	Quantity	STEP FILES Links	STL FILES Links
1	base cover	1	https://github.com/oppomo7amed/robotarm/blob/main/stepfiles/cover.stp	https://github.com/oppomo7amed/robotarm/blob/main/stlfiles/cover.stl
2	base of the base motor	1	https://github.com/oppomo7amed/robotarm/blob/main/stepfiles/base_motor.stp	https://github.com/oppomo7amed/robotarm/blob/main/stlfiles/base_motor.stl
3	bottom of the gear box 17	3	https://github.com/oppomo7amed/robotarm/blob/main/stepfiles/gear_box_17.stp	https://github.com/oppomo7amed/robotarm/blob/main/stlfiles/gear_box_17.stl
4	bottom of the gear box 34	3	https://github.com/oppomo7amed/robotarm/blob/main/stepfiles/gear_box_34.stp	https://github.com/oppomo7amed/robotarm/blob/main/stlfiles/gear_box_34.stl
5	Central disk	6	https://github.com/oppomo7amed/robotarm/blob/main/stepfiles/central_disk.stp	https://github.com/oppomo7amed/robotarm/blob/main/stlfiles/central_disk.stl
6	Common shaft 1	6	https://github.com/oppomo7amed/robotarm/blob/main/stepfiles/common_shaft_1.stp	https://github.com/oppomo7amed/robotarm/blob/main/stlfiles/common_shaft_1.stl
7	Common shaft 2	6	https://github.com/oppomo7amed/robotarm/blob/main/stepfiles/common_shaft_2.stp	https://github.com/oppomo7amed/robotarm/blob/main/stlfiles/common_shaft_2.stl
8	Cycloidal 1	6	https://github.com/oppomo7amed/robotarm/blob/main/stepfiles/cycloidal_1.stp	https://github.com/oppomo7amed/robotarm/blob/main/stlfiles/cycloidal_1.stl
9	Cycloidal 2	6	https://github.com/oppomo7amed/robotarm/blob/main/stepfiles/cycloidal_2.stp	https://github.com/oppomo7amed/robotarm/blob/main/stlfiles/cycloidal_2.stl
10	Elbow holder supporter	2	https://github.com/oppomo7amed/robotarm/blob/main/stepfiles/elbow_holder_supporter.stp	https://github.com/oppomo7amed/robotarm/blob/main/stlfiles/elbow_holder_supporter.stl
11	Elbow holder	2	https://github.com/oppomo7amed/robotarm/blob/main/stepfiles/elbow_holder.stp	https://github.com/oppomo7amed/robotarm/blob/main/stlfiles/elbow_holder.stl
12	Elbow motor holder	1	https://github.com/oppomo7amed/robotarm/blob/main/stepfiles/elbow_motor_holder.stp	https://github.com/oppomo7amed/robotarm/blob/main/stlfiles/elbow_motor_holder.stl
13	Elbow output shaft extention	2	https://github.com/oppomo7amed/robotarm/blob/main/stepfiles/elbow_output_shaft_extention.stp	https://github.com/oppomo7amed/robotarm/blob/main/stlfiles/elbow_output_shaft_extention.stl
14	Elbow output shaft	1	https://github.com/oppomo7amed/robotarm/blob/main/stepfiles/elbow_output_shaft.stp	https://github.com/oppomo7amed/robotarm/blob/main/stlfiles/elbow_output_shaft.stl
15	Elbow pulley holder	1	https://github.com/oppomo7amed/robotarm/blob/main/stepfiles/elbow_pulley_holder.stp	https://github.com/oppomo7amed/robotarm/blob/main/stlfiles/elbow_pulley_holder.stl
16	Nema 17 motor shaft	3	https://github.com/oppomo7amed/robotarm/blob/main/stepfiles/nema_17_motor_shaft.stp	https://github.com/oppomo7amed/robotarm/blob/main/stlfiles/nema_17_motor_shaft.stl
17	Nema 34 motor shaft	3	https://github.com/oppomo7amed/robotarm/blob/main/stepfiles/nema_34_motor_shaft.stp	https://github.com/oppomo7amed/robotarm/blob/main/stlfiles/nema_34_motor_shaft.stl
18	output shaft	4	https://github.com/oppomo7amed/robotarm/blob/main/stepfiles/output_shaft.stp	https://github.com/oppomo7amed/robotarm/blob/main/stlfiles/output_shaft.stl
19	shoulder base	1	https://github.com/oppomo7amed/robotarm/blob/main/stepfiles/shoulder_base.stp	https://github.com/oppomo7amed/robotarm/blob/main/stlfiles/shoulder_base.stl
20	Shoulder output shaft	1	https://github.com/oppomo7amed/robotarm/blob/main/stepfiles/shoulder_output_shaft.stp	https://github.com/oppomo7amed/robotarm/blob/main/stlfiles/shoulder_output_shaft.stl
21	top of the gear box	6	https://github.com/oppomo7amed/robotarm/blob/main/stepfiles/top_of_the_gear_box.stp	https://github.com/oppomo7amed/robotarm/blob/main/stlfiles/top_of_the_gear_box.stl
22	Weist2,3 motor holder	2	https://github.com/oppomo7amed/robotarm/blob/main/stepfiles/weist2_3_motor_holder.stp	https://github.com/oppomo7amed/robotarm/blob/main/stlfiles/weist2_3_motor_holder.stl
23	Wrist1 motor holder	2	https://github.com/oppomo7amed/robotarm/blob/main/stepfiles/wrist1_motor_holder.stp	https://github.com/oppomo7amed/robotarm/blob/main/stlfiles/wrist1_motor_holder.stl

MOTORS					
No.	Name	Code	For	Link	Founder
1	Nema34	34B	Base	https://www.digikey.com/en/products/detail/lin-engineering/34B	DigiKey
2	Nema34	34S	Shoulder	https://www.digikey.com/en/products/detail/lin-engineering/34S	DigiKey
3	Nema34	34E	Elbow	https://www.digikey.com/en/products/detail/lin-engineering/34E	DigiKey
4	Nema17	17W1	Wrist1	https://www.digikey.com/en/products/detail/same-sky-factory/17W1	DigiKey
5	Nema17	17W2	Wrist2	https://www.digikey.com/en/products/detail/same-sky-factory/17W2	DigiKey
6	Nema17	17W3	Wrist3	https://www.digikey.com/en/products/detail/same-sky-factory/17W3	DigiKey

Mechanical Components						
No.	Name	Code	Total quantity	Discretion	Link	Founder
1	Bearing	B304207	30	bearing for the shafts of the motors	https://www.mcmaster.com/5972K159/	McMaster
2	Bearing	B030804	60	bearing for the gaer boxes of the motors	https://www.mcmaster.com/7804K126/	McMaster
3	Bearing	B759510	6	bearing for the output of gaer boxes	https://www.mcmaster.com/6656K243/	McMaster
4	Bearing	B11014016	6	bearing for the output of gaer boxes	https://www.amazon.com/ACROPIX-Bearings-95x120x22mm-6000rpm-ABEC-3-Ball-Bearing/dp/B011014016	amazon
5	Bearing	B11017028	1	bearing for the base plate	https://www.amazon.com/ACROPIX-Bearings-80x100x22mm-6000rpm-ABEC-3-Ball-Bearing/dp/B011017028	amazon
6	Bearing	B061104	2	Bearing for the Elbow link	https://www.amazon.com/uxcell-MR106-2RS-Groove-Ball-Bearing-10x30x8mm/dp/B061104	amazon
7	Bearing	B061204	4	bearinf foe elbow joint	https://www.mcmaster.com/7804K112/	McMaster
8	Bearing Sleeve	BS061010	42	Bearing sleeve for the cycloidal dsiks	https://www.mcmaster.com/2867T114/	McMaster
9	Belt Pulley	BP337033	2	Pulley for tje Elbow belt	https://www.mcmaster.com/6495K512/	McMaster
10	Bracket	BRACKET34	2	Shoulder & Elbow bracket	https://www.amazon.com/Stepper-Motor-Mounting-Bracket/dp/B078888888	amazon
11	Bracket	BRACKET17	4	Wrist brackets	https://www.amazon.com/STEPPERONLINE-Mounting-Bracket/dp/B078888888	amazon
12	Belt	Belt905	1	Belt for the elbow	https://www.mcmaster.com/6484K407/	McMaster
13	Shaft	Sh0618	42	Bearing sleeve shafts	https://www.mcmaster.com/93600A682/	McMaster
14	Shaft	Sh0326	30	centrale disk shafts	https://www.mcmaster.com/91595A387/	McMaster
15	Shaft	Sh0626	2	shaft for the elbow support link	https://www.mcmaster.com/91585A398/	McMaster
16	Shaft	Sh06150	1	shaft for the elbow joint	https://www.mcmaster.com/5033N123/	McMaster
17	Shaft	Sh05340	1	Wrist 1 shaft 340mm or 13.4"	https://www.mcmaster.com/89325K112/	McMaster
18	coupling	coupling	1	Wrist1 coupling	https://www.mcmaster.com/3613N57/	McMaster
19	Nut	NutM4	60	T slot nut M4	https://www.mcmaster.com/90510A231/	McMaster
20	M3 Screw & Nut	M03	27	24 Screws& Nuts for the 3D printed shafts 80mm	24 Screws& Nuts for the 3D printed shafts 13mm	
21	M4 Screw & Nut	M04				.
22	M6 Screw & Nut	M06				.
23	T slot 20*20	T500	2	T slot 20mm*20mm, 500mm length		
24	T slot 20*20	T600	1	T slot 20mm*20mm, 600mm length		