

BILL OF MATERIALS

		BASE	ART1	ART2	ART3	ART4	ART5	GRIPPER	ELECTRONICS	TOTAL QUANTITY
BOARDS AND DRIVERS	ARDUINO MEGA 2560 CLONE								1	1
	RAMPS 1.6 BOARD								1	1
	TMC2209 STEPPER DRIVER								4	4
	DM556 STEPPER DRIVER								2	2
MOTORS	NEMA 17, 40 mm, 5 mm D-SHAFT, 0.4 N.m	1								1
	NEMA 23, 76 mm, 6.35 mm D-SHAFT, 1.89 N.m		1							1
	NEMA 23, 56 mm, 6.35 mm D-SHAFT, 1.26 N.m		1							1
	NEMA 14, 28 mm, 5 mm D-SHAFT, 0.15 N.m				1		1			2
	NEMA 17, 34 mm, 5 mm D-SHAFT, 0.28 N.m					1				1
	MG996R SERVO							1		1
BELTS	GT2 BELT, 6 mm WIDTH, 400 mm LENGTH	1				1				2
	HTD-3M BELT, 9 mm WIDTH, 390 mm LENGTH		1							1
	HTD-3M BELT, 9 mm WIDTH, 420 mm LENGTH			1						1
	GT2 BELT, 6 mm WIDTH, 200 mm LENGTH				1					1
PULLEYS	GT2 PULLEY, 20T, 5 mm BORE	1								1
	HTD-3M PULLEY, 16T, 6.35 mm BORE		1							1
	GT2 PULLEY, 16T, 5 mm BORE				1	1				2
IDLERS	GT2 IDLER, 16T (NO TEETH), 3 mm BORE	2				2				4
BEARINGS	61810-ZZ BALL BEARING	1	1	1						3
	625-ZZ BALL BEARING	3								3
	F623-ZZ BALL BEARING		4	4				1		9
	61804-ZZ BALL BEARING			1		1	1			3
	61808-ZZ BALL BEARING				1	1				2
MISC	MECHANICAL ENDSTOP SWITCH (Banggood ID: 1338647)	1	1	1	1	1	1			6
	MG996R ROUND SERVO HORN							1		1
	M3x6x10 NYLON SPACER							6	4	10
	GEL PAD SHEET 40 mm x 50 mm x 2 mm							1		1
	LARGE PUSH BUTTON								1	1
	326 mm x 244 x 16 mm WOOD BOARD								1	1
	MINI CLAMP								2	2

BILL OF MATERIALS

FASTENERS	M2.5x16 CAP HEAD SCREW								2	2
	M3x6 CAP HEAD SCREW	8	12	6	8	6	11			51
	M3x8 CAP HEAD SCREW		2	2	6	4	2			16
	M3x10 CAP HEAD SCREW					4		2		6
	M3x12 CAP HEAD SCREW	6								6
	M3x16 CAP HEAD SCREW			10			4	1		15
	M3x20 CAP HEAD SCREW					6	2	4	2	14
	M3x25 CAP HEAD SCREW			2		2		2		6
	M3x30 CAP HEAD SCREW	2	2	8	4					16
	M3x35 CAP HEAD SCREW	4								4
	M4x12 CAP HEAD SCREW		4						4	8
	M4x16 CAP HEAD SCREW							4		4
	M5x10 CAP HEAD SCREW	3								3
	M5x16 CAP HEAD SCREW	3	4							7
	M5x20 CAP HEAD SCREW		8					1	2	11
	M5x20 SHOULDER SCREW			1						1
	M3 HEX NUT	2	4	4	2	2	2	7	2	25
	M4 HEX NUT							4	4	8
	M5 HEX NUT		4						2	6
	M3 PLAIN WASHER				4	2				6
	M5 PLAIN WASHER	3								3
	*M3x6 HEAT-SET INSERT (Banggood ID: ID: 1665090)	14	16	16	12	20	13			91
	*M5x6 HEAT-SET INSERT (Banggood ID: ID: 1665090)	6	8	1			1			16
	* CAN SUBSTITUTE WITH DIFFERENT LENGTH HEAT-SET INSERTS									
	M5x25 WOOD SCREW	3							2	5
FILAMENT	PLA FILAMENT, 1.75 mm, 1 kg ROLL									2
POWER SUPPLY	12V, 15A, DC PSU (FOR RAMPS 1.6 BOARD)									1
	24V, 15A, DC PSU (FOR 2x DM556 DRIVERS)									1
	9V, 2A, DC ADAPTER (FOR MG996R SERVO)									1

BILL OF MATERIALS

TOOLING	3D PRINTER (220x220x250 mm BUILD VOL.)									1
	ADJUSTABLE TEMP SOLDERING IRON									1
	M3 HEAT-SET INSERT INSTALLATION TIP									1
	M5 HEAT-SET INSERT INSTALLATION TIP									1
	M2-M5 HEX KEY SET									1
	NEEDLE FILE SET									1