

REQUIREMENT LIST							
#	Date of Change	Category	Requirements	Metric	Value	Tolerance	Priority
1	4-10-2023	Geometry	Maximum dimensions (HxWxD)	mm <sup>3</sup>	300x300x300	10x10x10	F2
2	4-10-2023		Maximum container-holder diameter	mm	150	10	F1
3	4-10-2023		Minimum container-holder diameter	mm	50	10	F1
4	4-10-2023		Number of containers	#	9	3	F1
5	4-10-2023	Kinematics	Rotational movement (for the circular arrangement)	deg	360	N.A.	F0
6	26-10-2023		Time for container-opener to go up/down	s	5	4	F1
7	4-10-2023		Time for rotation from container i to container i+1	s	3	2	F1
8	4-10-2023		Time for opening one container	s	5	1	F1
9	4-10-2023	Forces	Maximum mass per container	g	200	50	F2
10	26-10-2023		Maximum force needed to open a lid	N	1	0,5	F1
11	4-10-2023		Torque needed to rotate the containers	Nm	10	3	F1
12	28-10-2023		Force on button (to fill the user's bowl, button option)	N	2	1	F1
13	4-10-2023		Force needed for the user to place a container	N	To Minimize	N.A.	F0
14	4-10-2023	Energy	Friction (losses because of the rotational movement)	W	To Minimize	N.A.	F0
15	4-10-2023		Heating (for motors or due to the friction losses)	W	To Minimize	N.A.	F0
16	28-10-2023		Input power supply	W	<1200	100	F2
18	4-10-2023	Safety	IEC-60335 "Safety of household and similar electrical appliances"	N.A.	N.A.	N.A.	F0
19	16-10-2023		Regulation (EC) N°1935/2004 should be respected	N.A.	N.A.	N.A.	F0
20	4-10-2023		High temperature sensor and alarm/measures	°C	40	N.A.	F1
21	16-10-2023	Ergonomics	Easy user interface (touch screen or buttons) for the elderly with an option to select the language(French, English, Dutch, a recipe library).	N.A.	N.A.	N.A.	F0
22	16-10-2023		Users can choose the order in which they want the ingredients to be served	N.A.	Available	N.A.	F1
23	16-10-2023		Storage space for other ingredient containers outside the automatic selection part	N.A.	Available	N.A.	F2
24	16-10-2023		Containers must be washable with normal washing-up liquid	N.A.	needed	N.A.	F1
25	16-10-2023		Ingredient containers are automatically selected according to the recipe and the order predefined by the recipe	N.A.	N.A.	N.A.	F0
26	4-10-2023	Quality Control	fulfillment of safety regulations	N.A.	N.A.	N.A.	F0
27	4-10-2023	Assembly	Replacement possibility of container holder	N.A.	Available	N.A.	F0
28	4-10-2023	Operations	Quietness	dB	50	20	F1
29	4-10-2023		Lifespan	years	1	N.A.	F1
30	4-10-2023		Working temperature	°C	30	20	F0
31	4-10-2023		Storage temperature	°C	35	45	F1
32	4-10-2023		Working humidity (not condensing)	%	45	45	F1
33	4-10-2023		Storage humidity (not condensing)	%	45	45	F2
34	16-10-2023	Production	Smooth, Non-edged and waterproof surfaces for the body of the robot	N.A.	Available	N.A.	F0
35	28-10-2023		Cost of the production	€	25	10	F0
36	16-10-2023		A production technique that can produce circular and complex shapes as quickly as possible	N.A.	Needed	N.A.	F0
37	16-10-2023		An impermeable, dry place for electronic equipment (arduino, sensors, servo-motors, etc.), protected from any contact with food.	N.A.	needed	N.A.	F0
38	16-10-2023	Materials	The EN 1186 Standard should be respected	N.A.	Available	N.A.	F0
39	16-10-2023		Regulation (EC) N°1935/2004 should be respected for the containers	N.A.	N.A.	N.A.	F0
40	16-10-2023		IP 68 should be respected for the containers	N.A.	N.A.	N.A.	F0
41	28-10-2023		Recyclability of parts	%	70	10	F0
42	28-10-2023		Density (to avoid a heavy robot)	kg/m <sup>3</sup>	240	50	F1
43	4-10-2023		Coefficient of thermal expansion	N.A.	To Minimize	N.A.	F0
44	4-10-2023	Signals	Voice recognition	N.A.	Available	N.A.	F1
45	4-10-2023		Buttons	N.A.	Available	N.A.	F0
46	4-10-2023		Display	N.A.	Available	N.A.	F0
47	22-10-2023	Maintenance	Option to replace or change broken pieces	N.A.	Available	N.A.	F1
48	28-10-2023	Cost	Selling price	€	80	50	F2
49	4-10-2023	Schedules	Presentation : Requirement list (MECA-H409)	Date	9-okt	N.A.	F0
50	4-10-2023		Presentation : Conceptual design (MECA-H409)	Date	23-okt	N.A.	F0
51	4-10-2023		Presentation : Conceptual design (MECA-Y403)	Date	24-okt	N.A.	F0
52	4-10-2023		Presentation : Embodiment design (MECA-H409)	Date	13-nov	N.A.	F0
53	4-10-2023		Presentation : Sub-system design	Date	28-nov	N.A.	F0
54	4-10-2023		End of product	Date	19-dec	N.A.	F0
55	4-10-2023		Instructables Submission	Date	31-dec	N.A.	F0