

4.2 TECHNICAL SPECIFICATIONS

TABLE 2: TECHNICAL SPECIFICATIONS

User need			Design input		Priority
C1	Capsules	Nespresso Design	T1	Only Nespresso® capsules	M
			T2	Aluminum capsules	M
C2	Output	Segregated aluminum and organic matter	T3	Segregation inside the existing machine	M
			T4	Aluminum and coffee stored in different containers after process	M
C3	Quality	The two output material must be completely separated	T5	Organic matter pure	M
			T6	Aluminum: max 30% weight is organic matter	M
C4	Storage capacity	The device must offer enough storage capacity to hold the recycled matter of a typical household of at least one week	T7	Min. 12 capsules	M
C5	Cleanliness	Parts in contact with organic matter must be easily cleanable.	T8	Easy to clean material for containers	W
			T9	Cleanable such that the mechanism remains operational	M
			T10	Avoid container shapes retaining the coffee	W
C6	Time	A capsule must be processed faster than a coffee is produced by the Espresso machine	T11	Processing time: max. 26.5 [s]	M
C7	Dimensions	Must be integrated in a currently available domestic Nespresso machine	T12	Minimum changes to the housing	W
			T13	Possible reorganization of existing components inside the housing	W
			T14	Maximum dimensions: 320mm (height), 170mm (width), 360mm (depth)	M
C8	Safety	Safe for domestic use	T15	No sharp edges on parts with which the user interacts	M
			T16	No accessible cutting tools	M
			T17	No accessible hot parts	M
			T18	No accessible electrical parts	M
			T19	Mechanism safe for intended use	M
C9	Noise	Acceptable noise level	T20	Noise level under 85dB(A), peak 100dB(A)	M
C10	Accessibility	Can be manipulated with ease by any user	T21	Intuitive manipulation	W
			T22	Required force can be applied by the average user	M
C11	Maintenance	Normal maintenance can be performed by the average user	T23	Robust components	M
			T24	Clear indications for defects	M
C12	Cost and energy	Must be cost and energy efficient	T25	Target price entire machine with system < 300 CHF	M
			T26	Max 1500 W for the entire machine	M
C13	Appearance	Nice appearance is necessary	T27	Same Nespresso design language	M
			T28	“True materials”: what we see is the real material, not just coating for instance	W