

DripVolts Budget

Table 01: Cost Analysis of Materials and Components

Item No.	Component / Material description	Quantity	Unit Cost (LKR)	Total cost (LKR)
01	3D printing components	3	4100.00	4100.00
02	Enameled cupper wires	50 g	8.70	435.00
03	15 mm screw bolts	4	65.00	260.00
04	7mm screw bolts	4	30.00	120.00
05	Nuts	24	5.00	120.00
06	washers	24	4.20	100.00
07	Springs	8	187.50	1500.00
08	Wood parts	1	500.00	500.00
09	springs	4	75.00	300.00
10	Piezo bussers	4	30.00	120.00
Total Cost				7435.00

Conclusion

During the initial stages of the project, we purchased a set of springs costing **Rs. 1600**, which accounted for approximately **24% of the total project budget**. However, upon evaluating the design and functionality requirements, we identified that these springs were **not essential** for the final system. To optimize costs and improve resource efficiency, we revised our component selection and opted for an alternative spring set costing only **Rs. 200**, reducing the spring-related expense to just **3% of the total budget**. This change significantly enhanced the **cost-effectiveness** of the project without compromising performance, demonstrating the value of continuous evaluation and decision-making during the design process.

Total cost with unwanted springs = Rs. 7435.00

Total cost without unwanted springs = Rs. 5835.00

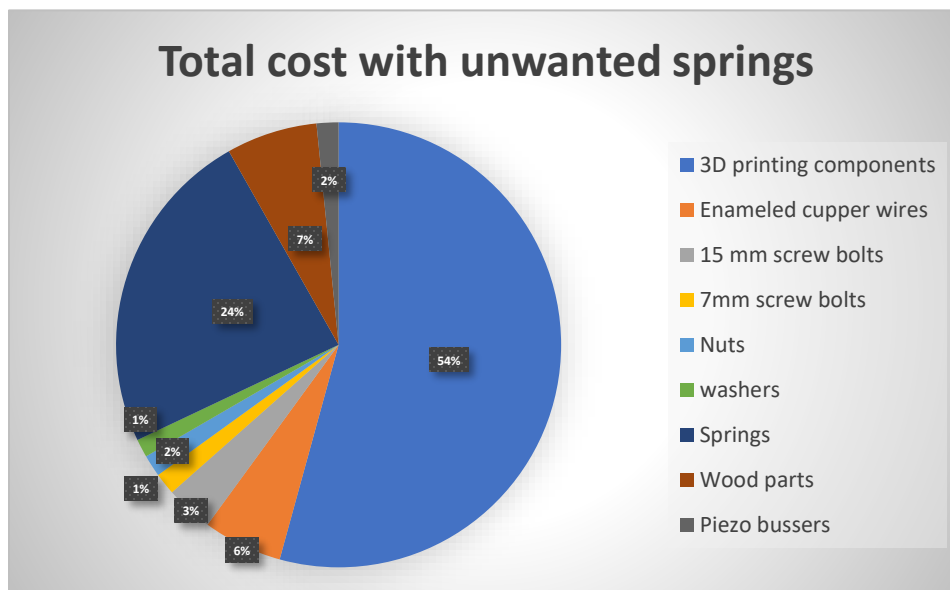


Figure 01 : Total cost with unwanted springs

Total cost without unwanted springs

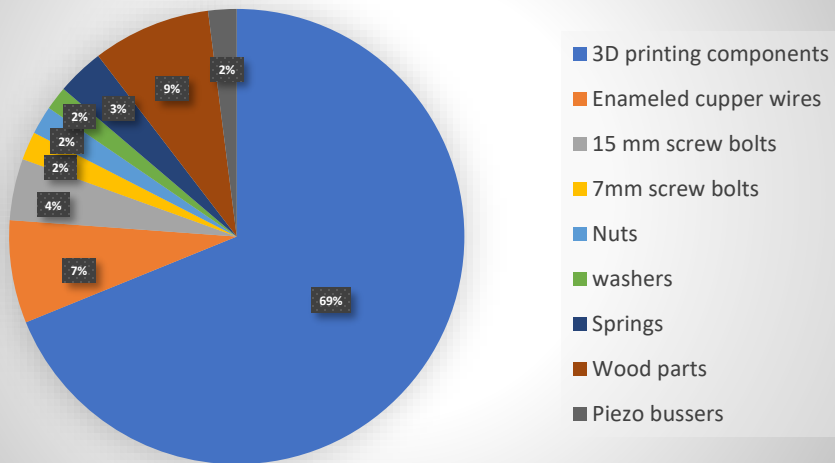


Figure 02 : Total cost without unwanted springs