4th International Conference on Environmental Design, ICED2023

Sustainability / Pollution / Energy / Cities-Buildings / Transportation / Erosion / Climate Change / Policy / Social Acceptance / Health Impacts 20-22 October 2023, Athens, Greece

RECYCLING AND ECODESIGN

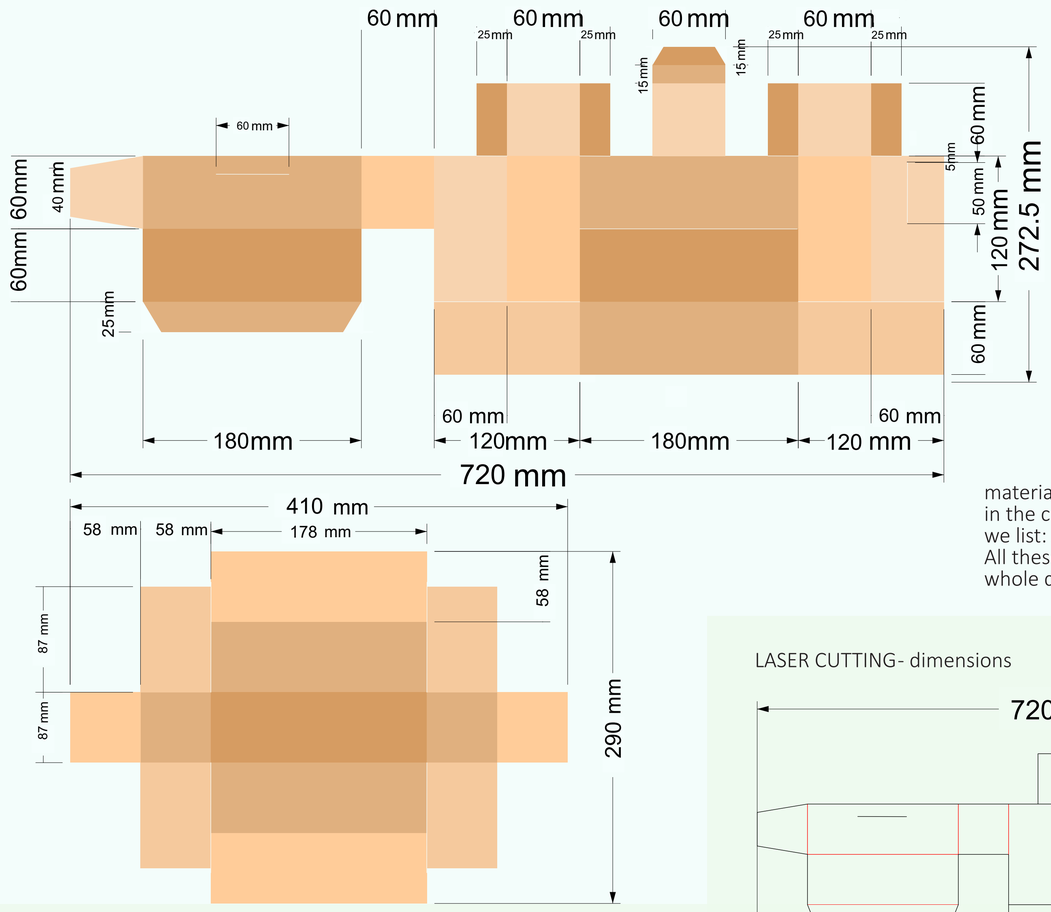
Ș. R. Stoica[1]

[1] postdoctoral researcher within the Proinvent POCU Project, university assistant doctor, Faculty of Visual Arts and Design, National University of Arts „G.Enescu", 700040, Yassi, Romania (stoica_stefana93@yahoo.com)

SCOPE

The greatest desire of the ecodesign idea is that the design product can be easily disposed of at the end of its useful life, or can be reused in another form or purpose. Basically, we can talk about a restructuring of the product concept, or a reinterpretation of the design so that it can cover another need and not only that.

The ecodesign takes into account all stages from the design concept to the manufacture of the product to its use and disposal so that it meets all the parameters within which the definition of recycling falls.



METHODOLOGY

The way we can create new products is by supporting recycling, especially cardboard packaging, which can be reused in another packaging design proposed for another type of product.

In order to reduce production costs and for a clean recycling of the cardboard packaging, it is desired that the method of assembly of folding the unfolded product packaging does not contain any adhesives or glue.

The methodology consists of studies on the ergonomics of the objects that will be placed inside the packaging and studies on the dimensioned and scaled technical drawing so that the unfolding of the packaging fits into the available space of a cardboard material from another packaging on the market.

Practically, the cardboard packaging of a product on the market will not be thrown away or stacked, but will be carefully collected in order to benefit from the flat, unbent material.

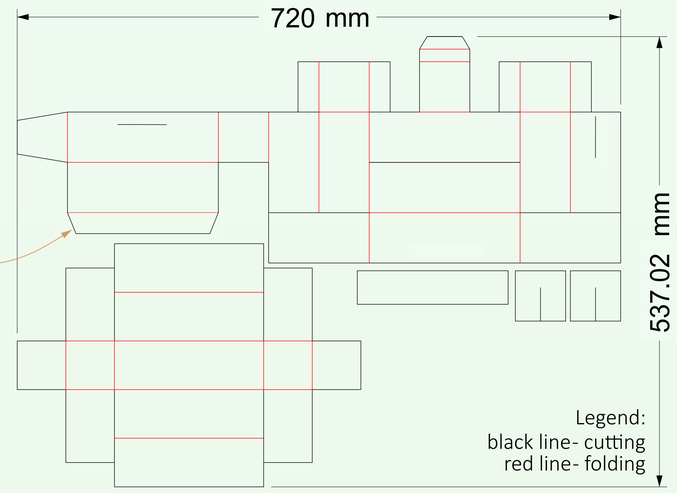
RESULTS AND DISCUSSION

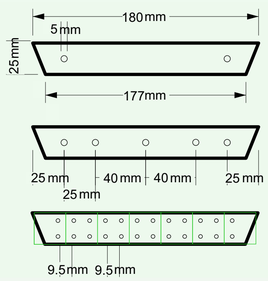
The results consist of finished products made from recycled cardboard packaging and the proposal of packaging made from the recycled material, the cardboard, to be formed without using other related materials.

CONCLUSIONS

Innovation and novelty can lie both in the material used and in all the important design elements in the creation of the finished product, among which we list: shape, shade, dimensions and texture.
All these elements are part of the composition of the whole design concept.

LASER CUTTING- dimensions Material used: cardboard





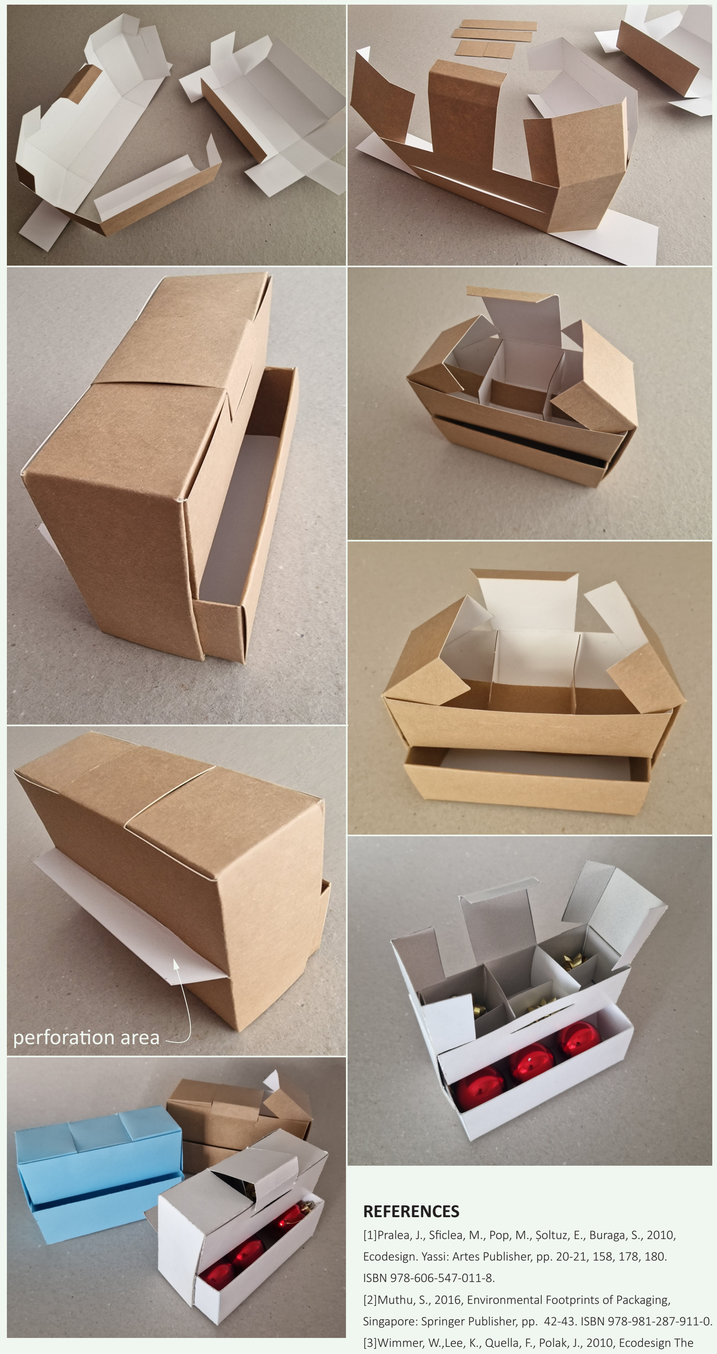
DECORATING VARIANTS- perforation

Variant 1- insertion of chain/ bracelet / decorative ribbon.

Variant 2- perforation- insertion of chain/ bracelet/decorative ribbon.

Variant 3- perforation- insertion of decorative ribbon earrings.

MOCK-UP



REFERENCES

[1]Pralea, J., Sficlea, M., Pop, M., Șoltuz, E., Buraga, S., 2010, Ecodesign. Yassi: Artes Publisher, pp. 20-21, 158, 178, 180. ISBN 978-606-547-011-8.

[2]Muthu, S., 2016, Environmental Footprints of Packaging, Singapore: Springer Publisher, pp. 42-43. ISBN 978-981-287-911-0.

[3]Wimmer, W.,Lee, K., Quella, F., Polak, J., 2010, Ecodesign The Competitive Advantage. Dordrecht: Springer Publisher, pp. 4-6. ISBN 978-90-481-9126-0.

[4] https://www.researchgate.net/publication/347933554_What_is_environmental_design