

ABSTRACT

PROCESSING OF PLASTIC BOTTLE WASTE FOR FASHION PRODUCTS WITH HOT TEXTILE TECHNIQUE

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The presence of plastic is useful for human life and it causes a lot of plastic waste continues to grows every year. Most plastics waste are untreated, besides accumulating in landfills, mostly pollutes the oceans. Indonesia, as one of the largest maritime countries in the world, in fact contributed to the plastic waste in the ocean after China. Waste plastic bottles is one of the most polluting trash on the beach. In addition to being one type of plastic waste with a large quantity, the selection of plastic bottle waste to be recycled due to its strong material quality, stable dimensions and chemical and heat resistance.

The method used in this research is the study of literature, interviews and observations from books and waste banks regarding data, types, impacts and how to process them as well. Other data collected relating to the hot textile technique includes tools, materials and data about which processed plastic bottle waste products have been produced. In addition, this research is also based on exploration methods regarding hot textile techniques and their development when applied to waste plastic bottles of type Polyethylene Perephtalate (PET).

Waste treatment technique used is hot textile. Hot textile is a technique in which synthetic or natural materials are combined together to form new sheets using heat conductors such as heat guns and irons. The use of heating techniques in plastic bottles is done because it can drastically reduce the volume of plastic bottles so as to increase the quantity of recycled plastic bottle waste and at the same time create visuals of new processed waste products.

Innovations born from the results of exploration will be further processed into modular or sheet results for fashion accessories. It is hoped that this research can be an inspiration for the community to be more active and innovative independently in utilizing plastic bottle waste.

Keywords: PET plastic bottle waste, hot textile, fashion products