

ABSTRACT

**THE IMPLEMENTATION OF FUZZY LOGIC IN PREDICTING
PRODUCTION QUANTITIES AT PT. INOCYCLE
TECHNOLOGY TBK, BENGKULU BRANCH**

By:
Muhamad Soleh ¹⁾
Yupianti ²⁾
Devi Sartika ²⁾

PT. Inocycle Technology Tbk Bengkulu Branch is one of the companies engaged in the production of Recycled Polyester Staple Fiber ("Re-PSF") by processing recycled plastic without waste. Re-PSF Bengkulu Branch is the raw material of many of the Company's products, ranging from non-woven manufacturing for automotive, construction, agriculture, infrastructure, and clothing and furniture. Pillow Dream Scope and Bolster Dream Score are the types of products produced by PT. Inocycle Technology Tbk Bengkulu Branch. The implementation of fuzzy logic in predicting the amount of production at PT. Inocycle Technology Tbk Bengkulu Branch can help in determining the amount of production of Pillow Dream Scope and Bolster Dream Score in every month and can help manage the inventory of Pillow Dream Scope and Bolster Dream Score products at PT. Inocycle Technology Tbk Bengkulu Branch. Based on test data obtained from PT. Inocycle Technology Tbk Bengkulu Branch, the implementation of tsukamoto model fuzzy logic method, the results of predicting the production number of Pillow Dream Scope products as much as 337 pcs for January 2024 from the test data used where there is a condition if the number of requests is 216 pcs and the number of supplies is 48 pcs. Based on system testing that has been carried out, it can be concluded that the functional application of fuzzy logic in predicting the amount of production at PT. Inocycle Technology Tbk Bengkulu Branch has run well and is able to display the results of predicting the production amount of product in accordance with the stages of Tsukamoto fuzzy logic model.

Keywords: Fuzzy Logic, Tsukamoto, Prediction, Production Quantity.

1) Student

2) Supervisors

