

## **ABSTRACT**

*PT Dharmapala Usaha Sukses is an industry that produces refined sugar located in Cilacap Regency, Central Java. The quality of refined sugar products of three types, namely dus super, diamond, and penyoe, has a defect percentage value of more than 2,568%, therefore refined sugar products exceed the standard limit set by the company of 2%. This study aims to analyze whether the refined sugar production process is within the control limits or not and to determine the types of defects and the causes of damage to refined sugar products which then make improvement proposals based on the problems described through fishbone. In data processing, this research uses the Statistical Process Control (SPC) method, namely making check sheets, pareto diagrams, control maps, and fishbone. Based on the results of the study, it is known that the types of defects in refined sugar products are defects in shape, odor and color. The causes of the three types of defects are in materials, people, machines, and production process methods. The proposed improvements aim to minimize defective products by selecting the quality of raw materials, checking the machine regularly and periodically, needing a briefing before the activity starts, checking the machine settings regularly and so on.*

**Keywords:** *Refined Sugar, Statistical Process Control, Quality Control.*