

## COMPANY PRODUCTIVITY MEASUREMENT ANALYSIS USING THE MARVIN E. MUNDEL METHOD AT PT XYZ

#### UNDERGRADUATE FINAL PROJECT

Submitted as one of the requirements to obtain Sarjana Teknik (S.T.)

By

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#### FACULTY OF ENGINEERING

INDUSTRIAL ENGINEERING STUDY PROGRAM

### CIKARANG

### **MARCH, 2023**

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The Panel of Examiners declare that the undergraduate thesis entitled:

## COMPANY PRODUCTIVITY MEASUREMENT ANALYSIS USING THE MARVIN E. MUNDEL METHOD AT PT XYZ

that was submitted by Daiana Handi majoring in Industrial Engineering from the Engineering Faculty was assessed and approved to have passed the Oral Examination on 8 March 2023.

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Ir. Hery Hamdi Azwir, M.T.

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### ABSTRACT

PT Saka Teknik Utama is a company that manufactures and repairs spare parts made of metal and provides services for installing metal materials. By using machines such as lathe, milling, drilling, and CNC. The company seeks to improve its performance and gain profits by increasing the company's productivity. To find out the level of productivity at PT Saka Teknik Utama is done using the Marvin E Mundel method. This measurement is carried out on material inputs, energy, labor, capital, and total inputs. The required data is taken from January-December 2021 and 2020 is taken as the base period year for measurement. The productivity calculation results show an increase and decrease in productivity, whereby using Marvin E Mundel, the highest total company productivity index was in December at 2.5865 and the lowest was in February with an index of 0.7202. In measuring the productivity of companies experiencing a trend of increasing or decreasing (fluctuation). With the results of these calculations, the company is advised to increase productivity by optimizing machine performance and maximum output workforce so that the amount of input is proportional to the amount of output produced.

Keywords: Productivity, Marvin E. Mundel, Index, Fluctuation, Input, Output.

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