

## ABSTRACT

*There are several problems faced by the manufacturing industry, such as in PD Tegas in the effort to raise production. One of the problems identified is inappropriate implementation of line balancing. This study is conducted by using 3 methods of line balancing, Ranked Positional Weight (RPW), the Largest Candidate Rule, dan Killbridge Wester. From analysis results, the Killbridge Wester method gained the biggest line Efficiency value of 88.25%, while the Ranked Position Weight (RPW) LE method gained a line Efficiency value of 85.98% and Largest Candidate Rule (LCR) LE method gained a line Efficiency value of 85.31%. By implementation of line balancing method in the company, production line can be improved, decrease of idle time, and better production capacity compared to initial conditions.*

**Keywords:** *line balancing, Ranked Positional Weight (RPW), Largest Candidate Rule, Killbridge Wester, line efficiency*

## ABSTRAK

*Ada beberapa masalah yang sedang dihadapi industri manufaktur seperti pada PD Tegas dalam usaha meningkatkan produksi. Masalah yang dihadapi belum diterapkannya keseimbangan lini pada lintasan secara baik dan benar. Penelitian ini dilakukan dengan mencoba 3 metode keseimbangan lini, yaitu RPW (Ranked Positional Weight), Largest Candidate Rule (LCR), dan Killbridge Wester. Dari hasil analisis didapatkan bahwa metode Killbridge Wester menghasilkan nilai line Efficiency tertinggi sebesar 88.25%, metode Ranked Position Weight (RPW) LE sebesar 85.98%, dan Largest Candidate Rule (LCR) LE sebesar 85.31%. Dengan penerapan metode keseimbangan lini pada perusahaan ini dapat memperbaiki lintasan produksi perusahaan, mengurangi terjadinya waktu menganggur, dan kapasitas produksi yang lebih baik dari kondisi awal.*

**Kata kunci:** *keseimbangan lini, Ranked Positional Weight (RPW), Largest Candidate Rule, Killbridge Wester, line efficiency*