

## ABSTRACT

Today the competition in the manufacturing industry is getting tighter, so this requires the manufacturing industry to always improve the performance of its production process along with the increasing target achievement of the company itself. PT. XYZ is one of the manufacturing industries engaged in the shoe industry. Shoe products manufactured by PT. XYZ consist of two main parts, namely the upper part which is the upper part of the shoe and the bottom section which is the bottom of the shoe. At present PT. XYZ faces the problem of not achieving shoe production targets for models A, B and C due to delays in achieving upper shoe production targets. The delay in achieving the upper production target is due to the imbalance of work time of each work station on the upper shoe assembly line. So it is necessary to balance the assembly lines, in this study balancing assembly lines using the RPW-MVM method. After balancing the assembly line, the results obtained, the decrease in the number of work stations to 20, the increase in line efficiency bottleneck situation to 78%, balancing efficiency increased to 92% and an increase in production output to 315 pairs / day.

***Keywords: assembly line balancing, ranked positional weighted-moving target (RPW-MVM), mixed-model assembly line balancing problem (MALBP)***