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**IMPROVEMENT THE SORTING PROCESS OF
LOGISTICS WELDING PARTS SUPPLY PROCESS
USING KAIZEN CONCEPT IN PT. TMMIN,
KARAWANG**

UNDERGRADUATE FINAL PROJECT

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

By

Ravena Pramayshela

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**FACULTY OF ENGINEERING
INDUSTRIAL ENGINEERING STUDY PROGRAM**

CIKARANG

AUGUST, 2023

PANEL OF EXAMINERS APPROVAL

The Panel of Examiners declare that the undergraduate final project entitled **“Improving the Sorting Process of Logistics Welding Parts Supply Process Using Kaizen Concept in PT. TMMIN, Karawang”** that was submitted by Ravena Pramayshela majoring in Industrial Engineering from the Engineering Faculty was assessed and approved to have passed on the Oral Examination on August, 29th 2023.

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Examiner I

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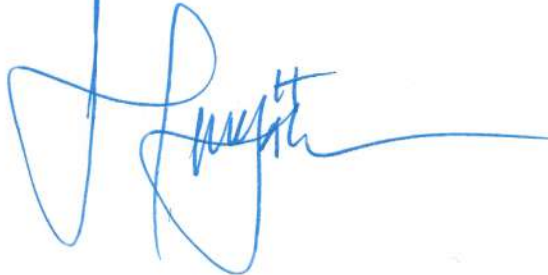
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WELDING PARTS SUPPLY PROCESS USING
KAIZEN APPROACH IN PT TMMIN**

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ABSTRACT

In a manufacturing company, Kaizen is highly prevalent. Numerous research has been done to understand Kaizen's components and effectiveness better. Even Kaizen had lessons to learn about its sustainability and execution. Kaizen's adoption and durability are crucial and advantageous for the business because they act as a gateway for additional improvements. Also, discusses how to make the activity in the material supply process more efficient in PT TMMIN using kaizen approach. There are many activities in line production logistic welding and finding the waste of the line supplying the materials. And the initial lead time process is 437.1. The concept of production system is every process in line should affect to every workstation. So, this research will improve to reduce the total lead time become 427.1 minutes.

Keywords: supply chain management, logistics, kaizen, lead time, part supply, PDCA

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LIST OF TERMINOLOGIES

- Andon : Signboard in manufacturing that shows the current state of the operations including for example parts produced target and current, process breakdowns, etc.
- Direct supplier shipping : Shipping method that the supplier directly delivery the order to PT. TMMIN
- In-house supplier : The supplier that still the part of PT. TMMIN, in example PT. TMMIN Sunter
- Jidouka (Built-in Quality) : A standard method in Lean Manufacturing and Toyota Production System, to detect problems in the production process and stop the production process.
- Maguchi flow rack : Rack in production line for the materials, so material handling equipment used to improve picking efficiency and accuracy.
- Maru-G supplier : The suppliers from other companies and not part of PT. TMMIN
- Milkrun shipping : Shipping method that the supplier should take the order from different places in sequence and has a fixed schedule similar, then deliver to PT. TMMIN
- PC Delivery : The process of sending part/supply from the progress line when the cycle of the part starts running until the part reaches the batton pass
- PC Safety : A backup time that is used to avoid things that are not desired
- LS Delivery : A calculation of the time a part is moved from the batton pass area to the line side

LS Delivery : A backup time that is used to avoid things that are not desirable when implementing LS Delivery.