

## Waste Identification Diagrams Effectiveness: A Case Study in the Manaus Industrial Pole

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**Abstract :** This research paper investigates the efficacy of waste identification diagrams (WIDs) as a tool for waste reduction and management within the Manaus Industrial Pole. The study focuses on assessing the practical application and effectiveness of WIDs in identifying, categorizing, and mitigating various forms of waste generated across industrial processes. Employing a mixed-methods approach, including a qualitative questionnaire applied to 5 companies and quantitative data analysis with SPSS statistical software, the research evaluates the implementation and impact of WIDs on waste reduction practices in select industries within the Manaus Industrial Pole. The findings contribute to understanding the utility of WIDs as a proactive strategy for waste management, offering insights into their potential for fostering sustainable practices and promoting environmental stewardship in industrial settings. The study also discusses challenges, best practices, and recommendations for optimizing the utilization of WIDs in industrial waste management, thereby addressing the broader implications for sustainable industrial development.

**Keywords :** waste identification diagram, value stream mapping, overall equipment effectiveness, lean manufacturing

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