

# ANALISIS KECACATAN PRODUK DENGAN MENGUNAKAN METODE SIX SIGMA STUDI KASUS CV ANDHY KARYA

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## ABSTRAK

Penelitian ini bertujuan untuk menganalisis jenis cacat pada produk tatakan kompor restoran dan melakukan perbaikan kualitas menggunakan metode Six Sigma. Metode ini digunakan untuk meminimalkan kesalahan dan meningkatkan produktivitas dalam industri manufaktur. Pada bulan Januari-Februari 2024, CV Andhy Karya mengalami 5% produk cacat, termasuk keropos, ukuran tidak rata, dan retak. Melalui DMAIC (*Define, Measure, Analyze, Improve, Control*), penelitian ini mengidentifikasi akar penyebab cacat, menghitung DPMO, dan melakukan analisis FTA, *control poka-yoki*. Hasilnya menunjukkan bahwa faktor manusia, bahan baku, dan mesin menyebabkan cacat. Usulan perbaikan mencakup pelatihan karyawan, pengecekan bahan baku, perawatan mesin, SOP, penataan lingkungan kerja dan pembuatan poster prosedur produksi. Penelitian ini menghasilkan rekomendasi praktis untuk meningkatkan kualitas produk dan mengurangi cacat di masa mendatang

**Kata Kunci :** , Cacat, DMAIC, FTA, *Six sigma*, *poka-yoki*

# ***ANALYSIS OF PRODUCT DEFECTS USING THE SIX SIGMA METHOD CASE STUDY CV ANDHY KARYA***

## **ABSTRACT**

This research aims to analyze the types of defects in restaurant stove coaster products and to implement quality improvements using the Six Sigma method. This technique is employed to reduce inaccuracies and enhance efficiency in the manufacturing sector. During January-February 2024, CV Andhy Karya had a 5% rate of defective products, which included items with pores, uneven sizes, and cracks. This research utilizes DMAIC (Define, Measure, Analyze, Improve, Control) to identify the root causes of defects, calculate DPMO, and conduct FTA analysis and poka-yoke control. The findings indicate that human factors, raw materials, and machines cause defects. The proposed improvements include employee training, checking raw materials, maintaining machines, updating SOPs, restructuring the work environment, and creating production procedure posters. This research provides practical suggestions for enhancing product quality and decreasing defects in the future.

**Keywords:** Defect, DMAIC, FTA, Six Sigma, poka-yoke

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