

# **ANALISIS PERBAIKAN KUALITAS PRODUK COKELAT MENGUNAKAN METODE *SEVEN TOOLS* PADA UMKM WONDIS**

**Suseno<sup>1</sup>, Ihsan Syaifuddin<sup>2</sup>**  
Program Studi Teknik Industri  
Fakultas Sains & Teknologi Universitas Teknologi Yogyakarta  
Email: [1suseno@uty.ac.id](mailto:suseno@uty.ac.id), [2ihsanudin1025@gmail.com](mailto:ihsanudin1025@gmail.com)

## **ABSTRAK**

UMKM Wondis merupakan salah satu UMKM yang memproduksi usaha berbahan dasar buah kakao yang menghasilkan produk salah satunya cokelat. Permasalahan yang terjadi di UMKM Wondis ialah terjadinya produk yang tidak sesuai dengan standar atau produk cacat. Jenis produk cacat antara lain Patah dan Salah Pemotongan dengan total cacat produk yaitu 351 pcs. Tujuan dari penelitian ini adalah untuk mengetahui faktor yang menyebabkan terjadinya cacat pada produk cokelat UMKM Wondis. Penelitian ini menggunakan metode seven tools. Metode seven tools ini menggunakan 7 alat pengendalian kualitas yaitu Check Sheet, Control Chart, Cause and Effect Diagram, Pareto Diagram, Histogram, Scatter Diagram dan Flowchart. Dari hasil penelitian menggunakan metode seven tools dapat diketahui bahwa penyebab terjadinya cacat patah produk cokelat disebabkan oleh empat aspek antara lain dari faktor alat, Faktor material, Faktor lingkungan, faktor yang terakhir yaitu manusia. Sedangkan karakteristik cacat salah potong memiliki tiga faktor yaitu faktor Alat, faktor metode kerja dan Dari faktor manusia.

Kata Kunci: Perbaikan Kualitas, Produk Cokelat, *Seven Tool*.

# ***ANALYSIS OF CHOCOLATE PRODUCT QUALITY IMPROVEMENT USING THE SEVEN TOOLS METHOD IN WONDIS SMEs***

**Suseno<sup>1</sup>, Ihsan Syaifuddin<sup>2</sup>**

*Industrial Engineering Study Program*

*Faculty of Science & Technology*

*University of Technology Yogyakarta*

Email: [1suseno@uty.ac.id](mailto:suseno@uty.ac.id), [2ihsanudin1025@gmail.com](mailto:ihsanudin1025@gmail.com)

## ***ABSTRACT***

*UMKM Wondis is one of the UMKM that produces cocoa-based businesses that produce products, one of which is chocolate. The problem that occurs in UMKM Wondis is the occurrence of products that are not in accordance with standards or defective products. Types of defective products include Broken and Incorrect Cuts with a total of 351 defective products. The purpose of this study was to determine the factors that cause defects in UMKM Wondis chocolate products. This study uses the seven tools method. The seven tools method uses 7 quality control tools, namely Check Sheets, Control Charts, Cause and Effect Diagrams, Pareto Diagrams, Histograms, Scatter Diagrams and Flowcharts. From the results of research using the seven tools method, it can be seen that the cause of defects in chocolate products is caused by four aspects, including tool factors, material factors, environmental factors, the last factor is humans. While the characteristics of faulty cuts have three factors, namely the tool factor, the work method factor and the human factor.*

*Keywords: Quality Improvement, Chocolate Products, Seven Tool.*

## DAFTAR PUSTAKA

- Antony, J., McDermott, O., & Sony, M. (2021). Revisiting Ishikawa's Original Seven Basic Tools of Quality Control: A Global Study and Some New Insights. *IEEE Transactions on Engineering Management*. <https://doi.org/10.1109/TEM.2021.3095245>
- Erdhianto, Y. (n.d.). Analisa Pengendalian Kualitas untuk Mengurangi Jumlah Cacat pada Kemasan Produk Gula Pasir PG Kremboong dengan Metode Seven Tools.
- Ginting, R., Wanli, & Fauzi Malik, A. (2020). *Crude Palm Oil Product Quality Control Using Seven Tools (case study: XYZ Company)*. *IOP Conference Series: Materials Science and Engineering*, 851(1). <https://doi.org/10.1088/1757-899X/851/1/012046>
- Grigoryan, E., & Golubkova, I. (2020). *Seven Tools for Quality Management and Control: Theory and Practice*.
- Kholil, M., Hanum, B., Hendri, & Almahdy, I. (2020). *Finishing Line Evaluation of Bracket product FWD RR Spring BT 1702 by Applying 8 Steps 7 Tools Method Toyota Production (Case Study: PT BA)*. *Journal of Physics: Conference Series*, 1529(3). <https://doi.org/10.1088/1742-6596/1529/3/032101>
- Memon, I. A., Jamali, Q. B., Jamali, A. S., Abbasi, M. K., Jamali, N. A., & Jamali, Z. H. (2019). *Defect Reduction with the Use of Seven Quality Control Tools for Productivity Improvement at an Automobile Company*. *Engineering, Technology & Applied Science Research*, 9(2), 4044–4047. <https://doi.org/10.48084/etasr.2634>
- Nirwana, N. R., Irawan, M. A., Diadi, F. A., Al-Fauzi, M. R., Saefullah, A., & Ferdian, R. (2022). *Analysis of Maintenance of Light Fire Extinguishers at PT Indorama Synthetics Using the Seven Tools Method* (Vol. 12, Issue 1).
- Novita, D., & Irawan, H. (2797). Analisis Pengendalian Kualitas Crumb Rubber Dengan Menggunakan Metode Seven Tools Di Pt. Batanghari Tebing Pratama. *In Jurnal Industri Samudra* (Vol. 3, Issue 1).
- Padhil, A., & Rauf, N. (2020). Perancangan Instruksi Kerja Dokumen Dan Visual Pada Mesin *Electrical Discharge Machine*. *Journal of Industrial Engineering Management*, 5(2), 80–89. <https://doi.org/10.33536/jiem.v5i2.121>
- Permono, L., Salmia, S. T., Septiari, R., Program, ), & Industri, S. T. (2022). Penerapan Metode Seven Tools Dan New Seven Tools Untuk Pengendalian Kualitas Produk (Studi Kasus Pabrik Gula Kebon Agung Malang). *Jurnal Mahasiswa Teknik Industri*, 5(1).
- Prabaswari, A. D., & Susilo, A. J. (2020). *Analysis of quality control of chippendale furniture products using seven tools approach (case study of PT. Bothwell Indonesia)*. *IOP Conference Series: Materials Science and Engineering*, 982(1). <https://doi.org/10.1088/1757-899X/982/1/012052>
- Prayoga, B. W., & Andesta, D. (2022a). *Analysis of Mattress Product Quality Using Seven Tools Method; a Case Study: UD. Pandawa Lima*. *MOTIVECTION: Journal of Mechanical, Electrical and Industrial Engineering*, 4(2), 115–128. <https://doi.org/10.46574/motivection.v4i2.117>
- Prayoga, B. W., & Andesta, D. (2022b). *Analysis of Mattress Product Quality Using Seven Tools Method; a Case Study: UD. Pandawa Lima*. *MOTIVECTION: Journal of Mechanical, Electrical and Industrial Engineering*, 4(2), 115–128. <https://doi.org/10.46574/motivection.v4i2.117>

- Radianza, J., & Mashabai, I. (2020). JITSA *Jurnal Industri & Teknologi Samawa* Analisa Pengendalian Kualitas Produksi Dengan Menggunakan Metode *Seven Tools Quality* Di Pt. Borsya Cipta Communica (Vol. 1, Issue 1).
- Saputra, A. E., & Mahbubah, N. A. (n.d.). STRING (Satuan Tulisan Riset dan Inovasi Teknologi) Analisis *Seven Tools* Pada Pengendalian Kualitas Proses Vulkanisir Ban 1000 Ring 20 Di Cv Citra Buana Mandiri Surabaya.
- Sarjono, H., & Defitasari, M. (2022). *Seven Tools Analysis of the Green Tea Industry: Systematic Literature Review*.
- Sjarifudin, D., & Kurnia, H. (2022). *The PDCA Approach with Seven Quality Tools for Quality Improvement Men's Formal Jackets in Indonesia Garment Industry*. *Jurnal Sistem Teknik Industri*, 24(2), 159–176. <https://doi.org/10.32734/jsti.v24i2.7711>
- Sucipto, D. A., & Herwanto, D. (2022). *Quality Control of Knitting Process with 4QC Tools and Failure Mode and Effect Analysis (FMEA)*. *MOTIVECTION : Journal of Mechanical, Electrical and Industrial Engineering*, 4(2), 65–76. <https://doi.org/10.46574/motivection.v4i2.111>
- Sumiati, I. N. (2022, November 22). *Quality Control Analysis of Steel Plates Products at PT. ABC Using Seven Tools and Kaizen Method*. *International Conference Eco-Innovation in Science, Engineering, and Technolog.* <https://doi.org/10.11594/nstp.2022.2731>
- Sutrisno, B. (2022). *A Systematic Literature Review of Quality Seven Tools*. In *IJIEM (Indonesian Journal of Industrial Engineering & Management)* (Vol. 3). <http://publikasi.mercubuana.ac.id/index.php/ijiem>
- Ulhaq, Z., Mulyati, D., Fahlevi, D., & Maulinda, &. (2022). “*Innovations to Support Emancipated Learning (MBKM), Research, and Community Services for Sustainable Development Goals*” *Analysis of Quality Control of Raw Materials with the Seven Tools Method on Sweet Bread Products at UD. Sarigut Bakery in Banda Aceh*. 05(2).
- Wardhani, R. P., Gustianta, E., Studi, P., Mesin, T., Teknik, F., Tridharma, U., & Balikpapan, P. (n.d.). *Seven Tools As The Problem Solving Ways TO Improve Quality Control*.