

DAFTAR PUSTAKA

- Airlangga, F. G., Triwiyatno, A., & Sumardi, S. (2017). Perancangan Sistem Automasi Pada Pengemasan Susu Dalam Botol Dengan Programmable Logic Controller (Plc) Omron Cp1e Terhadap Purwarupa Filling Bottle And Capping Machine. *Transient: Jurnal Ilmiah Teknik Elektro*, 6(1), 103-109.
- Alamirew, T., Balaji, V., & Gabbeye, N. (2017). Comparison of PID controller with model predictive controller for milk pasteurization process. *Bulletin of Electrical Engineering and Informatics*, 6(1), 24–35. <https://doi.org/10.11591/eei.v6i1.575>
- Alekseeva, Y. A., Garmaev, D. T., Khoroshailo, T. A., & Serdyuchenko, I. V. (2021, November). Automated systems application for the advanced cow milking technologies development. In *AIP Conference Proceedings* (Vol. 2402, No. 1, p. 070036). AIP Publishing LLC.
- Alsaidalani, R., & Elmadhoun, B. (2022). Quality risk management in pharmaceutical manufacturing operations: Case study for sterile product filling and final product handling stage. *Sustainability*, 14(15), 9618.
- Amole, A. O., Olabode, O. E., Akinyele, D. O., & Akinjobi, S. G. (2022). Optimal Temperature Control Scheme for Milk Pasteurization Process Using Different Tuning Techniques for a Proportional Integral Derivative Controller. *Iranian Journal of Electrical & Electronic Engineering*, 18(3).
- Åström, K. J., & Hägglund, T. (1995). *PID controllers: Theory, design, and tuning* (2nd ed.). Instrument Society of America.
- Astuti, R., Rolanda, F. N. P., Mulyarto, A. R., & Rahayu, L. (2025). Green Lean Six Sigma for Waste and Emissions Reduction in Small-Scale Pasteurized Milk Production. In *E3S Web of Conferences* (Vol. 665, p. 03003). EDP Sciences.
- Bafandegan Emroozi, V., Kazemi, M., Doostparast, M., & Pooya, A. (2024). Improving industrial maintenance efficiency: A holistic approach to integrated production and maintenance planning with human error optimization. *Process Integration and Optimization for Sustainability*, 8(2), 539-564.
- Basri, M., Nurwahidah, A., & Amalia, R. (2022). Identifikasi Human Error pada Proses Pengolahan Air Minum dalam Kemasan dengan Metode SHERPA dan HEART pda IKM Air Kemasan ABC. *Majalah Teknik Industri*, 30(2), 1-6.
- Budiman, I., & Alta, A. (2023). Transfer Teknologi Dan Pengetahuan Untuk Peternakan Sapi Perah: Kontribusi Sektor Swasta dalam Meningkatkan Produksi Susu. *Memodernisasi Pertanian Indonesia*, 107.

- Cahyani, S. N., Safirin, M. T., Donoriyanto, D. S., & Rahmawati, N. (2022). Human Error Analysis to Minimize Work Accidents Using the HEART and SHERPA Methods at PT. Wonojati Wijoyo. *Prozima (Productivity, Optimization And Manufacturing System Engineering)*, 6(1), 48-59.
- Challis, C., Tierney, M., Todd, A., & Wilson, E. (2017). Human factors in dairy industry process control for energy reduction. *Journal of Cleaner Production*, 168, 1319-1334.
- Challis, C., Tierney, M., Todd, A., & Wilson, E. (2017). Human factors in dairy industry process control for energy reduction. *Journal of Cleaner Production*, 168, 1319-1334.
- Charan, K. V., Redhu, S., Soni, G., & Singh, M. (2024, November). Application of a Large Language Model (LLM) for Failure Modes and Effects Analysis (FMEA). In *The Unified International Conference on Emerging Technologies in Cyber-Physical Systems and Industrial AI* (pp. 619-634). Cham: Springer Nature Switzerland.
- Chen, L. (2021). Principle and simulation PID Controller of liquid level system. In *Journal of Physics: Conference Series* (Vol. 1757, No. 1, p. 012187). IOP Publishing.
- Di Pasquale, V., Miranda, S., Iannone, R., & Riemma, S. (2015). A simulator for human error probability analysis (SHERPA). *Reliability engineering & system safety*, 139, 17-32.
- Ellis, G. (2017). A Practical Application of Human Reliability Assessment.
- Falconi, F., Capitaneanu, S., Guillard, H., & Raïssi, T. (2021, June). On robust online identification of industrial systems. In *2021 29th Mediterranean Conference on Control and Automation (MED)* (pp. 776-781). IEEE.
- Faqeer, H. A., & Khajavi, S. H. (2025). Digital Twin and Computer Vision Combination for Manufacturing and Operations: A Systematic Literature Review. *Applied Sciences*, 15(18), 10157.
- Franciosi, C., Di Pasquale, V., Iannone, R., & Miranda, S. (2019). A taxonomy of performance shaping factors for human reliability analysis in industrial maintenance. *Journal of Industrial Engineering and Management (JIEM)*, 12(1), 115-132.
- Gerov, R., Jovanovic, T. V., & Jovanovic, Z. (2021). Parameter estimation methods for the fopdt model, using the lambert w function. *Acta Polytechnica Hungarica*, 18(9), 141-159.
- Gerov, R., Jovanović, Z., & Jovanović, M. (2021). Tuning of fractional order PID controller with PSO algorithm for FOPDT plants. *Acta Polytechnica Hungarica*, 18(9), 27-44. <https://doi.org/10.12700/APH.18.9.2021.9.2>

- Hajdu, D., & Bachrathy, D. (2023). Active vibration control for milling operations including frequency response function uncertainties. *Procedia CIRP*, 117, 181-186.
- Indriani, S., Ermawati, E., Jannah, S. L., Wati, Y. E., Munawaroh, M., Injarsari, S., & Jalil, M. (2022). Proses Produksi dan Pengendalian Mutu Bahan Baku Susu Pasteurisasi di CV. Cita Nasional Getasan Semarang. *Symbiotic: Journal of Biological Education and Science*, 3(1), 27-38.
- Indumathy, M., Sobana, S., Panda, B., & Panda, R. C. (2022). Modelling and control of plate heat exchanger with continuous high-temperature short time milk pasteurization process—A review. *Chemical Engineering Journal Advances*, 11, 100305.
- Jafari, S. M. (Ed.). (2021). *Engineering principles of unit operations in food processing: unit operations and processing equipment in the food industry*. Woodhead Publishing.
- Jha, P. R., Di Pasquale, V., Saleem, J. J., & Wang, X. (2024). Taxonomy of performance shaping factors in manufacturing: A systematic literature review. *Human Factors and Ergonomics in Manufacturing & Service Industries*, 34(5), 367-385.
- Khamaludin, K., Respatiningsih, I., & Kustiawan, B. (2024). *Manajemen Mutu*. PT. Sonpedia Publishing Indonesia.
- Kruppa, F., Weiß, U., Oberdorfer, B., & Wilke, B. (2023). Increasing the dosing accuracy of a screw dosing device by inline measurement of the product density. *Packaging Technology and Science*, 36(3), 185-194.
- Kusumaningrum, J., Haris, H., Fanani, M. Z., Jumiono, A., & Amalia, L. (2024). Analisis Pengendalian Mutu Kemasan Produk Mi Instan X dengan Metode Six Sigma di PT. Y. *Jurnal Ilmiah Pangan Halal*, 6(2), 134-143.
- Kutz, M. (Ed.). (2019). *Handbook of farm, dairy and food machinery engineering*. Academic Press.
- Li, Y., & Zhu, L. (2020). Risk analysis of human error in interaction design by using a hybrid approach based on FMEA, SHERPA, and fuzzy TOPSIS. *Quality and Reliability Engineering International*, 36(5), 1657-1677.
- Maulana, D. S., Hidayat, H., & Priyana, E. D. (2025). Human Error Analysis on Steelmaking Process to Reduce Product Defect Rate at PT. RAVANA JAYA Using Sherpa and Heart Methods. *G-Tech: Jurnal Teknologi Terapan*, 9(2), 636-647.
- Maulidya, A., Oginawati, K., & Suharyanto, S. (2023). Analysis of Human Error Potential as a Cause of Work Accident using Sherpa and Heart Method in The Cement Industry. *Journal of World Science*, 2(9), 1387-1397.

- Maxim, A., & De Keyser, R. (2020). An industrially applicable formulation of the multivariable PID tuning problem with constraints on relative delay margin. *Mathematics*, 8(10), 1799. <https://doi.org/10.3390/math8101799>
- Meng, Q. (2021). *Advanced Process Control with Applications in the Food Industry* (Doctoral dissertation, Sheffield Hallam University).
- Mewengkang, G., Punuhsingon, C. S., & Neyland, J. S. (2024). Penerapan Metode Systematic Human Error Reduction And Prediction Approach (Sherpa) Untuk Keselamatan Kerja Pada Industri Pembuatan Garam Di Pt Empat Saudara. *Jurnal Tekno Mesin*, 10(2), 150-155.
- Musić, J., Stančić, I., Džaja, B., & Pekić, V. (2023). Image-Based Sensor for Liquid Level Monitoring during Bottling with Application to Craft and Home-Brewing. *Sensors*, 23(16), 7126.
- Neilam, D. (2021, March). Analisis Pengendalian Kualitas Dengan Menggunakan Metode Seven Tools Guna Mencapai Standar Produk Susu Pasteurisasi “Jab Milk” Pada Koperasi Agro Niaga (Kan) Jabung Malang. In *Conference on Economic and Business Innovation (CEBI)* (pp. 91-105).
- Panjaitan, N. J., Dewi, R. M., & Kristiyani, I. M. (2025). Analisis produktivitas untuk mengevaluasi losses tertinggi pada mesin filling produksi kosmetik. *Jurnal Teknik Industri dan Manajemen Rekayasa*, 3(1), 54-64.
- Puspitasari, A., Safitri, G., Efionita, Y., & Halim, M. I. (2025). Human error analysis to reduce production defects with Sherpa method and Heart method in PT XYZ. *Journal of Sustainable Community Development*, 3(3), 120-128.
- Rahayu, W. P., Nugroho, G., & Situmorang, A. F. (2016). implementasi Statistical Process Control Pada Operasi Pengisian Produk Pangan Bubuk. *Jurnal Mutu Pangan: Indonesian Journal of Food Quality*, 3(1), 18-27.
- Rahman, A. (2020). *Evaluasi Human Error Menggunakan Metode HEART (human error assessment and reduction technique) Guna Meminimasi Waste Di Lantai Produksi PT. Riau Graindo* (Doctoral dissertation, Universitas Islam Negeri Sultan Syarif Kasim Riau).
- Ramadhani, D. (2024). *SISTEM KONTROL ALAT PENGISIAN AIR PADA BOTOLBERBASIS ARDUINO NANO* (Doctoral dissertation, UNIVERSITAS MUHAMMADIYAH PAREPARE).
- Rifa'i, M. R. I. M., Aripriharta, A., & Edo, D. (2021). Analisis metode PID pada mini plant pasteurisasi susu berbasis sistem DCS (Distributed Control System). *Jurnal Inovasi Teknologi dan Edukasi Teknik*, 1(10), 747-757.
- Rivera, D. E., Morari, M., & Skogestad, S. (1986). Internal model control: 4. PID controller design. *Industrial & Engineering Chemistry Process Design and Development*, 25(1), 252–265. <https://doi.org/10.1021/i200032a041>

- Riza, F., Martiano, M., & Arianty, N. (2025). Smart Quality Control Berbasis IOT untuk Peningkatan Mutu Pengemasan Makanan Kering di Umkm Te-Man Pospera Kampung Kurnia Belawan. *Prioritas: Jurnal Pengabdian Kepada Masyarakat*, 7(02), 59-65.
- Saputra, H., Fonataba, P. W., Wudda, A. R., Chintia, A., Ardana, A., Zulfri, A., ... & Yazid, M. U. (2025). Peran Manajemen Agribisnis dan Diversifikasi Produk dalam Keberlanjutan Usaha Susu Kambing Rumahan: Studi Kasus pada Usaha Ibu Sri Endang Hartati. *EKOMAN: Jurnal Ekonomi, Bisnis Dan Manajemen*, 3(1), 71-100.
- Seborg, D. E., Edgar, T. F., Mellichamp, D. A., & Doyle, F. J. (2017). *Process dynamics and control* (4th ed.). John Wiley & Sons.
- Si, W., & Niu, L. (2024). Enhancing Human Reliability Prediction in Smart Tower Crane Interfaces: A Refined Approach Using Simplified Plant Analysis Risk–Human Reliability Assessment and the Decision Making Trial and Evaluation Laboratory–Analytic Network Process. *Buildings*, 14(4), 1083.
- Sirait, I. H. (2025). *Ekonomi Mikro untuk UMKM: Buku Ekonomi Mikro untuk UMKM: Konsep Dasar & Strategi Mengembangkan Bisnis merupakan panduan praktis yang dirancang khusus untuk pelaku Usaha Mikro, Kecil, dan Menengah dalam memahami dan menerapkan prinsip-prinsip ekonomi mikro dalam pengelolaan bisnis. Disusun secara sistematis, buku ini membahas konsep seperti permintaan dan penawaran, elastisitas, biaya produksi, perilaku konsumen, hingga strategi harga dan adaptasi di era digital—semuanya dikaitkan langsung dengan* CV. Mitra Edukasi Negeri.
- Soliman, M. (2022). Simple and efficient PID algorithm design method for controlling first order systems with a time delay. *International Journal of Applied Science and Research*. <https://doi.org/10.56293/ijasr.2022.5483>.
- Soliman, M. S. (2023). Simple and efficient PID algorithm design method for controlling first order systems with a time delay. *International Journal of Applied Science and Research*, 6(1), 50–72. <https://doi.org/10.56293/IJASR.2022.5483>
- Syaichu, A., & Naja, S. (2023). Penerapan SPC (Statistical Process Control) Pada Proses Produksi Air Minum Dalam Kemasan Untuk Meningkatkan Yieldoutput Produksi. *Jurnal Teknik dan Manajemen Industri Pomosda (JTMIP)*, 1(01), 11-18.
- Thibault, É., Kelly, J. D., Lebreux Desilets, F., Chioua, M., Poulin, B., & Stuart, P. (2023). Industrial Data-Driven Processing Framework Combining Process Knowledge for Improved Decision Making—Part 1: Framework Development. *Processes*, 11(8), 2376.

- Torres, Y., Nadeau, S., & Landau, K. (2021). Classification and quantification of human error in manufacturing: A case study in complex manual assembly. *Applied Sciences*, *11*(2), 749.
- Utama, A. S. P., Tambunan, W., & Fathimahhayati, L. D. (2020). Analisis Human Error pada Proses Produksi Keramik dengan Menggunakan Metode HEART dan SHERPA. *Jurnal INTECH Teknik Industri Universitas Serang Raya*, *6*(1), 12-22.
- Wellmi, N., Nurhidayah, D., Prastyo, Y., VBFB, E., & Rivaldo, B. (2025). Analisa Dan Evaluasi Proses Pengisian Botol Reagen Menggunakan Pompa Dispensing Dengan Metode Fishbone. *Journal of Management and Innovation Entrepreneurship (JMIE)*, *2*(3), 2216-2225.
- Williams, J. C. (1988). A data-based method for assessing and reducing human error to improve operational performance. In *Proceedings of the IEEE Fourth Conference on Human Factors and Power Plants* (pp. 436–450). Institute of Electrical and Electronics Engineers.
- Windy, W. W., Nasution, H., & Huda, L. N. (2025). The Role of Human Error in Production Process Failures: A Systematic Literature Review. *Jurnal Sistem Teknik Industri*, *27*(3), 137-144.
- Wu, Z., Li, D., & Xue, Y. (2019). A New PID Controller Design with Constraints on Relative Delay Margin for First-Order Plus Dead-Time Systems. *Processes*. <https://doi.org/10.3390/pr7100713>.
- Wu, Z., Li, D., & Xue, Y. (2019). A new PID controller design with constraints on relative delay margin for first-order plus dead-time systems. *Processes*, *7*(10), 713. <https://doi.org/10.3390/pr7100713>
- Yalçın, E., Çiftçioğlu, G. A., & Güzel, B. (2024). Human reliability analysis methods. *Pamukkale Üniversitesi Mühendislik Bilimleri Dergisi*, *30*(2), 282-292.
- Yang, S., Demichela, M., Geng, J., Wang, L., & Ling, Z. (2024). A data-driven Bayesian network of management and organizational factors for human reliability analysis in the process industry. *Heliyon*, *10*(15).
- Zacharski, K. A., Burke, N., Adley, C. C., Hogan, P., Ryan, A., & Southern, M. (2021). Milk reception in a time-efficient manner: A case from the dairy processing plant. *Food Control*, *124*, 107939.