

DAFTAR PUSTAKA

- American Institute of Steel Construction. (2023). Steel Construction Manual (16th ed.).
- Anton, R. (2018). Desain Alat Pengupas Kacang Kedelai Dengan Pendekatan Antropometri Untuk Mengurangi Keletihan Dan Meningkatkan Produktivitas Kerja (Disertasi Doktor, Universitas 17 Agustus 1945).
- Arrohmanasyah, D., & Utomo, M. A. (2025). *Analysis of Factors Affecting the Incidence of Musculoskeletal Disorders (MSDs) among Factory Field Workers: A Literature Review*. Journal of Primary Care and Public Health, 6(3).
- Asosiasi Perusahaan Air Minum Dalam Kemasan Indonesia [ASPADIN]. (2026). *Data Proyeksi Volume Penjualan Air Minum Dalam Kemasan (AMDK) Nasional 2021–2026*. ASPADIN.
- ASTM International. (2019). ASTM A36/A36M-19: Standard Specification for Carbon Structural Steel.
- ASTM International. (2023). ASTM A500/A500M-23: Standard Specification for Cold-Formed Welded and Seamless Carbon Steel Structural Tubing in Rounds and Shapes.
- Badan Pengawas Obat dan Makanan. (2021). *Peraturan Badan Pengawas Obat dan Makanan Nomor 22 Tahun 2021 tentang Tata Cara Penerbitan Izin Penerapan Cara Produksi Pangan Olahan yang Baik*. Jakarta: BPOM RI
- Bagas R. P., P. B., & Prastawa, H. (2023). *Analisis tingkat kelelahan serta keluhan anggota tubuh menggunakan metode Swedish Occupational Fatigue Inventory (SOFI) dan Nordic Body Map (NBM) (Studi kasus pekerja divisi produksi PT XYZ)*. Industrial Engineering Online Journal, 12(4).
- Beltran Martinez, K., Nazarahari, M., & Rouhani, H. (2023). *Breaking the fatigue cycle: Investigating the effect of work-rest schedules on muscle fatigue in material handling jobs*. Sensors, 23(24), 9670.
- Bridger, R. S. (2018). *Introduction to Human Factors and Ergonomics*. CRC Press. Boca Raton, FL, USA.

- Chen, Y. L., Ho, T. K., & Chen, K. L. (2021). Maximum strength levels for pulling and pushing handleless cartons in warehousing tasks. *Ergonomics*, 64(9), 1174–1182.
- Dul, J., & Weerdmeester, B. (2008). *Ergonomics for beginners: A quick reference guide* (Edisi ke-3). CRC Press.
- Fitri, A. N., Salsabila, Z., & Wijaya, I. (2025). Ergonomic Risk Assessment and Workstation Redesign on Packaging Lines to Reduce Musculoskeletal Potential. *International Journal of Ergonomics and Safety Engineering*, 9(2), 114-123.
- Hendrick, H. W., & Kleiner, B. M. (2002). *Macroergonomics: Theory, Methods, and Applications*. CRC Press. Boca Raton, FL, USA.
- Hignett, S., & McAtamney, L. (2000). Rapid Entire Body Assessment (REBA). *Applied Ergonomics*, 31(2), 201–205.
- International Ergonomics Association (IEA). (2014). *International Ergonomics Association Definition of Ergonomics*. International Ergonomics Association. Tokyo, Japan.
- International Labour Organization (ILO). (2020). *Ergonomic Checkpoints: Practical and Easy-to-Implement Solutions for Improving Safety, Health and Working Conditions* (2nd ed.). Geneva: ILO.
- International Organization for Standardization. (2021). ISO 11228-1:2021 Ergonomics—Manual Handling—Part 1: Lifting, Lowering and Carrying.
- Karimah, R. R. S., Rhomadhoni, M. N., Ratriwardhani, R. A., & Sahri, M. (2023). Examining physical workload and manual material handling: A NIOSH lifting equation analysis for packing workers at PT X. *Medical Technology and Public Health Journal*, 7(2), 154–165.
- Kuorinka, I., Jonsson, B., Kilbom, A., Vinterberg, H., Biering-Sørensen, F., Andersson, G., & Jørgensen, K. (1987). *Standardised Nordic questionnaires for the analysis of musculoskeletal symptoms*. *Applied Ergonomics*, 18(3), 233–237. doi.org
- Kurnianingtyas, C. D., & Sukma, H. P. (2022). Analysis of work posture and manual handling on the material transport activities of Indonesian traditional market

- worker. *International Journal of Industrial Engineering and Engineering Management*, 4(2), 65–74.
- Lenggana, B. W., Nugroho, A., & Ubaidillah. (2024). Structural simulation of wheelchair ramp using finite element method. *Journal of Mechanical Engineering Science and Technology*, 8(2), 306–321.
- Lubis, S. R. H., & Mu'minah, N. (2022). Analisa kelelahan kerja berdasarkan dimensi *Swedish Occupational Fatigue Index* (SOFI) pada pekerja produksi. *Jurnal Ergonomi Indonesia*, 8(2), 64–72.
- Mahdang, P. A., & Maksum, T. S. (2025). *Analysis of Ergonomic Risk Levels in Manual Handling Activities Using the National Institute for Occupational Safety and Health (NIOSH) Lifting Equation Method with Upper Back Pain Complaints*. *Jurnal Berita Kesehatan*, 18(1).
- Marková, P., Vrecková, D., Míkva, M., Szabó, P., & Čambál, M. (2025). *The impact of ergonomic rationalisation on the efficiency and productivity of the production process*. *Administrative Sciences*, 15(2), 62.
- Mital, A., Desai, A., & Mital, A. (2017). *Fundamentals of Work Measurement: What Every Engineer Should Know*. CRC Press.
- Munyai, T. T., Mbonyane, B. L., & Mbohwa, C. (2018). *Productivity Improvement in Manufacturing SMEs: Application of Work Study*. Productivity Press.
- National Institute for Occupational Safety and Health (NIOSH). (2021). *Applications Manual for the Revised NIOSH Lifting Equation*. Cincinnati: U.S. Department of Health and Human Services.
- Ohno, T. (1988). *Toyota Production System: Beyond Large-Scale Production*. Productivity Press. New York, NY, USA.
- Orgianus, Y., Achiraeniwati, E., Fiqri, M. R. R., & Oemar, H. (2024). *Optimizing ergonomic work facilities in distribution logistics to prevent manual lifting injuries*. *Acta Logistica*, 11(4), 615–625.
- Pinupong, C., Jalayondeja, W., Mekhora, K., Bhuanantanondh, P., & Jalayondeja, C. (2020). *The effects of ramp gradients and pushing–pulling techniques on lumbar spinal load in healthy workers*. *Safety and Health at Work*, 11(3), 307–313.

- Pramesthi, Y. V., Tranggono, & Sari, R. N. (2026). *Analysis of Musculoskeletal Disorders (MSDs) Complaints Among Production Workers and Posture Improvement Using the Posture Evaluation Index (PEI)*. Journal La Medihealtico, 7(3), 813-825.
- Pratiwi, I., & Kalyana, V. S. (2022). Ergonomic risk evaluation of manual material handling in brick production. Jurnal Ilmiah Teknik Industri, 21(1), 113–124.
- Ramadhan, N. D., Alfarizi, M., & Widyianto, A. (2025). Design and finite element analysis of a portable bus service ramp to reduce dependence on service pits. Journal of Automotive and Mechanical Applied Technology, 2(2), 132–145.
- Reason, J. (2000). *Human Error: Models and Management*. BMJ. London, UK.
- Ridley, J. (2008). Ikhtisar kesehatan dan keselamatan kerja (S. Astranto, Penerjemah; L. Simarmata, Editor; Ed. 3). Erlangga.
- Rizky, I., Syahputri, K., Sari, R. M., & Siregar, I. (2024). *Lean Warehousing Approach for Waste Reduction: A Case-Based Analysis Using VSM and VALSAT*. International Journal of Industrial Engineering and Operations Management, 6(1), 45-58.
- Ruslan, U., Nuroji, & Partono, W. (2011). *Analisis Bekisting Terhadap Waktu Siklus Pengecoran Lantai Pada Gedung Bertingkat* (Tesis Magister, Universitas Diponegoro). Repositori Institusi UNDIP. <http://eprints.undip.ac.id/38528/>
- Salvendy, G., & Karwowski, W. (Eds.). (2021). *Handbook of Human Factors and Ergonomics* (5th ed.). John Wiley & Sons.
- Setiawan, A., & Wijaya, K. (2023). *Simulation-Based Warehouse Layout Analysis to Minimize Material Handling Time in Manufacturing Industry*. Jurnal Teknik Industri dan Sistem Informasi, 10(2), 112-124.
- Skals, S., Bláfoss, R., Andersen, L. L., Andersen, M. S., & de Zee, M. (2021). Manual material handling in the supermarket sector, Part 2: Knee, spine and shoulder joint reaction forces. Applied Ergonomics, 92, 103345.
- Sukpto, P., Susanto, S., & Rohman, F. (2024). Application of participatory ergonomic method to reduce musculoskeletal disorders with Rapid Entire Body Assessment at PT. Adyawinsa Stamping Industries. Jurnal Improsci, 2(1), 60–73.

- Suparman, A., Wibowo, S., Kekalih, A., Ilyas, M., & Agustina, A. (2022). *Indonesian version of Swedish Occupational Fatigue Inventory (SOFI): Validity and reliability test of worker's fatigue assessment instrument. The Indonesian Journal of Community and Occupational Medicine*, 2(2), 89–95.
- Tarwaka. (2015). *Ergonomi Industri*. Harapan Press. Semarang, Indonesia.
- Tewari, P. C. (2017). *Work Study and Ergonomics*. CRC Press.
- Wardani, K. S., & Ramadhan, F. (2026). *Evaluating Manual Material Handling Risks Using the Ergonomic Checklist and Designing Mechanical Aids in Beverage Industries*. *Jurnal Teknik Dan Manajemen Industri*, 14(1), 45-56.
- Wijaya, A. (2019). Hubungan postur kerja dengan keluhan muskuloskeletal pada pekerja. *Jurnal Kesehatan Masyarakat*, 7(2), 112–120.
- World Health Organization (WHO) 2019, *Musculoskeletal conditions*, WHO, Jenewa, dilihat 16 Juli 2026, who.int.
- Wurzelbacher, S. J., Lampl, M. P., Bertke, S. J., & Tseng, C. Y. (2021). *The Effectiveness of Ergonomic Interventions in Material Handling Operations. National Institute for Occupational Safety and Health (NIOSH) Report*, PMC8669597.
- Zadry, H. R., Susanti, L., Yuliandra, B., & Jumenno, D. (2015). *Analisis dan Perancangan Sistem Kerja*. Andalas University Press. Padang. Indonesia.
- Zhao, Y. S., Jaafar, M. H., Mohamed, A. S. A., Azraai, N. Z., & Amil, N. (2022). *Ergonomics risk assessment for manual material handling of warehouse activities involving high shelf and low shelf binning processes: Application of marker-based motion capture*. *Sustainability*, 14(10), 5767.