

References:

- [1] K. A. C. Vidyaratne, "Review on National Competitive Advantage for Marketing Potentials for Off-The Road (OTR) Tyre Industry in Sri Lanka," *Sri Lanka Journal of Marketing*, vol. 8, pp. 150-164, 2022.
- [2] D. K. Bernard, "Sri Lanka Export development board," trelleborg, 15 03 2020. [Online]. Available: <https://www.srilankabusiness.com/rubber/tyre-sector.html>.
- [3] L. I. A. K. A. Bragov, "Effects of High Strain Rate and Self-heating on Plastic Deformation of Metal Materials Under Fast Compression Loading," *Journal of Dynamic Behavior of Materials*, vol. 5, no. 3, pp. 309-319, 2019.
- [4] A. A. Dasgupta, "Failure Mechanism Models For Cyclic Fatigue," vol. 42, no. 4, pp. 548-555, 1993.
- [5] E. G. B. D. A. Martinet, "Procedural modeling of cracks and fractures," *Procedural modeling of cracks and fractures*, pp. 346-349, 2004.
- [6] N. W. a. W. T. C. Smith, "A stress-strain function for the fatigue of metals," *Journal of Materials*, vol. 5, no. 4, pp. pp. 767-778, 1970.
- [7] F. T.-U. K. a. R. V. Abe, " Creep-resistant steels,," "Viscoelastic characterization of wood: Time dependence of the orthotropic compliance in tension and compression," vol. 13, pp. 411-467, 1999.
- [8] C. Ansberry, ". "In Firestone Tyre Study, Expert Finds Vehicle Weight Was Key in Failure"," *Wall Street Journal*, no. 6 September 2016, pp. 188-345, 2001.
- [9] M. F. Z. Z. K. A. Basoglu, "A Computational Model of Peridynamic Theory for Deflecting Behavior of Crack Propagation," *Comput. Mater. Sci.*, vol. 162, no. 1, pp. 33-46, 2019.
- [10] W. Blum, P. Eisenlohr and Breutinger, ""Understanding creep—a review". Metallurgical and Materials Transactions A.," *International Journal of Plasticity*, vol. 19, p. 291–303, 2003.
- [11] É. Z. G. M. N. a. B. Budyn, "A Method for Multiple Crack Growth in Brittle Materials Without Remeshing," *Int. J. Numer. Methods Eng.*, vol. 61, no. 10, pp. 1741-1770, 2004.
- [12] M. Manson, "Fatigue: A complex subject-some simple approximations," *Experimental Mechanics*, vol. 3, no. 5, pp. 193-226, 1953.
- [13] K.-H. Chang, "Solidworks Simulation," *Design Optimization*, vol. 8, no. Dassault Systemes, pp. 220-246, 2015.
- [14] N. W. C. Smith, "A stress-strain function for the fatigue of metals," *Journal of Materials*, vol. 5, no. 4, pp. 767-778, 1970.

- [15] R. Morrow, "Cyclic plastic strain energy and fatigue of metals," *ASTM Special Technical Publication*, vol. 378, pp. 58-81, 1965.
- [16] H. Eskandari and H. S. Kim, ""A theory for mathematical framework and fatigue damage function for S-N plane"," *Fatigue and Fracture Test Planning, Test Data Acquisitions*, vol. 1598, no. ISBN 978-0-8031-7639-3., p. pp. 299–336, 2017.
- [17] C. C. B. B. J. Vasco, "Material selection for high performance moulds," *Material selection for high performance moulds*, no. November 2007, p. 7, 2007.
- [18] S. S. S. Prakash, "A review on fatigue damage assessment techniques," *International Journal of Fatigue*, vol. 126, pp. 324-338, 2019.
- [19] X. L. a. L. Z. J. Luo, "Effect of microstructure on tensile deformation behavior of AZ31 magnesium alloy," *Materials Science and Engineering*, vol. 764, pp. 138-188, 2019.
- [20] A. D. F. Lekarp, "Modelling permanent deformation behaviour of unbound granular materials," *Construction and Building Materials*, vol. 12, no. 1, pp. 9-18, 1998.
- [21] C. I. M. Fragassa, "Technology assessment of tyre mould cleaning systems and quality finishing," *International Journal for Quality Research*, pp. 523-546, 2016.
- [22] B. He, "Reseach on the failure and material selection of plastic Mould," *Procedia Engineering*, vol. 23, pp. 46-52, 2011.
- [23] Z. S. I. Magomedov, "Comparative study of finite element analysis software packages," in *Journal of Physics: Conference Series*, 2020.
- [24] P. Kelly, "Failure of Elastic Materials," *Auckland Engineering*, pp. 277-282, 2015.
- [25] K. J. W. Jamal Ali, "Linear dynamic analysis of a structural system," in *Linear dynamic analysis of a structural system*, 2015, pp. 48-55.
- [26] B. X. J. Zhang, "Energy-saving performance and production accuracy of the direct-pressure tyre curing technology with an expandable steel internal Mould," *Applied Sciences (Switzerland)*, vol. 10, no. 1, 2020.
- [27] J. Ye, "Theories of elastic failure," *Structural and Stress Analysis*, pp. 180-191, 2021.
- [28] Z. P. J. A. Z. Li, "Reconfigurable Fixtures : Concept and Examples," no. July 2004, pp. 1-4, July 2004.
- [29] X. Yan, "A numerical modeling of dynamic curing process of tyre by finite element," *Polymer Journal*, vol. 39, no. 10, pp. 1001-1010, 2007.
- [30] L. C. a. S. Lee, "Effects of strain rate on tensile behavior of metallic materials," *International Journal of Plasticity*, vol. 26, no. 1, pp. 1-23, 2002.

- [31] H. G. A. E. S. B. R. W. F. P. Willschütz, "Recursively coupled thermal and mechanical FEM-analysis of lower plenum creep failure experiments," *Annals of Nuclear Energy*, p. 33, 2006.
- [32] H. Long, S. Mao, Y. Liu, Z. Zhang and X. Han, ""Microstructural and compositional design of Ni-based single crystalline superalloys," *ournal of Alloys and Compounds*, vol. 743, pp. 203-220, 2018.
- [33] J. F. a. W. Kalthoff, "Failure Mode Transition of High Rates of Shear Loading," Proceedings of the International Conference on Impact Loading and Dynamic Behavior of Materials," *Deutsche Gesellschaft für Metallkunde*, vol. 21, pp. 185-195, 1987.
- [34] J. C. J. & C. K. Li, "Fatigue life prediction of Mould inserts," *The International Journal of Advanced Manufacturing Technology*, Vols. 1283-1302, pp. 79(5-8), 2015.
- [35] I. Kharagpur, "Module-3_lesson-1," in *Design For Strength*, 2008, p. 98.
- [36] J. Marzbanrad, ""Thickness and Material Yield Strength Effects of Thin Sheets on Dent Resistance"," *Automotive Engineering Department University of Science and Technology, Narmak*, vol. 5, pp. 16846-13114, 2005.
- [37] J. P. a. K. Laures, "Three-Dimensional Interactions of a Crack Front With Arrays of Penny-Shaped Microcracks," *Int. J. Fract*, vol. 48, pp. 255-279, 1991.
- [38] R. Morrow, "Cyclic plastic strain energy and fatigue of metals," *ASTM Special Technical Publication*, vol. 378, pp. pp. 58-81, 1965.
- [39] A. G. L. G. F. B. L.V. Raulea, ""Side effects in the processing of thin metal sheets"," in *Netherlands institute for Metal Research, Eindhoven University of Technology*, , Netherlands, 2005.
- [40] i. e.-D. Kuang-Hua Chang, "Solidworks Simulation," *Design Optimization*, 2015.
- [41] Q. H. G. L. H. Y. B. L. D. Y. Li, "Understanding the Effect of Plastic Deformation on Elastic Modulus of Metals Based on a Percolation Model with Electron Work Function," *Jom*, pp. 1130-1135, 2018.
- [42] M. Manson, "Fatigue: A complex subject-some simple approximations," *Experimental Mechanics*, vol. 3, pp. pp. 193-226, 1953.
- [43] Y. Murakami, "Metal fatigue: effects of small defects and nonmetallic inclusions," *ELSEVIER*, vol. 2, p. 369, 2002.
- [44] A. A. a. R. Needleman, "Texture development and strain hardening in rate dependent polycrystals," *Acta Metallurgica*, vol. 33, no. 6, pp. 923-953, 1985.
- [45] W. S. a. J. Z. Q. Li, "Microstructural evolution and its effect on plastic deformation behavior of Mg-4Zn-0.5Zr alloy during hot compression," *Materials Science and Engineering*, vol. 760, pp. 323-333, 2019.

- [46] M. (. / O. M. Introduction, "Chapter 4 Static Structural Analysis," in *Linear Static Analysis, Simulation*, 2009, pp. 1-49.
- [47] E. M. Z. T. R. Afia, "Mechanical Stresses on Polymer Insulating Materials," *2018 International Conference on Diagnostics in Electrical Engineering, Diagnostika 2018*, pp. 2018-2021, 2018.
- [48] Z. a. C. B. B. Zhuang, "A Novel Enriched CB Shell Element Method for Simulating Arbitrary Crack Growth in Pipes," *IEEE*, vol. 8, no. Sci. China: Phys., Mech. Astron, p. 1520–1531, 2011.
- [49] D. S. C. M. & E. T. Radaj, "Fatigue of structures and materials," *Springer Science & Business Media*, vol. 4, p. 243, 2008.
- [50] K. M. O. O. O. Battaia, "A Distributive Approach for Position Control of Clamps in a Reconfigurable Assembly Fixture," vol. 14, no. 1, p. 1, 2020.
- [51] T. A. L. K. accident, "Report of a Norwegian public commission appointed by royal decree," *presented to the Ministry of Justice and Police March*.
- [52] J. L. Zhuo Zhuang, "Dynamic Crack Propagation," 2015.
- [53] L. S. S. W. H. Zaremba, "Optimal portfolio choice under a liability constraint," *Annals of Operations Research*, pp. 131-141, 2000.
- [54] Z. Z. L. T. Y. Wang, "Research on the Moulding Design and Optimization of the Moulding Process Parameters of the Automobile Trunk Trim Panel," *Advances in Materials Science and Engineering*, vol. 2020, 2020.
- [55] S. A. a. A. Silling, "A Meshfree Method Based on the Peridynamic Model of Solid Mechanics," *Comput. Struct*, vol. 83, p. 1526–1535, 2005.
- [56] S. A. Silling, "Reformulation of Elasticity Theory for Discontinuities and Long-Range Forces," *J. Mech. Phys. Solids*, vol. 48, no. 1, pp. 175-209, 2000.
- [57] ". a. S. Rupture", ""Creep and Stress Rupture"," *Philosophical Magazine A*, vol. 46, no. NC State University, pp. 67-616, 2017.
- [58] S. A. Silling, "Reformulation of Elasticity Theory for Discontinuities and Long-Range Forces," *J. Mech. Phys. Solids*, vol. 48, pp. 175-209, 2000.
- [59] J. Moore, " Monitoring Building Structures. Blackie and Son Ltd," *USA and Canada*, vol. 31, no. ISBN 0-442-31333-0, 1992.
- [60] T. Z. G. B. S. a. N.-X. H. Rabczuk, "A Simple and Robust Three-Dimensional Cracking-Particle Method Without Enrichment," *Comput. Meth. Appl. Mech. Eng.*, vol. 199, pp. 2437-2455, 2010.
- [61] M. S. a. X. Z. Y. Wang, "Effect of microstructure on tensile deformation behavior of Ti-6Al-4V alloy," *Materials Science and Engineering*, vol. 622, pp. 188-195, 2015.

- [62] X. W. a. L. W. Y. Yang, "A study of the effects of plastic deformation on fracture behavior of 2Cr13 stainless steel," *International Journal of Pressure Vessels and Piping*, no. 162-163, pp. 94-102, 2018.
- [63] A. E. A. R. Saidur, "A review on energy strategies in industrial sector," *Renewable and sustainable energy reviews*, vol. 15(1), pp. 150-168, 2011.
- [64] R. N. W. P. & T. T. H. Smith, "A review of fatigue crack growth models for ductile metallic materials.," *Nuclear Engineering and Design*, Vols. 1628-1652, pp. 236(15-16), 2006.
- [65] S. P. a. O. Toparli, "An overview of non-destructive testing and evaluation techniques for fatigue damage assessment," *Fatigue & Fracture of Engineering Materials & Structures*, vol. 38, no. 2, pp. 111-129, 2015.
- [66] Roberto, J. García-Barba, M. Cano, M. P. Sanabria, S. Ivorra, J. Duro and G. Herrera, ""Subsidence damage assessment of a Gothic church using differential interferometry and field data", " *Structural Health Monitoring.*, vol. 11, pp. 751-762, 2012.
- [67] K. M. K. P. R. R. J. H. Volker Piottter, "Performance and simulation of thermoplastic micro injection Moulding," *Microsystem Technologies*, vol. 8, no. 10.1007/s00542-002-0178-6, pp. 387-390, 2002.
- [68] u. Manuel, A. Lozano, G. Herrera, J. Mulas and Á. Rodríguez, ""Instrumental monitoring of the subsidence due to groundwater withdrawal in the city of Murcia (Spain)", " *Environmental Earth Sciences*, vol. 70, no. ISSN 1866-6280, pp. 1957-1963, 2013.
- [69] Y. L. a. X. Z. Y. Huang, "Influence of microstructural changes on plastic deformation behavior of Ti-6Al-4V alloy," *Materials Science and Engineering*, vol. 33, pp. 157-168, 2013.
- [70] J. Z. a. J. Z. Y. Liu, "Failure analysis of a plastic injection Mould," *Engineering Failure Analysis*, vol. 68, pp. 91-102, 206.
- [71] D. Rees, "Basic Engineering Plasticity: An Introduction with Engineering and Manufacturing Applications," *Butterworth-Heinemann*, Vols. ISBN 0-7506-8025-3, no. 2017-12-22., p. p. 41., 2006.
- [72] X. L. W. & Z. Y. Zhu, "Fatigue analysis and life prediction of Mould components," *The International Journal of Advanced Manufacturing Technology*, Vols. 2183-2201, pp. 84(9-12), 2016.
- [73] A. M. P. M. S. Mondal, "Temperature dependent plastic deformation behavior of metals," *Materials Today: Proceedings*, vol. 33, pp. 1090-1096, 2020.
- [74] "Chapter 2 Linear dynamic analysis of a structural system," in *Linear dynamic analysis of a structural system*, IEEE, 2015, pp. 843-848.

- [75] O. Engineering, "ANSYS WORKBENCH," in *An Introduction of ANSYS mechanical*, ANSYS, 2004, pp. 221-235.
- [76] S. S. a. S. K. S. Prakash, "A review on fatigue damage assessment techniques," *International Journal of Fatigue*, vol. 126, pp. 324-338, 2019.
- [77] J. E. Shigley, C. R. Mischke and R. G. Budynas, "Mechanical Engineering Design," *McGraw Hill Higher Education.*, vol. 7, no. ISBN 978-0-07-252036-1., 2003.
- [78] J. Schijve, "Fatigue of structures and materials in the 20th century and the state of the art," *International Journal of Fatigue*, vol. 8, no. 25, p. 679–702., 2003.
- [79] S. A. E. M. W. O. X. Silling, "Peridynamic States and Constitutive Modeling," *J. Elast*, vol. 88, pp. 151-184, 2007.
- [80] P. Robles and Tomás, ""Multitechnical approach for damage assessment and reinforcement of buildings located on subsiding areas: Study case of a 7-story RC building in Murcia," *Engineering Structures.*, vol. 173, no. ISSN 0141-0296, pp. 744-757, 2018.
- [81] G. Redmond, " "From 'Safe Life' to Fracture Mechanics - F111," *Aircraft Cold Temperature Proof Testing at RAAF Amberley*, vol. 19, pp. 88-110, 2019.