

DAFTAR PUSTAKA

- Aaron D. Deutschman, Walter J. Michels, C. E. W. (1975). *Brian Schilling*, BSME, MBA.
- Al Hafiz, M., Nawi, M., Al, M., Marzuki, B., Azlan, S., Polytechnic, S., Marzuki, M. A. B., Azmi, M. F. M., Mohamed, A. R. N., Bakar, M. A. A., & Nawi, M. A. M. (2018). Pre-stress Modal Analysis of Space Frame Chassis Structure Using Finite Element Method Firdaus Azmi Polytechnic Kota Kinabalu Pre-stress Modal Analysis of Space Frame Chassis Structure Using Finite Element Method. *International Journal of Engineering & Technology*, December, 1545–1548. <https://doi.org/10.14419/ijet.v7i4.36.29369>
- Barbosa, L. M. Q., Fernandes, G. H. N., & Murad, M. de Q. (2024). Finite element analysis and optimization of a Formula SAE car chassis. *Caderno Pedagógico*, 21(1), 2053–2071. <https://doi.org/10.54033/cadpedv21n1-107>
- Dagdeviren, S., Yavuz, M., Kocabas, M. O., Unsal, E., & Esat, V. (2016). Structural crashworthiness analysis of a ladder frame chassis subjected to full frontal and pole side impacts. *International Journal of Crashworthiness*, 21(5), 477–493. <https://doi.org/10.1080/13588265.2015.1135522>
- Dalal, H., & Sheth, P. P. (2019). *Design and Analysis of Heavy Vehicle Chassis Using Finite Element Analysis*. January. https://www.researchgate.net/publication/281373162_Design_Analysis_and_Optimization_of_Heavy_Vehicle_Chassis_Using_Finite_Element_Analysis
- Daniyan, I. A., Mpofu, K., Adeodu, A. O., & Azeez, T. M. (2019). ScienceDirect ScienceDirect Investigating Investigating the the Quality Quality and and Conformity Conformity of of Carbon Carbon Steel AISI Investigating the Quality

- and Conformity of Carbon Steel AISI 1035 under Varying Heat Treatment Conditions. *Procedia Manufacturing*, 35, 1111–1116.
<https://doi.org/10.1016/j.promfg.2019.06.064>
- Deakin, A., Crolla, D., Ramirez, J. P., & Hanley, R. (2000). *The Effect of Chassis Stiffness on Race Car Handling Balance*. 724.
- Desai, M., Somwanshi, D., & Jagetia, S. (2019). Optimal material selection on designed chassis. In *Advances in Intelligent Systems and Computing* (Vol. 698, Issue January). Springer Singapore. https://doi.org/10.1007/978-981-13-1819-1_43
- Fang, D., & Kefei, W. (2019). *Simulation analysis and experimental verification on body-in-white static stiffness of a certain commercial vehicle. I*, 141–147.
<https://doi.org/10.21595/vp.2019.21171>
- Farabi, J. (2021). The Design and Analysis of Multiple Monocoque Chassis for Formula Student (FS) racecar. *International Journal of Mechatronics and Automotive Research (IJMAR)*, 3(1), 19–32.
<https://www.researchgate.net/publication/362943871>
- Fauzi, G., & Marsono. (2021). Analisis Statik Chassis Mobil Listrik Jenis Ladder Frame Berbahan Baja Hollow Dengan Bantuan Software Solidworks. *Seminar Nasional – XX, Rekayasa Dan Aplikasi Teknik Mesin Di Industri*, November, 1–10.
<https://eproceeding.itenas.ac.id/index.php/fti/article/view/699>
- González-Velázquez, J. L. (2020). Fracture. In *Structural Integrity* (Vol. 12).
https://doi.org/10.1007/978-3-030-29241-6_6
- Hajar Isworo. (2017). Permodelan Analisis Pengaruh Tinggi Main Roll Hoop terhadap Tegangan dan Displacement Pada Mobil Formula Student Automotive Engineering

- Hajar. *Ketertiban Umum, Kebersihan, Dan Keindahan*, 2(1), 634.
<https://kinematika.ulm.ac.id/index.php/kinematika/article/view/42>
- Haslinda, H. (2023). Analisis Kekuatan Tegangan Geser Pada Baja Karbon Sedang. *Jnsta Adptersi Journal*, 3(2), 29–35.
<https://jurnal.adptersi.or.id/index.php/JNSTA/article/view/464>
- Hotma, L., Majid, N. C., Marsalyna, Hendrawan, J., Kinasih, N. A., Febriansyah, D. J., Novariawan, B., Alfin, M. R., Putri, I. S., Afif, M. T., Fadjrinn, B. N., & Purnomo, E. D. (2024). Mesh Convergence Test By Using Finite Element Analysis (Fea) in Shaft Loading of 2 Kw Induction Motor. *Jurnal Rekayasa Mesin*, 15(3), 1271–1280.
<https://doi.org/10.21776/jrm.v15i3.1516>
- Ismail, A. H. (2014). *Experimental and Analytical Study of Bending Stresses and Deflections in Curved Beam Made of Laminated*. 10(4), 21–32.
- Jain, A., & Wheelers, M. (2018). *Computational Analysis and Optimization of Torsional Stiffness of a Formula-SAE Chassis*. <https://doi.org/10.4271/2014-01-0355>. Copyright
- Kania, K., Verma, A., Babariya, R., & Vasani, J. (2023). *Design & Development of Formula Student Chassis*. May, 1796–1800.
- Kopec. (2023). *Microstructural evolution of 6061 aluminium alloy subjected to static and dynamic compression at low temperature Materials and methods Microstructural characterisation of the as - received AA6061*. 13(6), 1244–1251.
<https://doi.org/10.1557/s43579-023-00439-x>
- Kumar, M. D., Teja, P. S. ., Krishna, R., & Sreenivasan, M. (2019). Design Optimization and Simulation Analysis of Formula SAE Frame Using Chromoly Steel. *Journal of Engineering Sciences*, 6(2), d9–d13. [https://doi.org/10.21272/s.2019.6\(2\).d2](https://doi.org/10.21272/s.2019.6(2).d2)
- Lučić, M. (2023). Structural analysis of Formula Student vehicle chassis using Ansys

- software. *International Scientific Journal "Industry 4.0,"* 8(2), 52–56.
- Megson. (2019). *Structural and Stress Analysis Fourth Edition Structural and Stress Analysis Fourth Edition.*
- Mgbemena, C. O., Okongwu, M. ., & Ibadode, A. O. . (2019). Design Considerations for Ladder Chassis of a Lightweight Vehicle. *FUPRE Journal of Scientific and Industrial Research*, 3(1), 2019. <https://journal.fupre.edu.ng/index.php/fjsir/article/view/45>
- Miliken. (1995). *Race Car Vehicle Dynamics Milliken Milliken*
- Mott, R. L., & Vavrek, E. M. (2018). *MACHINE ELEMENTS IN MECHANICAL.*
- Mounika, K., James, B., Rao, P., Srikanth, P., Lingareddy, S., & Sangeetha, S. (2021). Automotive Chassis Frame Structural Analysis and Design Modification for Weight Reduction. *Journal of Science and Technology*, 06(02), 2456–5660. www.jst.org.indoi:https://doi.org/10.46243/jst.2021.v6.i02.pp164-194
- Noor, F., Hari, D., Prasetyo, T., & Noor, I. (2024). *Jurnal Polimesin experimental study.* 22(3), 324–333. https://www.researchgate.net/publication/382283812_Investigating_the_effects_of_partitioning_temperature_fluctuations_on_the_mechanical_properties_of_ASTM_A36_carbon_steel_using_Q-P-T_heat_treatment_an_experimental_study
- Openstax. (2022). *physics2e.*
- Pilkey, W. D., & Pilkey, D. F. (n.d.). *PETERSON ' S STRESS.*
- Ramaiya, U. B., Vemuluri, R. B., Darla, S. P., Edwin Sudhagar, P., & Ashok, B. (2021). Front, rear and side impact analysis of backbone chassis of a compact sports car. *IOP Conference Series: Materials Science and Engineering*, 1123(1), 012050. <https://doi.org/10.1088/1757-899x/1123/1/012050>

- Restu, F., Hakim, R., & Anwar, F. S. (2017). Analisa Kekuatan Material ASTM A36 pada Konstruksi Ragum terhadap Variasi Gaya Cekam dengan Menggunakan Software SolidWorks 2013. *Jurnal Integrasi*, 9(2), 113. <https://doi.org/10.30871/ji.v9i2.444>
- Reyes, A., Langseth, M., & Hopperstad, O. S. (2002). *Crashworthiness of aluminum extrusions subjected to oblique loading : experiments and numerical analyses*. 44, 1965–1984.
- Riley, W. B., & George, A. R. (2002). *Design , Analysis and Testing of a Formula SAE Car Chassis*. 724.
- Rizqy, M. I. N., Ariadhy, R. Z., Alpinas, G., Ryzki, J., & Wideasanti, I. (2021). Analisa Kebutuhan Material Pembesian pada Struktur Shear Wall. *Jurnal IKRA-ITH Teknologi*, 5(2), 1–5. <https://journals.upi-yai.ac.id/index.php/ikraith-teknologi/article/download/928/721>
- Saefudin, E., Anggraeni, N. D., Marsono, M., & Azhari, S. (2023). Static Analysis of Tubular Space Frame Chassis of an Electric Racing Car Made of ASTM A106 Grade B. *METAL: Jurnal Sistem Mekanik Dan Termal*, 7(1), 15–22. <https://doi.org/10.25077/metal.7.1.15-22.2023>
- Saefudin, E., Desi, N., & Azhari, S. (2023). *Static Analysis of Tubular Space Frame Chassis of an Electric Racing Car Made of ASTM A106 Grade B. 1*, 15–22.
- Schweighardt, A., Vehovszky, B., & Feszty, D. (2020). Modal analysis of the tubular space frame of a formula student race car. *Manufacturing Technology*, 20(1), 84–91. <https://doi.org/10.21062/mft.2020.013>
- Seward, D. (2014). *Race Car Design*.
- Singh, R. P. (2010). Structural Performance Analysis of Formula SAE car. *Jurnal Mekanikal*, 31, 46–61. <https://mech.utm.my/mech/wp->

content/uploads/2017/01/5STRUCTURAL-PERFORMANCE-ANALYSIS-OF-FORMULA-SAE-CAR.pdf

Structures, H., Compression, U., & Loading, I. (2025). *Numerical Study on the Comparative Structural Behavior of Auxetic Chiral and Honeycomb Structures Under Compression and Impact Loading*. 10(2), 222–231. <https://ftkunsurya.com/jurnal/index.php/jtk/article/view/128>

Sulamet-Ariobimo, R. D., Aji, D. P. B., Prayitno, D., Muslih, E. Y., Anas, M. S., Eddy, N., Triyono, T., Sukarnoto, T., Oktaviano, Y., & Mujalis, Y. (2020). Pengenalan Material Dan Karakterisasinya Bagi Masyarakat Industri. *Jurnal Abdi Masyarakat Indonesia (JAMIN)*, 2(1), 21–28. <https://doi.org/10.25105/jamin.v2i1.6248>

Suryady, S., & Sapto, A. D. (2024). Pembebanan Statis terhadap Rangka Mesin Alat Pengaduk untuk Adonan Donat menggunakan Software FEA. *Jurnal Teknik Mesin*, 13(1), 22. <https://doi.org/10.22441/jtm.v13i1.17689>

Sutrisno, R. (2023), ANALISIS STATIS *TUBULAR SPACE FRAME* ENGGANG EVO 4 UNTUK FESC MENGGUNAKAN *FINITE ELEMENT ANALYSIS*.

Tremblay, J., Regnerus, M. D., Educação, S. D. A. S. N. D. E., Júnior, F. T., Sanfelice, J. L., Tavares Júnior, F., Dourado, L. F., Brito, M. M. A. de, Maiti, Bidinger, Sposito, M. P., Dubet, F. F., Ribeiro, C. A. C., Silva, N. do V., Barbosa, M. L. de O., Cunha, N. M., Dayrell, J., Rogošić, S., Baranović, B., ... Alves, S. (2016). Shigley Mechanical Engineering Desing Edition10th. In *Educacao e Sociedade* (Vol. 1, Issue 1).

http://www.biblioteca.pucminas.br/teses/Educacao_PereiraAS_1.pdf
http://www.anpocs.org.br/portal/publicacoes/rbcs_00_11/rbcs11_01.htm
http://repositorio.ipea.gov.br/bitstream/11058/7845/1/td_2306.pdf
<https://direitoufma2010.files.wordpress.com/2010/>

- Upadhyay, S., & Badiger, G. (2020). Design and Analysis of Supra Chassis. *International Research Journal of Engineering and Technology*, May. www.irjet.net
- Widiyanto, I., Sutimin, S., Laksono, F. B., & Prabowo, A. R. (2021). Structural assessment of monocoque frame construction using finite element analysis: A study case on a designed vehicle chassis referring to ford GT40. *Procedia Structural Integrity*, 33(C), 27–34. <https://doi.org/10.1016/j.prostr.2021.10.005>
- Wongchai, B. (2020). *FRONT AND SIDE IMPACT ANALYSIS OF SPACE FRAME CHASSIS OF FORMULA CAR*. 18(67), 168–174. https://www.researchgate.net/publication/339611052_FRONT_AND_SIDE_IMPACT_ANALYSIS_OF_SPACE_FRAME_CHASSIS_OF_FORMULA_CAR
- Wulvik, A., Balters, S., & Steinert, M. (2015). *Photography- The Answer to Combining Needfinding and Visual Thinking PHOTOGRAPHY - A NEW TOOL IN NEEDFINDING*. October. https://www.researchgate.net/publication/281104112_Photography-The_Answer_to_Combining_Needfinding_and_Visual_Thinking
- Yani, I., Arifin, A., Jambak, A. I., Gunawan, G., Adanta, D., & Barlin, B. (2021). Chassis Frame Design and Analysis Based on Formula Sae Japan. *Indonesian Journal of Engineering and Science*, 2(2), 015–023. <https://doi.org/10.51630/ijes.v2i2.19>
- Yinghao, J. (2023). Finite Element Analysis and Optimization of Medium Truck Frame Based on ANSYS. *Journal of Engineering Research and Reports*, 24(10), 13–22. <https://doi.org/10.9734/jerr/2023/v24i10844>
- Zienkiewicz, O. C. (2013). *The Finite Element Method Fifth edition Volume 2 : Solid Mechanics*. 2.
- Zigap, A. (2023). *Plywood Cantilever Deflection : Experimental , Analytical and FEM*

Approach Prodig konsole od furnirske ploče : eksperimentalni , analitički i FEM pristup. 74(1), 81–91.

Zola, G., Siska, ;, Nugraheni, D., Andhien, ;, Rosiana, A., Dzamar, ;, Pambudy, A., & Agustanta, N. (2023). Inovasi kendaraan listrik sebagai upaya meningkatkan kelestarian lingkungan dan mendorong pertumbuhan ekonomi hijau di Indonesia. *Ekonomi Sumberdaya Dan Lingkungan, 11(3)*, 2303–1220. <https://online-journal.unja.ac.id/JSEL/article/view/30229>