

THE STUDY OF THE CHASSIS OF FOUR WHEELER

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DOI: 10.5958/2249-7137.2021.02641.0

ABSTRACT

A chassis is the fundamental framework that gives the body its power and offers a resting place for all machine components. The basic framework of a vehicle is an example of a chassis. The automobile sector has a serious issue with mass or weight reduction. A few research from the past years were evaluated in this article. In general, the chassis is the fundamental framework of a car, motorbike, or truck. The study paper on chassis analysis, the technique used to analyze chassis, and the material utilized in chassis production is published previously in this article. A variety of analytical and experimental methods are available for evaluating the chassis and the materials used in its manufacture. In various chassis constructions, steel forms are commonly utilized; however, aluminum has also been used in the past.

KEYWORDS: *Automobile, Automotive, Chassis, Framework, Vehicle.*

REFERENCES

1. F. A. Conle and C. C. Chu, "Fatigue analysis and the local stress-strain approach in complex vehicular structures," *Int. J. Fatigue*, 1997, doi: 10.1016/s0142-1123(97)00045-5.
 2. F. Zhen et al., "Development of a heavy heavy-duty diesel engine schedule for representative measurement of emissions," *J. Air Waste Manag. Assoc.*, 2009, doi: 10.3155/1047-3289.59.8.950.
 3. S. Yoon, J. Collins, A. Thiruvengadam, M. Gautam, J. Herner, and A. Ayala, "Criteria pollutant and greenhouse gas emissions from CNG transit buses equipped with three-way catalysts compared to lean-burn engines and oxidation catalyst technologies," *J. Air Waste Manag. Assoc.*, 2013, doi: 10.1080/10962247.2013.800170.
 4. "What Is A Chassis And What Are Its Types?" .
 5. N. Y. Kado et al., "Emissions of toxic pollutants from compressed natural gas and low sulfur diesel-fueled heavy-duty transit buses tested over multiple driving cycles," *Environ. Sci. Technol.*, 2005, doi: 10.1021/es0491127.
 6. M. P. Lammert, R. L. McCormick, P. Sindler, and A. Williams, "Effect of B20 and Low Aromatic Diesel on Transit Bus NOx Emissions Over Driving Cycles with a Range of Kinetic Intensity," *SAE Int. J. Fuels Lubr.*, 2012, doi: 10.4271/2012-01-1984.
 7. M. Cavazzuti, A. Baldini, E. Bertocchi, D. Costi, E. Torricelli, and P. Moruzzi, "High
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performance automotive chassis design: A topology optimization based approach,” Struct. Multidiscip. Optim., 2011, doi: 10.1007/s00158-010-0578-7.

8. Chassis Handbook. 2011.
9. H. H. Rathod, S. Kumar, V. Goel, and B. E. Pursuing, “A Review on Analysis and Design of Vehicle Chassis and its Materials,” Int. J. Sci. Eng. Res., 2018.
10. “Types Of Car Chassis Explained | From Ladder To Monocoque!” .