

# Design and Analysis of Bicycle Chassis Frame

Atharva Pitke<sup>1</sup>, Saheel Shirsat<sup>2</sup>, Vaishnavi Joshi<sup>3</sup>, Gauri Kulkarni<sup>4</sup>, Sonali Dhaneshwar<sup>5</sup>

Students, Department of Mechanical Department Engineering<sup>1,2,3,4</sup>

Professor, Department of Mechanical Department Engineering<sup>5</sup>

JSPM's Rajarshri Shahu College of Engineering, Tathawade, Pune, Maharashtra, India

**Abstract:** Human beings are currently unable to devote specific attention to their health. This emphasizes the significance of exercise and physical fitness. In this paper, we look for another alternate source, such as an electric vehicle, to help with the time crunch and pollution control. Because electric vehicles are light, they may be utilized anywhere. The final goal of this paper is to develop and assess a chassis frame. In this paper we are also attempting to comprehend several forms of chassis frames in order to assess deformation and material selection. Cycles can now be regarded a good mode of transportation for neighbouring destinations due to rising fuel prices. In smart city people have very hectic schedule to deal with it they always refer a fastest route for transportation so that they can save their time and utilize it elsewhere. So electric cycle can be the best solution for them, it can be the fastest and cheapest route for transportation. As these electro cycles are light in weight, they can be easily carried out on shoulders without feeling of uneasiness. This cycle is ideal for use of short distance and for the people of any class and age.

**Keywords:** Electric bicycle, chassis frame, electric vehicle, CAD design, Static Structural analysis

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