

## ABSTRACT

The warm gases which generate from combustion of gas passes through the exhaust device of the two wheeler as they shape the passage for the recent gases and launched to the ecosystem at a temperature of round 150-250 Celsius after passing through muffler. Exhaust device of a two wheeler include 3 components including exhaust manifold, catalytic converter and silencer out of these silencers having very quick life span as there's lot of limits furnished to the waft of warm gases because of complicated geometry to be able to reduce the noise stage for this reason gases staying extra time on this phase compared to different part of exhaust device. Hence that region wishes to be targeted at some point of layout phase. The uniform temperature distribution over the complete exhaust device is critical for making sure greater lifestyles of factors with inside the subsystem. The trouble recognized for this dissertation paintings is to evaluate the uniform warmth waft alongside the passage of warm gases the use of extraordinary materials (Stainless metallic and Inconel 625 alloy) the use of ANSYS workbench 18.1.

**Keywords:** Exhaust manifold, Catalytic converter, Stainless steel, Inconel 625 alloy, CATIA and ANSYS.