

The major Disadvantage of 2 stroke engine is its fuel inefficiency; a portion of the fuel intake leaves the cylinder unburnt because all the ports are open at the same time, resulting in low fuel efficiency and power reduction. This was dealt with by making changes in the piston head design to divert the flow from the exhaust ports.

The 2nd part of the project was fabricating a fully functional piston using Direct Metal Laser Sintering Process. Various parameters such as dimensional accuracy, surface roughness, hardness etc. were measured to assess if 3D Printing can be a possible alternative to conventional manufacturing processes.