

Machine Design Projects for Mtech & PHD

1. Design and Analysis of UAV using CFD
2. Fatigue Life analysis of tube flange weld joint
3. Performance evaluation of Conical Diffuser for swirl flow conditions
4. Design optimization of Heavy Motor vehicle chassis using ANSYS
5. Design Optimization of Pulse jet Engine to improve thrust generation
6. Design Optimization of Leaf Spring using Response Surface Optimization
7. Thermal Analysis and Design Optimization of Disk Brake using ANSYS
8. Design Optimization of IC engine piston using Response Surface Method
9. Design and Analysis of EGR cooler used in Automobiles
10. Crash Analysis of Front Bumper used in Passenger Car using ANSYS
11. Fatigue Life analysis of tube flange T shaped weld joint
12. Design and analysis of steering knuckle using ANSYS
13. Thermal Analysis of IC engine cylinder fins to study cooling characteristics
14. Thermal Analysis and Design Optimization of cooling fins used in heat sink
15. Fluid flow analysis of fuel injector system using ANSYS CFX
16. Design and Analysis of Pulsejet Engine using ANSYS CFX
17. CFD Analysis of NACA 0012 airfoil operating at different altitudes
18. Design and Analysis of Solar Panel support structure subjected to different wind conditions
19. Structural Analysis of Cracked cylinder beam subjected to torsional loading using ANSYS

20. Rigid Body Analysis of Robotic Arm using Creo and ANSYS
21. Stability Analysis of Solar Panel subjected to different air flow condition
22. Vibration Analysis of Vertical Axis Wind Turbine using ANSYS
23. Thermal Analysis of IC engine cylinder fins using ANSYS
24. Thermal Characteristics of disk brake cooling subjected to wind load
25. Weight Reduction of Automobile Component using Topology Optimization Technique
26. Structural Analysis of tyre road interaction of SUV using ANSYS.
27. Design Optimization of cracked cantilever beam using Taguchi Response Surface Method.
28. Weight Reduction of Robotic Arm using Topology Optimization Technique
29. Weight Reduction of T shape joint subjected to fatigue loading using Topology Optimization Technique

