Design and analysis of piston

Piston is a part of engine which converts pressure and heat energy into mechanical energy, by mixing of air and fuel. which converts chemical to mechanical energy.It transfers force\energy from expanding gas in the cylinder to the crank shaft with connecting rod. When engine at higher speed it has high pressure ratio and energy improves constantly. Burning of piston at higher temperature and pressure which makes the piston expands and produces thermal stress and deformation. So it is essential to analyze the thermal load and heat transfer.

By using SOLID WORKS 2014 software can create the model of piston, and perform the thermal analysis with different material at different temperatures.