

ROLES & RESPONSIBILITIES

- Simulated the performance of clutch with simultaneous presence of mechanical and thermal loads through ANSYS
- Studied the effect of thermal load on friction surfaces of flywheel and pressure plate at three different layers to understand the degree of conduction of these materials and their endurance to the thermal load
- Investigated the effect of mechanical and thermal load on clamp load, transmitted torque, friction surfaces of flywheel and pressure plate of clutch, position of diaphragm spring through calculations
- Validated the simulated values with help of experimental values

RESULTS

- The simulation in ANSYS helped Schaeffler India save £2500 to £5000
- These results helped in optimizing the materials of friction surfaces of flywheel and pressure plate and ensure better customer satisfaction
- These simulations were used to validate design made by design team and reduce experimental setup costs by 100% there by eliminating the need to conduct experiments for new designs

* Results could not be shared due to confidentiality of project details