Design and analysis of flange coupling

A coupling is a device used to connect two shafts together at their ends for the purpose of transmitting power. Each automobile has different power transmission system constructive features depend on vehicle’s driveline concept. While transmitting a torque different stresses are induced such as tensional stress & bending stress are experienced.

The main objective of the project is to design a flange coupling and perform structural analysis to find out critical stress points. The analysis is carried out in different materials to find most preferable material by considering the stress and deformation values. The cad model is generated in solid works premium 2014. The analysis is carried out in solid works simulation.