

COMPARATIVE STUDY OF SINTERED SPUR GEAR FOR BOTH STANDARD AND PROFILE CORRECTED TOOTH

SHIVAPPA D¹, K. V NAGESHA² & N. SHIVAKUMARA³

¹Department of Mechanical Engineering, JGIT, Bangalore, Karnataka, India

²Department of Mechanical Engineering, AIET, Moodbidire, Karnataka, India

³Department of Mechanical Engineering, VKIT, Bangalore, Karnataka, India

ABSTRACT

Gears have been used throughout history for various purposes gearing is one of the most effective methods transmitting power and rotary motion from the source to its application with or without change of speed or direction. The rapid development of heavy industries such as vehicle, shipbuilding and aircraft industries in recent decades require advanced application of gear technology. The modeling of a sintered spur gear for both standard and profile corrected tooth. After making model from C programming is then imported to an analysis software ANSYS for carrying out the static analysis. Finally the comparisons for stress is carried out for both the standard sintered spur gear and profile corrected sintered spur gear. The interference for the profile corrected sintered spur gear was considerably less as compared to the standard sintered spur gear.

KEYWORDS: ANSYS, Von Mises Stresses