WEAR TESTING ANALYSIS ON CYLINDER HEAD VALVE FOR CNG FUELED ENGINE

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ABSTRACT

Engine valve train mechanism is the last part of airflow before the combustion. It consists of combination of Camshaft, Roller tappet, Push rod, Rocker arm, valve and valve seat. The valve-seat contacts of internal combustion engines are subjected to combined attacks of impact and sliding under high temperature. This valve seat serves as seals for high-temperature, high-pressure & also does not adverse wear on valve, resulting in compression pressure and engine timing loss. Vehicle fuel and grease system need to make some improvise since rises of country administration rules needs to upgraded the engine fuel save and less emissions. One of the current fuels usable to give a challenge with gasoline fuel in our country is Compressed Natural gas (CNG) as it is readily available in oil refill stations nationwide and is used by Natural Gas Vehicle (NGV) on the road. CNG is usually conducted on combustion under lean burn conditions that leads to improved fuel efficiency as there has been a great deal of interest in lean burn technology for natural gas engines. This project is focus on valve seat recession on CNG fuelled engine under lean burn condition.

Keywords: Valve, wear, test rig.