

Parts for Gas Forklifts

Gas Forklift Parts - The diesel engine was developed during 1893 by Rudolf Diesel. It is an internal combustion engine that utilizes the heat of compression so as to burn the fuel and initiate ignition. After that the fuel is injected into the combustion chamber. This design is in contrast to spark ignition engines, such as gasoline or petrol engines which depend on spark plugs in order to ignite an air-fuel mix.

Because of its really high compression ratio, the diesel engine has the highest thermal efficiency of any conventional external or internal combustion engine. Low-speed diesel engines normally have a thermal efficiency which exceeds fifty percent.

There are both 2-stroke and 4-stroke kinds of the diesel engine manufactured. Originally, diesel engines were used as a more effective replacement for stationary steam engines. Diesel engines have been used ever since the year 1910 in ships and submarines, with subsequent use in electric generating plants, trains and large trucks in the following years. By the 1930s, these engines were making their way into the automotive trade. The use of diesel engines has been on the increase in the USA ever since the 1970s. These engines are a common option in larger off-road and on-road motor vehicles. Approximately fifty percent of all new car sales within Europe are diesel according to a 2007 statistic.

The internal combustion diesel engine is uniquely different from the gas powered Otto cycle. It utilizes highly compressed, hot air in order to ignite the fuel that is known as compression ignition as opposed to using a spark ignition and spark plug.

The high compression ratio also immensely increases the engines' general efficiency. This is due to the high level of compression that enables combustion to take place without a separate ignition system. Conversely, in a spark-ignition engine where fuel and air are mixed previous to entering the cylinder, increasing the compression ratio is limited by the need to prevent damaging pre-ignition. In diesel engines, premature detonation is not an issue because only air is compressed and fuel is not introduced into the cylinder until soon before top dead center. This is one more reason why compression ratios in diesel engines are significantly higher.