## **Forklift Engines**

Forklift Engine - An engine, otherwise called a motor, is a device which changes energy into useful mechanical motion. Motors which change heat energy into motion are known as engines. Engines come in various kinds like for example external and internal combustion. An internal combustion engine normally burns a fuel making use of air and the resulting hot gases are used for generating power. Steam engines are an example of external combustion engines. They use heat so as to generate motion utilizing a separate working fluid.

The electrical motor takes electrical energy and generates mechanical motion via varying electromagnetic fields. This is a common type of motor. Several types of motors are driven through non-combustive chemical reactions, other types can use springs and function through elastic energy. Pneumatic motors function by compressed air. There are different designs based upon the application needed.

## ICEs or Internal combustion engines

An internal combustion engine happens when the combustion of fuel mixes along with an oxidizer in a combustion chamber. Inside an internal combustion engine, the increase of high pressure gases combined with high temperatures results in applying direct force to some engine components, for example, nozzles, pistons or turbine blades. This particular force produces useful mechanical energy by moving the component over a distance. Normally, an ICE has intermittent combustion as seen in the popular 2- and 4-stroke piston engines and the Wankel rotating motor. The majority of gas turbines, rocket engines and jet engines fall into a second class of internal combustion engines referred to as continuous combustion, which happens on the same previous principal described.

External combustion engines like for instance steam or Sterling engines differ very much from internal combustion engines. External combustion engines, wherein the energy is delivered to a working fluid such as pressurized water, liquid sodium and hot water or air that are heated in some type of boiler. The working fluid is not combined with, having or contaminated by combustion products.

Different designs of ICEs have been developed and are now available with various strengths and weaknesses. If powered by an energy dense gas, the internal combustion engine delivers an effective power-to-weight ratio. Even if ICEs have been successful in many stationary applications, their real strength lies in mobile applications. Internal combustion engines control the power supply meant for vehicles like for instance boats, aircrafts and cars. Some hand-held power equipments make use of either ICE or battery power equipments.

## External combustion engines

In the external combustion engine is made up of a heat engine working using a working fluid like for example gas or steam that is heated through an external source. The combustion would take place via the engine wall or through a heat exchanger. The fluid expands and acts upon the engine mechanism that generates motion. Next, the fluid is cooled, and either compressed and used again or disposed, and cool fluid is pulled in.

The act of burning fuel with an oxidizer to be able to supply heat is known as "combustion." External thermal engines can be of similar application and configuration but utilize a heat supply from sources like for example geothermal, solar, nuclear or exothermic reactions not involving combustion.

The working fluid can be of whatever composition. Gas is the most common kind of working fluid, yet single-phase liquid is occasionally utilized. In Organic Rankine Cycle or in the case of the steam engine, the working fluid varies phases between gas and liquid.