## **Forklift Engines**

Forklift Engine - An engine, likewise known as a motor, is a tool which changes energy into functional mechanical motion. Motors which change heat energy into motion are known as engines. Engines come in several types like for instance external and internal combustion. An internal combustion engine usually burns a fuel using air and the resulting hot gases are utilized for creating power. Steam engines are an example of external combustion engines. They utilize heat so as to produce motion using a separate working fluid.

To be able to produce a mechanical motion through different electromagnetic fields, the electrical motor needs to take and produce electrical energy. This particular type of engine is really common. Other kinds of engine can function using non-combustive chemical reactions and some would make use of springs and be driven through elastic energy. Pneumatic motors are driven by compressed air. There are other styles based on the application needed.

## ICEs or Internal combustion engines

Internal combustion occurs when the combustion of the fuel mixes with an oxidizer inside the combustion chamber. Inside the IC engine, higher temperatures will result in direct force to certain engine parts like for example the pistons, turbine blades or nozzles. This particular force produces useful mechanical energy by moving the part over a distance. Usually, an internal combustion engine has intermittent combustion as seen in the popular 2- and 4-stroke piston motors and the Wankel rotary motor. Most rocket engines, jet engines and gas turbines fall into a second class of internal combustion motors called continuous combustion, which takes place on the same previous principal described.

Stirling external combustion engines or steam engines greatly differ from internal combustion engines. The external combustion engine, wherein energy is to be delivered to a working fluid such as hot water, liquid sodium, pressurized water or air that is heated in a boiler of some sort. The working fluid is not combined with, having or contaminated by combustion products.

The models of ICEs on the market nowadays come with various strengths and weaknesses. An internal combustion engine powered by an energy dense fuel would distribute efficient power-to-weight ratio. Even if ICEs have been successful in lots of stationary applications, their real strength lies in mobile applications. Internal combustion engines dominate the power supply meant for vehicles like for instance boats, aircrafts and cars. A few hand-held power gadgets utilize either battery power or ICE devices.

## External combustion engines

An external combustion engine is comprised of a heat engine where a working fluid, like for instance steam in steam engine or gas in a Stirling engine, is heated through combustion of an external source. This combustion happens through a heat exchanger or through the engine wall. The fluid expands and acts upon the engine mechanism which generates motion. Afterwards, the fluid is cooled, and either compressed and reused or discarded, and cool fluid is pulled in.

Burning fuel utilizing the aid of an oxidizer to supply the heat is known as "combustion." External thermal engines can be of similar application and configuration but use a heat supply from sources like for example solar, nuclear, exothermic or geothermal reactions not involving combustion.

The working fluid can be of whichever composition. Gas is actually the most common type of working fluid, yet single-phase liquid is sometimes used. In Organic Rankine Cycle or in the case of the steam engine, the working fluid varies phases between gas and liquid.