## Engines for Forklifts

Forklift Engine - An engine, likewise known as a motor, is a device that transforms energy into useful mechanical motion. Motors that change heat energy into motion are referred to as engines. Engines come in numerous kinds like for example external and internal combustion. An internal combustion engine normally burns a fuel with air and the resulting hot gases are used for generating power. Steam engines are an example of external combustion engines. They make use of heat to produce motion making use of a separate working fluid.

The electric motor takes electrical energy and generates mechanical motion through different electromagnetic fields. This is a common type of motor. Some kinds of motors function by non-combustive chemical reactions, other kinds could utilize springs and be driven by elastic energy. Pneumatic motors function by compressed air. There are other designs based upon the application needed.

ICEs or Internal combustion engines

An ICE takes place when the combustion of fuel combines with an oxidizer inside a combustion chamber. Inside an internal combustion engine, the increase of high pressure gases mixed together with high temperatures results in applying direct force to some engine parts, for example, turbine blades, nozzles or pistons. This force produces useful mechanical energy by means of moving the component over a distance. Usually, an internal combustion engine has intermittent combustion as seen in the popular 2- and 4-stroke piston engines and the Wankel rotating engine. Nearly all rocket engines, jet engines and gas turbines fall into a second class of internal combustion motors known as continuous combustion, which occurs on the same previous principal described.

External combustion engines like Stirling or steam engines vary very much from internal combustion engines. External combustion engines, where the energy is delivered to a working fluid like for example pressurized water, liquid sodium and hot water or air that are heated in some type of boiler. The working fluid is not mixed with, comprising or contaminated by combustion products.

Different designs of ICEs have been created and placed on the market together with several weaknesses and strengths. When powered by an energy dense fuel, the internal combustion engine produces an efficient power-to-weight ratio. Even if ICEs have succeeded in several stationary utilization, their actual strength lies in mobile applications. Internal combustion engines control the power supply used for vehicles such as boats, aircrafts and cars. Several hand-held power tools 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 by an external source. The combustion would take place through the engine wall or through a heat exchanger. The fluid expands and acts upon the engine mechanism that generates motion. After that, the fluid is cooled, and either compressed and reused or discarded, and cool fluid is pulled in.

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

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