

## Engines for Forklift

Forklift Engine - An engine, also known as a motor, is a device which transforms energy into useful mechanical motion. Motors that change heat energy into motion are known as engines. Engines are available in various kinds such as internal and external combustion. An internal combustion engine typically burns a fuel together with air and the resulting hot gases are used for creating power. Steam engines are an example of external combustion engines. They utilize heat in order to produce motion making use of a separate working fluid.

In order to produce a mechanical motion via varying electromagnetic fields, the electric motor has to take and produce electrical energy. This particular type of engine is extremely common. Other kinds of engine could function making use of non-combustive chemical reactions and some would use springs and function by elastic energy. Pneumatic motors function by compressed air. There are different styles depending upon the application needed.

### ICEs or Internal combustion engines

An internal combustion engine occurs when the combustion of fuel mixes with an oxidizer in 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 instance, nozzles, pistons or turbine blades. This force produces functional mechanical energy by moving the part over a distance. Normally, an ICE has intermittent combustion as seen in the popular 2- and 4-stroke piston motors and the Wankel rotating engine. Most 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.

Stirling external combustion engines or steam engines greatly vary from internal combustion engines. The external combustion engine, wherein energy is to be delivered to a working fluid like for instance hot water, liquid sodium, pressurized water or air that is heated in a boiler of some kind. The working fluid is not mixed with, consisting of or contaminated by burning products.

A variety of designs of ICEs have been created and are now available together with several weaknesses and strengths. When powered by an energy dense gas, the internal combustion engine provides an effective power-to-weight ratio. Though ICEs have been successful in several stationary utilization, their real strength lies in mobile utilization. Internal combustion engines control the power supply utilized for vehicles such as cars, boats and aircrafts. Some hand-held power equipments utilize either battery power or ICE equipments.

### External combustion engines

In the external combustion engine is made up of a heat engine working with a working fluid like for example gas or steam that is heated by an external source. The combustion will occur through the engine wall or through a heat exchanger. The fluid expands and acts upon the engine mechanism which produces 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 along with an oxidizer so as to supply heat is referred to as "combustion." External thermal engines may be of similar application and configuration but make use of a heat supply from sources like for example geothermal, solar, nuclear or exothermic reactions not involving combustion.

The working fluid can be of whatever constitution. 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 changes phases between gas and liquid.