

## Forklift Engine

Forklift Engine - An engine, also referred to as a motor, is a device which converts energy into useful mechanical motion. Motors which change heat energy into motion are referred to as engines. Engines come in many kinds like for instance internal and external 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 illustration of external combustion engines. They use heat in order to generate motion together with a separate working fluid.

In order to generate a mechanical motion via varying electromagnetic fields, the electrical motor should take and create electrical energy. This type of engine is really common. Other types of engine can function making use of non-combustive chemical reactions and some would make use of springs and be driven by elastic energy. Pneumatic motors function by compressed air. There are various designs based on the application needed.

### ICEs or Internal combustion engines

An ICE takes place whenever the combustion of fuel mixes together with an oxidizer inside a combustion chamber. In an internal combustion engine, the expansion of high pressure gases mixed together with high temperatures results in making use of direct force to some engine components, for example, pistons, turbine blades or nozzles. This force generates 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 engines and the Wankel rotating engine. Nearly all rocket engines, jet engines and gas turbines fall into a second class of internal combustion engines called continuous combustion, which occurs on the same previous principal described.

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

A range of designs of ICEs have been developed and placed on the market with several strengths and weaknesses. If powered by an energy dense gas, the internal combustion engine produces an effective power-to-weight ratio. Even though ICEs have succeeded in numerous stationary applications, their real strength lies in mobile applications. Internal combustion engines control the power supply meant for vehicles such as boats, aircrafts and cars. Several hand-held power equipments use 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 occur via the engine wall or via 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 thrown, and cool fluid is pulled in.

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

Working fluid can be of whichever constitution, although gas is the most common working fluid. From time to time a single-phase liquid is sometimes used. In Organic Rankine Cycle or in the case of the steam engine, the working fluid adjusts phases between liquid and gas.