

## Forklift Engines

Engines for Forklifts - Otherwise referred to as a motor, the engine is a device that can change energy into a useful mechanical motion. When a motor changes heat energy into motion it is typically known as an engine. The engine could come in many kinds like the external and internal combustion engine. 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 utilize heat in order to produce motion using a separate working fluid.

In order to produce a mechanical motion through different electromagnetic fields, the electrical motor needs to take and create electrical energy. This type of engine is very common. Other kinds of engine could be driven utilizing non-combustive chemical reactions and some will utilize springs and be driven through elastic energy. Pneumatic motors are driven through compressed air. There are different styles based upon the application needed.

### Internal combustion engines or ICEs

Internal combustion occurs when the combustion of the fuel mixes together with an oxidizer in the combustion chamber. Inside the IC engine, higher temperatures will result in direct force to certain engine parts such as the turbine blades, nozzles or pistons. This particular force generates functional mechanical energy by way of moving the part over a distance. Usually, an ICE has intermittent combustion as seen in the popular 2- and 4-stroke piston engines and the Wankel rotating engine. Most gas turbines, rocket engines and jet engines fall into a second class of internal combustion engines known as continuous combustion, that occurs on the same previous principal described.

External combustion engines like for instance steam or Sterling engines differ greatly from internal combustion engines. External combustion engines, where the energy is delivered to a working fluid like for instance liquid sodium, hot water and pressurized water or air that are heated in some sort of boiler. The working fluid is not mixed with, comprising or contaminated by combustion products.

Various designs of ICEs have been developed and are now available together with several weaknesses and strengths. If powered by an energy dense fuel, the internal combustion engine provides an efficient power-to-weight ratio. Even though ICEs have been successful in various stationary utilization, 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

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

The act of burning fuel utilizing an oxidizer so as to supply heat is referred to as "combustion." External thermal engines may 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 could be of whichever composition, though gas is the most common working fluid. Every so often a single-phase liquid is sometimes utilized. In Organic Rankine Cycle or in the case of the steam engine, the working fluid adjusts phases between gas and liquid.