

Differentiate, distinguish, compare and explain what is the main difference between internal combustion and steam engine. Comparison and Differences.

Difference between Internal Combustion and Steam Engine

1. The combustion of fuel takes place inside the engine cylinder in an internal combustion engine. The combustion of fuel takes place outside the engine cylinder in steam.
2. The I.C. engine has efficiency about 35-40%. The steam engine has efficiency about 15-20%.
3. The first one can be started instantaneously while the second one cannot be started instantaneously.
4. Since combustion of fuel takes place inside the engine cylinder, I.C. engines are very noisy. Since combustion of fuel takes place outside the engine cylinder, therefore steam engines are smooth and silent running.
5. Because of very high pressure and temperature, special alloys are used for the manufacture of the engine cylinder and its parts in I.C. Because of low pressure and temperature, ordinary alloys are used for the manufacture of the engine cylinder and its parts in Steam-engine.
6. An I.C. engine does not require a boiler or other components. Thus it is light and compact. A steam engine requires a boiler and other components to transfer energy. Thus it is cumbersome.
7. The working pressure and temperature inside the cylinder are very high in the first one. The working pressure and temperature inside the engine cylinders low in the second one.