

chapter Carburation

Definition: "Carburation is a process of atomizing and vapourising the fuel, mixing it with air in varying proportions and supplying the mixture in right quantity and quality for the efficient operation of the engine under varying load conditions."

vapⁿ → change of phase from liquid to vapour

Atomⁿ → Reducing the fuel to fine particles by mechanical breaking process

Factors affecting the vapourisation process:

1. The vapourisation characteristics of the fuel (Highly volatile fuel)
2. The Incoming Air Temp. (outside condition of air)
3. Engine speed (Temp. of engine parts)
4. Design of the carburator
 - a) The suction head above the discharge jet
 - b) The extent of fuel atomisation.

Note ⇒ Normally vapourisation is not complete until the end of compression in the cylinder