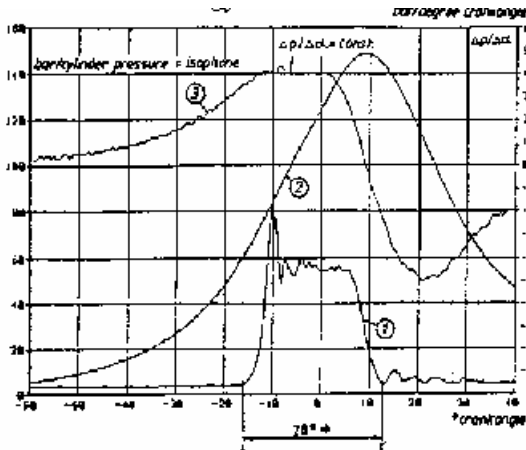


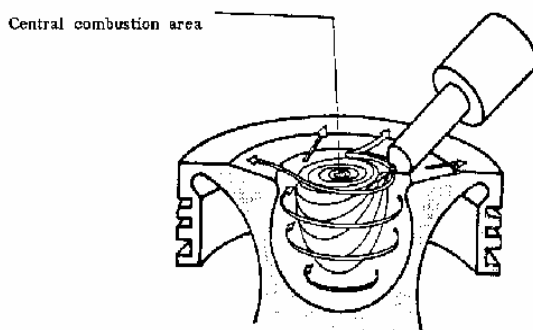
THE ELSBETT DUOTHERMIC COMBUSTION SYSTEM



The aim of the system is to safeguard against the loss of useful energy in the form of heat outside the combustion chamber. For this reason the heat is concentrated inside the chamber so that it cannot reach the surfaces and become lost in a radiator.

The **ELSBETT** duothermic combustion system is based on the principle that the air circulates inside the combustion chamber and arranges itself into different layers according to differences in heat and density, thus forming a central hot air combustion area and an external surrounding layer of cooler excess air. The combustion chamber must be spherical and located in the piston itself. The shape and size of the inlet ducts are such that the inlet air moves in a circular motion.

The fuel is injected tangentially and directed towards the inside of the combustion area, thus causing it to blend perfectly with the air. It does not reach the wall of the combustion chamber and, therefore, the formation of unwanted deposits is avoided. The external layer of cooler, excess air acts as a thermal and acoustic insulator and prevents the fuel from making contact with the chamber walls. The reduced size of the surface of the combustion chamber wall minimises heat flow and the loss of energy.



The noise level is kept low as a result of the internal pressure increase differential remaining constant during the combustion and equal to the pressure differential during the compression of the gases.