Power Generation: Electricity Generation: Stirling engines can be used to generate electricity.By applying an external heat source, the engine can provide cooling for applications such as food storage, medical facilities, or portable cooling units.The engine can be paired with solar concentrators or parabolic mirrors to focus sunlight onto the engine's heat exchanger, providing a reliable and efficient means of harnessing solar energy.Pumping Systems: Stirling engines can be employed for pumping water in remote locations where conventional power sources are not readily available.Stirling engines can convert heat from a nuclear source or solar energy into mechanical power for space probes and rovers.Combined Heat and Power (CHP) Systems: Stirling engines are used in combined heat and power systems, where they generate both electricity and useful heat simultaneously.By utilizing waste heat, these engines can improve overall energy efficiency and reduce environmental impact.Stirling engines are particularly suitable for decentralized power generation in remote or off-grid areas.