

In summary, the thermal analysis emphasizes the significance of efficiency, sustainability, and environmental responsibility in power plant operations and is the basis for continued efforts to optimize steam power generation. Ensuring the plant's long-term viability and contribution to energy demands requires ongoing assessment and improvement. We now have a better grasp of heat transmission procedures and energy conversion mechanisms after looking at parts including the boiler, turbine, pump, and condenser. The steam power plant's thermal study has shed light on several important aspects of its functioning.