

45% reduction in energy bill of a chemical MSME unit through Energy Efficiency Measures

Background

Faridabad is a mixed cluster in Haryana having over 12000 MSMEs majorly manufacturing various kinds of automobile parts, sheet metal components and fabrics. There are majorly 15 industrial segments in the cluster with a high range of products from soaps to tractors.

Unit Profile

M/s ABC is a MSME unit engaged in manufacturing of hot forged and machined parts producing about 1000 tpa. Total Energy bill of the unit was Rs.158.7 lakh per annum which was around 40% of total turnover. About 81% of the unit's energy bill was on account of Piped Natural Gas, 12% accounted for Grid Electricity and remaining 7% accounted for HSD-DG

Process description

The manufacturing process involves the cutting of raw material to desired sizes by band saw, shearing machines followed power saw by and preheating of material in forging furnace. After preheating the forged are products passed through hammers, power presses and Upsetter Machine to give forged product the desired shape. After forging, the product undergoes machining



operation as per requirements. This include trimming by press and after initial inspection if required then products are sent for grinding process. The final product undergoes quality check and is then dispatched

Piped natural Gas and Grid Electricity were used to operate major energy consuming equipments in the unit i.e. induction furnace, hammers and other utilities i.e. pumps, motors associated with equipments, and lighting.



of India (SIDBI) and Bureau of Energy Efficiency (BEE).

Comment [p1]: Incorrect data in IGDPR

