

Summary of study: Boiler efficiency improvements in a rubber products manufacturing unit: Unit - 1

Industry : Rubber products

Unit profile : A unit located in Pune (Maharashtra) engaged in production of rubber products like ptfе rubber products, ptfе coated bearings, ptfе sheets, ptfе tapes, ptfе tubes, etc.

Technology :

- High efficient once-through boiler
- Operating practice improvements

Application : Energy savings in steam system

Year of investigation : 2016

Key features:

- Replacing existing boiler with high efficient once-through boiler
- Optimisation of combustion air to fuel ratio
- Chemical treatment of condensate
- Boiler water softener management

Energy and cost saving:

Details	Existing	Recommended
Steam system	Non-IBR, coil type, diesel fired: 400kg/h x 2units	Once-through boiler
Efficiency level (%)	88.6	94.8
Efficiency improvement (%)		6.9

Note:

This report is an example for investigating the potential of application of Japanese low carbon technology (LCT) in Indian industries. Once-through boiler is the LCT which can generate greater benefits in steam generation system in industries.

