

Summary of study: Boiler efficiency improvements in a textiles unit: Unit - 1

Industry : Textiles

Unit profile : A unit located in Pune (Maharashtra) engaged in production of various food products like breakfast mix, snacks mix, desert mix, ready meals and dairy products

Technology :

- High efficient once-through boiler
- Operating practice improvements

Application : Energy savings in steam system

Year of investigation : 2015



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: 1500kg/h x 2units | Once-through boiler |
| Efficiency level (%) | 84.5 | 92.4 |
| Efficiency improvement (%) | | 7.9 |

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.