

Summary of study: Boiler efficiency improvements in a pharmaceuticals & cosmetics unit: Unit - 4

Industry : Pharmaceuticals & cosmetics

Unit profile : A unit located in Mumbai (Maharashtra) engaged in manufacturing of pharma and cosmetics products

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
- Boiler water softener management



Energy and cost saving:

Details	Existing	Recommended
Steam system	Non-IBR, coil type, diesel fired: 600 kg/h x 2units	Once-through boiler
Efficiency level (%)	88.6	94.0
Efficiency improvement (%)		5.4

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.