

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

Industry : Food products

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

Identified technologies:

- High efficient once-through boiler
- Operating practice improvements

Application : Energy savings in steam system

Year of investigation : 2011

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

Potential energy and cost savings:

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.

