



ALTA PROCESS SOLUTIONS

AFFILIATED TO ALTA ENERGY SOLUTIONS CORPORATION

ALTIUS CENTRE – SUITE 2500 – 500 4th AVE SW CALGARY, AB, T2P 2V6 CANADA

INFO@ALTAENERGY.CA | WWW.ALTAENERGY.CA | WWW.ALTAPROCESS.CA

INDUSTRIAL PROJECTS

Project No.: 05

Industry: Sugar Industry

Project Subject:

Retrofitting of Steam System in Sugar Production Plant

Challenge:

This is a project about retrofitting of an existing sugar plant for energy saving. In this study, the production process, including steam system has been revised using Process Integration and Pinch concepts, and a few modifications were proposed. The result of this study shows that some %37 reduction in steam consumption is achievable which is equivalent to \$386,000 saving per 120 days of working cycle.

Proposed Solution:

1. Steam production and fuel consumption in boilers reduced as a result of improved heat recovery in the process.
2. Heat loads on coolers were reduced resulting in a good saving on cooling water as well as fan power consumption in air coolers.
3. The energy intensity of the overall production plant were reduced which resulted in a lower product cost.
4. GHG's emissions reduced due to less fossil fuel consumption.

Results:

