



# ALTA PROCESS SOLUTIONS

AFFILIATED TO ALTA ENERGY SOLUTIONS CORPORATION

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

[INFO@ALTAENERGY.CA](mailto:INFO@ALTAENERGY.CA) | [WWW.ALTAENERGY.CA](http://WWW.ALTAENERGY.CA) | [WWW.ALTAPROCESS.CA](http://WWW.ALTAPROCESS.CA)

## INDUSTRIAL PROJECTS

**Project No.:** 10

**Industry:** Coal Refining

**Project Subject:**

**Energy & Utility Consumption Optimization of a Coal Refinery**

### Challenge:

In this project, a coal refinery plant was studied and by using the most modern Pinch Technology, heat energy demand and cool utility consumption reduced by 1341.24 KW and 1299.16 KW respectively.

### Proposed Solution:

1. Reduced fuel consumption in furnaces, reduced cost of fuel consumption in unit and therefore the company's added income.
2. Reduced energy demand in production process and also reduced load of CTR coolers by improving the exchangers' network.
3. Decreased energy intensity or in other words, the fuel consumption per unit of production decreased in the company and therefore energy efficiency in the company raised.
4. Lower energy intensity in refinery and therefore lower product cost, because less fuel per unit of production consumed.
5. Less GHG emission.

### Results:

			
Energy Saving (%)	OPEX Saving (\$/yr)	Investment (\$)	Payback Period (month)
22	71,362	227,320	38