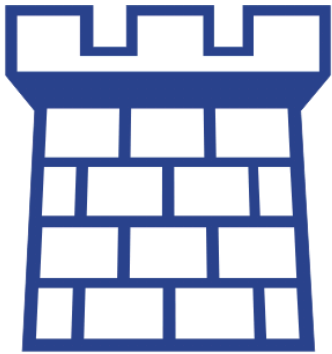
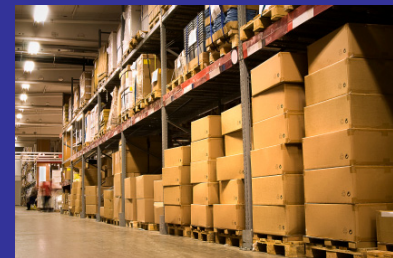
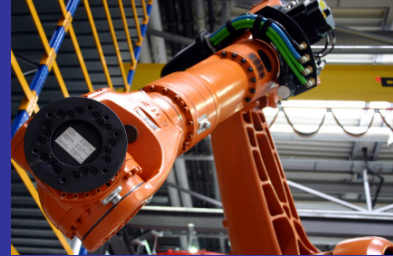


PROCESS INTEGRATION STUDY



FORTRESS
ENGINEERING LTD

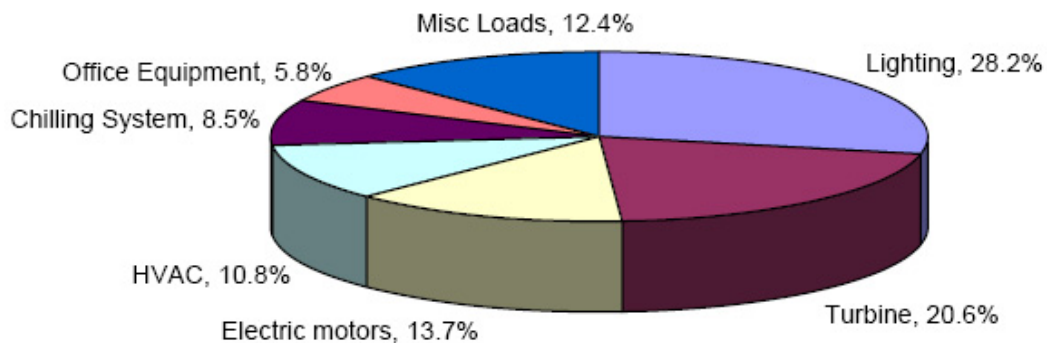


Benefits of a Process Integration (P.I.) Study

- **Natural Resources Canada (NRCan) pays for 50% of the study cost (up to \$50,000), www.oeenrcan.gc.ca/industrial**
- Reduced electricity, gas & water consumption
- Reduced greenhouse gas emissions
- Lower utility costs
- Eliminate process bottlenecks
- Optimized utility procurement strategy
- Improved bottom line
- Improved employee safety and productivity
- **Typical outcome is 5 – 35 % savings in utility costs**

Deliverables

- Summary of electrical & gas consumption by area
- Process analysis to determine fit for various energy optimization technologies
- Utility billing and consumption pattern analysis for purchase contract optimization
- Estimate of project capital cost for each energy efficiency recommendation
- Economic analysis to determine return on investment (ROI) for each option
- A concise and clear P.I. Study report, outlining our findings and recommendations



*** A typical consumption profile**

Our Mandate

To reduce the operating costs of high energy - consuming companies in North America through a multi-disciplined engineering approach, addressing both the supply and demand sides of the utility equation.

Areas of Opportunity to Reduce Costs

Electric Motors
Lighting Systems
HVAC Equipment
Waste Heat Recovery
Process Equipment – Boilers, Fans, Compressors and Pumps
Heating and Insulation
Co-generation Opportunities



The P.I. Study Process

1. Perform an initial plant walkthrough to ensure the facility is a strong candidate for a P.I. Study
2. Prepare a P.I. Study proposal with costs clearly outlined
3. Assist the client to become registered with NRCan's Energy Innovators program (required for funding eligibility)
4. Ensure the client is approved by NRCan for P.I. Study incentive funding
5. Complete the P.I. Study and present final report to the client
6. Ensure the client receives their NRCan incentive funding
7. Manage the design and implementation of the client-approved efficiency improvement projects identified by the P.I. Study

Think Green

In addition to traditional efficiency improvement strategies, where appropriate, Fortress Engineering will suggest supplementation with renewable energy sources such as solar power, wind power, solar heating and geothermal energy.



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