SIEMENS
Ingenuity for life

Process Energy Optimization

A never ending story

Chemical and pharmaceutical processes often have a high energy demand. Reducing these cost drivers can generate high earnings.

Main energies are electricity as well as heating steam and cooling water.

In many processes their contribution to the manufacturing cost is important.

Rarely, plants are operated at the design point - over the years they deviate from the original specifications due to product and process changes - resulting in higher production cost.

To reduce these costs, a step approach of detection of the main energy consumers, the development of alternatives and the implementation of the right counter measures are administered.

For the development of alternatives very often a simulation with Aspen or similar software is required based on the actual plant data. In addition, a PINCH analysis might be used as well.

Energy monitoring helps make operational personnel aware of the current energy consumption and is the basis for energy management systems.

By energy saving projects the sustainability of the plant can be maintained or improved. Reduced energy cost safeguards the operation of the plant and improves the competitive advantage.

Interested? Contact us!
Engineering & Consulting
PD PA SE&C EC
team-ec.industry@siemens.com
Tel.: +49 (69) 797-84500

Your Benefit

Operational plant excellence with a high degree of manufacturing agility and responsiveness:

- Reduced energy and operational costs
- Reduced environmental emissions
- Improved process reliability
- Our services and solutions enable you to manage your energy effectively

Our range of services

Energy studies with:

- List of projects with estimated saving potential
- Rating matrix with project prioritization and estimated costs for implementation
- Design and Engineering support and backup for implementation

Project examples

- Substitution of expensive utilities (brine, high pressure steam) by process optimization and heat integration (pinch technology)
- Reduced energy costs by intelligent equipment design
- Study for condensate utilization