

Great Return on Investment:

No other single area can provide the types of high financial returns with little, if any, investment. AMCS' Engineered Services Group combines the client's objectives with our hundreds of years of experience in creativity, process, system and scientific knowledge, and attention-to-detail, to provide practical and cost effective solutions to nagging problems.

Energy Optimization continues to be a critical component of any industrial manufacturing enterprise. In addition to designing efficient processes and plants, the real-time cost of power makes it imperative that plants optimize production when the power rate is low vs. when power rates are high while maintaining required supply chain quantities. This can be an extremely challenging situation as the power rate can occur several times a day. AMCS has a successful track record of implementing control techniques that automatically maximize the net return of the operation for power costs in both single and networked plants through sophisticated advanced controller and optimization techniques and software.

Process Enhancing Example:

AMCS' ESG worked with a client to enable the recovery of krypton / xenon as part of an optimization process. The recovery of crude krypton / xenon from a new installation was less than 30% of design projections. Despite exhaustive efforts by the client, they were not able to find a solution. By evaluating the overlooked "corners of the process" and providing an analysis of the production patterns, AMCS was able to arrive at a solution that brought the process up to full design recovery capacity.

Energy Saving Example:

AMCS' ESD provided an analysis of the operation of the main condenser-reboiler of an oxygen plant which strongly suggested that the liquid nitrogen condensate was backing up into the condensing passage and blanking heat transfer surface. Data indicated that reduction in head pressure achievable by re-routing piping would be significant. After piping changes, the plant has saved \$20,000 a month on its power bill.