enel X

Customer Spotlight:

Automation Plastics Improves Operations with Energy Intelligence Software

Automation Plastics is a custom injection molder——producing plastic parts of all sizes from small parts for aerosol spray bottles to large gas line fittings for underground natural gas. Its 50,500 sq ft Cleveland, OH facility produces in excess of 1M parts per day.

Challenges

Energy is a major operating expense and a corporate–level initiative to reduce overall production costs to drive profitability exists, but the "on the ground" engineering team lacked visibility to make better decisions about energy use.

Despite best efforts by the engineering team to reduce costs, the team had difficulty benchmarking the plant's performance over time, adjusting for fluctuations in production value. Monthly utility bill data only explained how much was due, not what was driving that number. It was very difficult to measure and verify the impact of equipment upgrades/optimization.

The Solution

Chris Miller, Automation Plastics Manufacturing Engineer, used Enel X's energy intelligence software (EIS) in a previous role at a different company to monitor performance and identify waste. He knew when he came to Automation Plastics he couldn't do his job effectively without it.

The Results

Higher Operating Margin

"We can see when equipment costs more to run than we initially expected——when we see something strange come up in our profile we can change our operations to save."

INDUSTRY
Manufacturing

LOCATION
Aurora, Ohio

Enel X's Energy Intelligence Software gives Miller and his team the visibility to make better decisions about energy use, driving down costs, saving his team time, and providing concrete data about how well the facility is managed.

"We really didn't have an idea of what our energy profile looked like, so it was kind of like being in the dark. You really couldn't see the ups and downs and the valleys and determine what was going on——it was frustrating not knowing if you had any waste."

—Chris Miller, Manufacturing Engineer

Better Measurement and Verification

"It's really nice to see when we upgrade a piece of equipment how our energy profile changed from year to year—we can see when we do an upgrade what effect it actually has over our energy usage."

Deeper Understanding of the Facility

"We were experiencing a high peak at a certain time and we didn't understand where it was coming from. [Because of EIS], my colleague, Kevin Fink, realized when we used our dry ice machine to clean plastic injection molds our air compressor reached a maximum consumption threshold. This caused a second air compressor to automatically kick on. We'd never seen that on our load profile before. All of a sudden there was a giant spike in the middle of the day. We were able to pinpoint where the spike was coming from with the software andgain visibility into some of the automatic functions going on at the plant that we didn't know about beforehand."

Drift Prevention and the Ability to be Proactive

"At a glance I can find out exactly what we're doing at any point in time—that's huge. The software gives us an idea of whether or not we're staying on course… and lets us know when we have issues so we can take action immediately."

Proactive Push Notifications of Too Much—or Too Little—Power Consumption

"I'll set limits to get alerts for an off–shift. We can actually get emails or texts to notify us when we are running higher than normal or if we left something on and then come in and investigate. We also set low limits for seven days a week so we'll know if we've lost power."

Better Communication Across the Organization

"The Enel X graphs come through email and I share those with the team and other stakeholders. We can then bring questions, like 'Why are we using less energy now than we were last year?' And we can look at our production data and see if we are running less equipment or if we have less machine hours. The monthly reports are a good trigger for these conversations."