



DAVIS-STANDARD®

Where your ideas take shape.

An Eye Toward A Sustainable Future

We take our commitment to sustainability very seriously.

At Davis-Standard, manufacturing high-performing, energy-efficient polymer processing technologies and components involve a combination of design, material selection, and production processes aimed at minimizing the energy consumption of our technology while maintaining or enhancing its performance.

Extrusion machines and lines are often used in continuous production processes, which means they can run for extended periods. We understand that even minor improvements in the energy efficiency of our equipment can greatly reduce the amount of power required by our customers to operate their equipment, leading to lower electricity bills and operational expenses and reducing energy consumption. It is a win for them and a win for the environment.

We take our commitment to sustainability very seriously. Every product we manufacture has an eye toward sustainability.

It begins with our design phase using energy modeling and simulations to identify areas where



Optimize Productivity

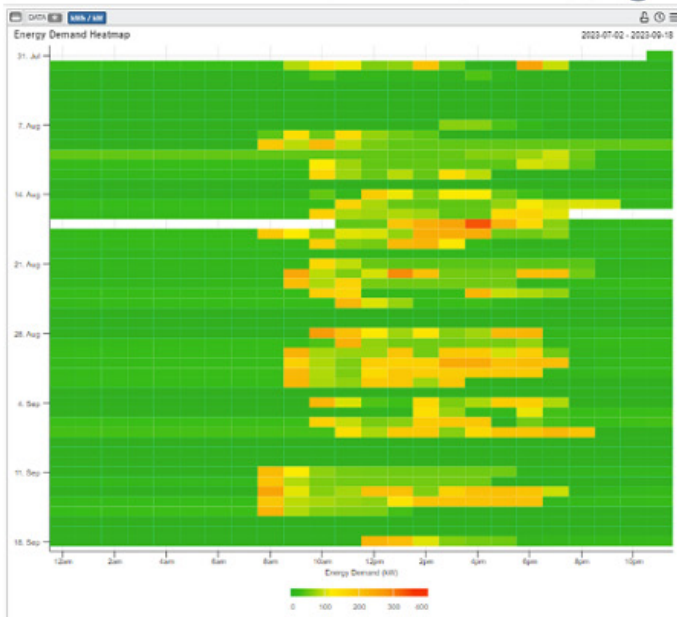
- Reducing material waste
- Smart sensors and control systems to ensure efficient equipment operations.

improvements can be made. Our team of engineers also focuses on optimizing the design of individual components such as motors, pumps, and compressors to reduce energy losses.

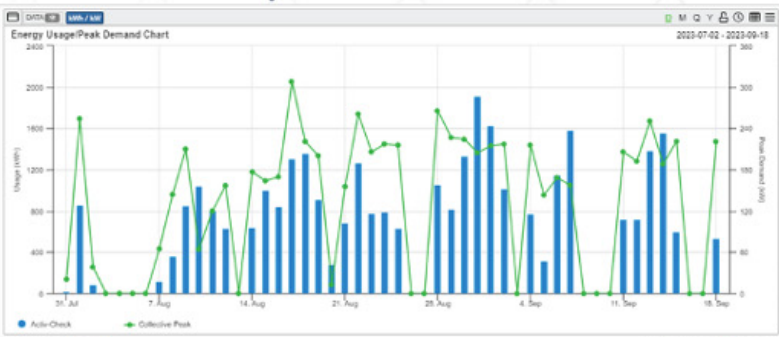
During our manufacturing process, we take great care to ensure tight tolerances are adhered to, ensuring precision in manufacturing processes to minimize gaps, misalignments, or other factors that can lead to energy losses. That's why we use modern CNC machines for high-precision manufacturing, which reduces material wastage and ensures components are produced to exact specifications.

Selecting the correct extruder platform and size for your application is one of the most overlooked aspects of ensuring energy efficiency. Ensuring your extruder is rightsized for your application will ensure you're not using more energy than required.

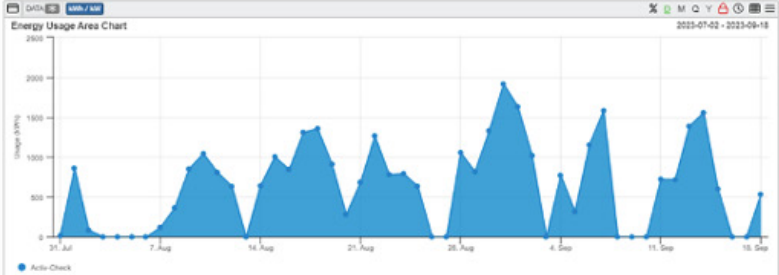
As the industry continues to develop IIOT solutions, we'd be remiss if we didn't mention the significant role that smart sensors and control systems play in ensuring equipment is operating at peak performance



Kw-hr Intensity map of power usage over the month



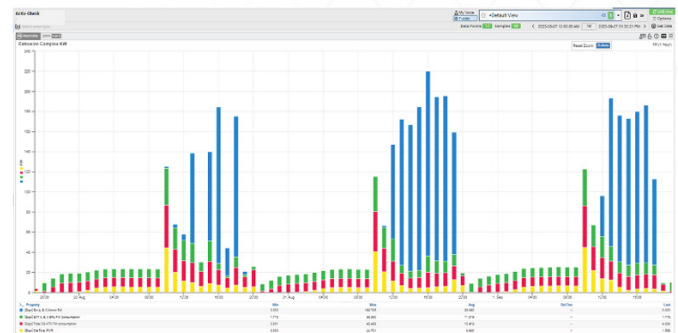
Peak demand Kw-hr consumption



and doing it efficiently. With the introduction of DS Activ-Check, our customers can monitor energy consumption and machinery performance in real-time and analyze historical energy consumption data.

And finally, as an extrusion line ages and technologies advance our customers existing equipment becomes less efficient. That's where our DS Global Services team can help. We offer a number of retrofits and upgrade options to bring older equipment up to modern day energy consumption levels to extend the life of an older line.

In summary, energy efficiency is crucial for extrusion machines because it directly impacts the operational costs, environmental footprint, competitiveness, and overall sustainability of a manufacturing process. Investing in energy-efficient technologies and practices, manufacturers can achieve both economic and environmental benefits.



Extrusion Complex Electrical Power Consumption
 Blue – Extruder A, B and C Motors
 Green - Extruder Barrel Ext. A, B, C
 Red – Down stream Adaptors
 Yellow – Die

