

SECO/WARWICK

INVENTION MEETS RELIABILITY



SENERGY

Monitoring and optimization of electric consumption

SENERGY

MONITORING AND OPTIMIZATION OF ELECTRIC CONSUMPTION

An advanced, distributed power measurement system, SENERGY is designed to monitor, control, report and optimize the use of electrical energy. The SENERGY package facilitates more effective analysis and scheduling of maximum and temporary demand for electrical energy, thus minimizing the overall cost of consumption.

The main feature of the application is the scheduling of all planned processes for all devices in order to achieve maximum productivity for a given line. One of its great characteristics is that the software can reduce the cost of electric consumption for the company. The software calculates the solution every minute, depending on the current state of the line, and applies the new results in real time, allowing the application to respond to the changes in line conditions. The software can operate in two modes: online, for automated production lines, and offline, with prompts to perform reloads for equipment with a manual loader.

The overall idea is to reduce electric costs by planning the processes based on the energy consumption profile for each recipe. Recipes have their own power consumption profiles that are updated after each process.

Power Metering is an extension of Senergy that collects data from electrical power consumption meters. Power Metering reads the information about the start of each recipe segment and collects data. It divides the recipe into segments or sub-segments and calculates the electrical power consumed for each of them. It is a database that shares the information on energy consumption with other modules within the Senergy platform.



SENERGY MEANS:

- / Electric consumption monitoring, various types of electric consumption reports, electric consumption profiles for recipes, optimization of processes planned at the production line,
- / Two operation modes: eco mode and fast mode.



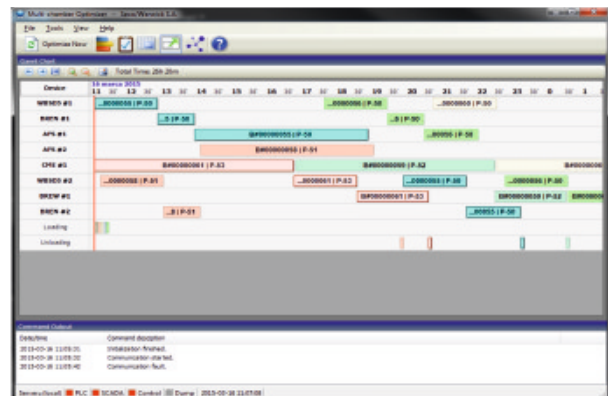
SENERGY PROVIDES:

- / Continuous measurement of the electrical power consumption of individual machines,
- / Automatic batch queue scheduling to ensure that the contracted power consumption is not exceeded,
- / Alternative batch queue scheduling to maximize the capacity of the production line,
- / Determination of energy profiles for recipes that are continuously updated using statistics,
- / Reporting of electric consumption from multiple angles.



ADVANTAGES OF SENERGY:

- / Avoiding penalty charges for exceeding the maximum power demand,
- / Saving time using automatic production planning,
- / Continuous monitoring and reports on electrical power consumption.



SECO/WARWICK is a technological leader in innovative heat treatment furnaces. Expertise includes end-to-end solutions in 5 categories: vacuum heat treatment, atmosphere and aluminum thermal processing, controlled atmosphere brazing of aluminum heat exchangers and vacuum metallurgy.

SECO/WARWICK Group has 9 companies located on three continents with customers in nearly 70 countries. The company provides standard or customized state-of-the-art heat processing equipment and technologies to leading companies in the following industries: automotive, aerospace, electronics, tooling, medical, recycling, energy including nuclear, wind, oil, gas, and solar and production of steel, titanium, and aluminum.