



Energy and Media Solution

Product By:



What is EMS?

EMS is a simulation software that consists of an energy balance model which simulates complex behaviors and dynamic interactions of integrated industrial processes to improve the management of energy and media.

The scheduling module allows optimization of electrical energy generation and minimization of the consumption of fuels and utilities through scheduling of plant operations, shutdowns, maintenance periods, by the simulation of different production scenarios.

EMS is able to model:

- ✓ Consumption of:
Industrial Gases
Fuels
Utilities
Electrical energy
- ✓ Production of :
Fuels (Recovery of flue gases)
Steam
Electrical Energy
- ✓ Cost of :
Industrial gases
Fuels
Electrical energy

“The perfect tool to forecast and manage your energy and media necessities”

Model Concept

Energy management is crucial to ensure the effectiveness of the industry today; moreover, environmental compromise to reduce CO₂ emissions by

production plans for the different plant areas, which after simulating the software displays static results for the different productions and

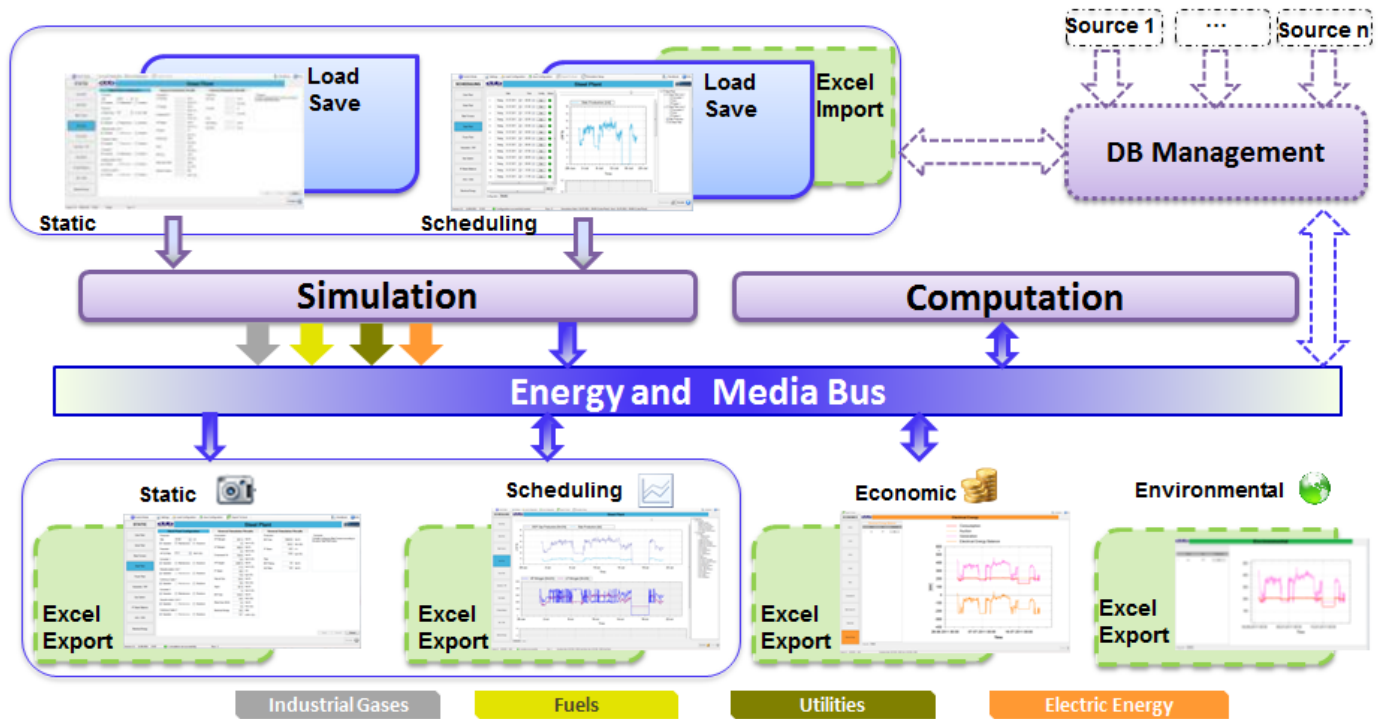
EMS can be utilized as a decision tool, which through the analysis of different operating scenarios, can calculate and forecast the economic cost of the consumptions of fuels utilities, electric energy and industrial gases to assist in decision making.

increase in energy efficiency is the goal of each modern company. Energy and Media solution (EMS) is the ideal tool for the energy intensive industries who wants to achieve this goal by means of forecasting.

EMS is based on two modules, a static and scheduling module. The static module allows the user to give the

consumptions. Scheduling mode, allows the user to schedule plant production plans at different times. In this module the user can schedule not only production plans, but also maintenance periods or planned and unplanned shutdowns. After simulation, the software displays the results for the different productions and consumptions in different





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periods of time. These results are no longer showed as values like in static module, but as curves which can be displayed graphically in the software.

Additionally, the scheduling mode contains an economic module which analyses the calculated results in scheduling mode for industrial gases, fuels, utilities and electrical energy. The economic module takes into consideration the different contract information for flows and prices for industrial gases, utilities and fuels, as well as the

different contracts and spot market prices for electrical energy, to calculate their respective costs.

Additional functionalities

- ✓ EMS also helps to understand the functionality of integrated processes by showing how the operation of one plant can affect the total functionality of the whole industrial complex.
- ✓ Extra module for carbon dioxide emissions which is developed from the different processes and

from the combustions in the different stationary equipment. This module assists in monitoring the amount of carbon dioxide emissions.

- ✓ Due to modular assembly, EMS is completely flexible, calculations and functions are adaptable to different process necessities.
- ✓ By means of our middleware online connection to data banks and measured data is possible and reliable.

For more information, we will be glad to assist you!

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