



HYBRID ENERGY SUPPLY FOR A PLASTIC MOLDING COMPANY



Minimizing Energy Costs The SMA Fuel Save Solution

As a young, ambitious country, Lebanon has to satisfy a massive increase in energy consumption. However, the country's energy generation is not sufficient to meet the current demand. Electricity from the grid is expensive and the supply is not stable.

Industrial enterprises in particular have to ensure an uninterrupted power supply to ensure 24/7 operation of their production. Because of this, many operators rely on additional backup gensets to supply their loads, leading to higher costs.

To counteract these increased electricity supply costs, the operator of a plastic molding company in Zouk Mosbeh decided to integrate a PV plant into the company's electricity grid.

The PV diesel hybrid system, incorporating the SMA Fuel Save Solution, reduces the use of expensive power from both the public grid and gensets, and optimizes the consumption of PV energy. Additionally, the electricity network is stabilized by the decentralized production.

System Size

- Installed PV power: 192 kWp
- Diesel generators: 3 x 750 kVA

System Information

- Zouk Mosbeh, Lebanon
- Coordinates: 33,96°N/
35.629°E
- Commissioning in April 2014

- EPC: Elements Wind & Sun
- Operator: API Plastics
- Annual diesel savings:
approx. 70,000 l

PV System Technology

- 8 SMA Sunny Tripower 20000TL
Economic Excellence
- SMA Fuel Save Controller

SMA Fuel Save Solution for Photovoltaic Diesel Hybrid Systems