

TAILORED ENERGY SOLUTIONS

for small and medium-sized businesses

FENECON Commercial 100

Manufacturing



"We are very satisfied with the FENECON energy storage system. We are now much less dependent on these constant power outages and are finally able to make our entire facility profitable again."

Philipp Gutmann, wire manufacturing plant Drahtwerk Wilhelm Gutmann

Vision

As a medium-sized family-owned business, the wire manufacturing plant Drahtwerk Wilhelm Gutmann focuses on cost-effective and sustainable solutions. Although a photovoltaic system had already been installed, its full potential could not be realized. Due to regular curtailments by the local grid operator, the system had to reduce its output, particularly during the day when production is at its peak. At the same time, electricity was drawn from the public grid during this period – even though enough solar energy would actually have been generated on site.

To increase the self-consumption rate and improve the cost-effectiveness of the PV system, options for battery storage were explored. The goal was to temporarily store excess solar power, offset grid restrictions, and use the self-generated energy when it is actually needed during operation.

Client Information

- Drahtwerk Wilhelm Gutmann GmbH & Co KG
- Lehenwiesenweg 1-5
91781 Weißenburg
- Approx. 1,500 kWh/day
average consumption
- Existing PV system with regular 0% curtailment by the local grid operator



Watch the video here

Project Details

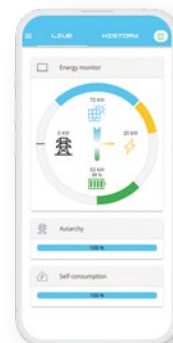
- FENECON Commercial 100
- 55 kW Power (extension already planned)
- 126 kWh Capacity (extension already planned)
- Installation by Sonnenwende2020 GmbH
- Existing system with 270 kWp

Energy Management in Detail

- FEMS App Grid-Optimized Charging
- FEMS App Production and Consumption Meter
- FEMS App PV Inverter



More info
about FEMS



Outcome

80%

Autarcty

7.47 t

Monthly CO₂ Savings*

20,600 kWh

Reduced monthly electricity consumption

*based on data from the German Federal Environment Agency

Energy Journey

With the FENECON Commercial 100 in its first configuration stage, a solution has been implemented that is specifically tailored to the site's requirements. The focus is on dynamic master control via the FEMS box. Unlike traditional curtailment at the inverter's AC output, this approach does not reduce the overall output of the PV system. Instead, the energy management system intelligently controls the grid connection point and maintains it at the specified value during

curtailment periods. This allows the solar power generated to continue to be used directly on-site or temporarily stored in the battery, rather than being lost unused. Plans are already in place to upgrade the FENECON Commercial 100 to the next level in terms of performance and storage capacity, and this upgrade can be flexibly integrated into the existing system.

"FENECON is a partner that makes it a true pleasure to turn ideas into solutions and customer requests into tangible reality."

Uwe Linsenmann, Sonnenwende2020 GmbH

