DWEEN Cold

x Mantinga

CASE STUDY

24 % annual savings!

How Mantinga has cut their electricity bills with Dween

Find out how much you can save →

INTERESTED? CONTACT US
info@dween.com

READ MORE
dween.com

CONTEXT

Mantinga is a leading frozen food manufacturer, known for its frozen bread and pastry products. All products are first baked at high temperatures. Production lines are supported by advanced refrigeration system.

PROBLEM

High electricity consumption of refrigeration system, need to reduce CO_2 emissions, reduce maintenance costs, and improve operational efficiency.

SOLUTION

Intelligent automatic control of refrigeration system resulted in efficient operation of all connected equipment and a dramatic reduction in electricity consumption.

TECHNICAL DETAILS

REFRIGERATION SYSTEM

Stage -40°C	3 compressors
Stage -10°C	4 compressors
Glycol stage	4 heat exchangers
Condensers	4 x 1.6MW

CONTROLLED TEMPERATURE ROOMS

Stage -40°C	11 chambers
Stage -10°C	32 chambers
Glycol stage	5 chambers

ADVANCED TEMPERATURE CONTROL

Air conditioning	+ 10°C
Cold storage	- 20°C
Shock freezers	- 33°C

DIGITAL TWIN

CONTINUOUS MONITORING

Electricity consumption
Refrigeration system efficiency
Compressor station status
Predefined reports: hourly, daily, weekly, monthly

RESULTS

24%

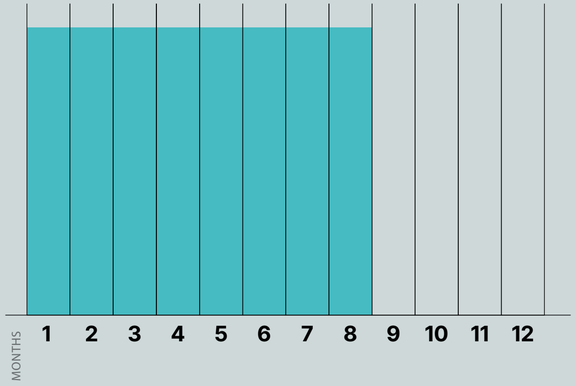
Anual savings from the overal plant's electricity consumption

1547 MWh

Reduction of refrigeration system's electricity consumption during full year of Digital Twin operation (from March 2023 to March 2024)

ROI TIMELINE

Promise to achieve ROI in 12 months, delivered in:



SET UP TIME

Without ceasing operations

6 months

Dainius Mašalaitis
HEAD OF TECHNICAL DEPARTMENT

Optimized parameters, reduced energy waste, and greater control. When systems run precisely, processes flow smoother – and the world becomes a bit safer.