

„AERATION AT ITS FINEST!“



RUDOLF
MESSNER
UMWELTECHNIK

Rudolf Messner Umwelttechnik AG

No Water, no Production! Expert Round Table on Water Management in Industry, 27.11.2024



„AERATION AT ITS FINEST!“



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RMU - Company Structure

RMU is specialized in the biological processes and aeration technology for municipal and industrial wastewater treatment plants. Present at the market since 1978 and with installations worldwide.

Distribution / Licensing Partner:

- Belgium
- Switzerland
- Denmark
- Australia, New Zealand
- Egypt, Tunisia, Israel
- South Korea, Taiwan

MESSNER Aeration Systems b.v.

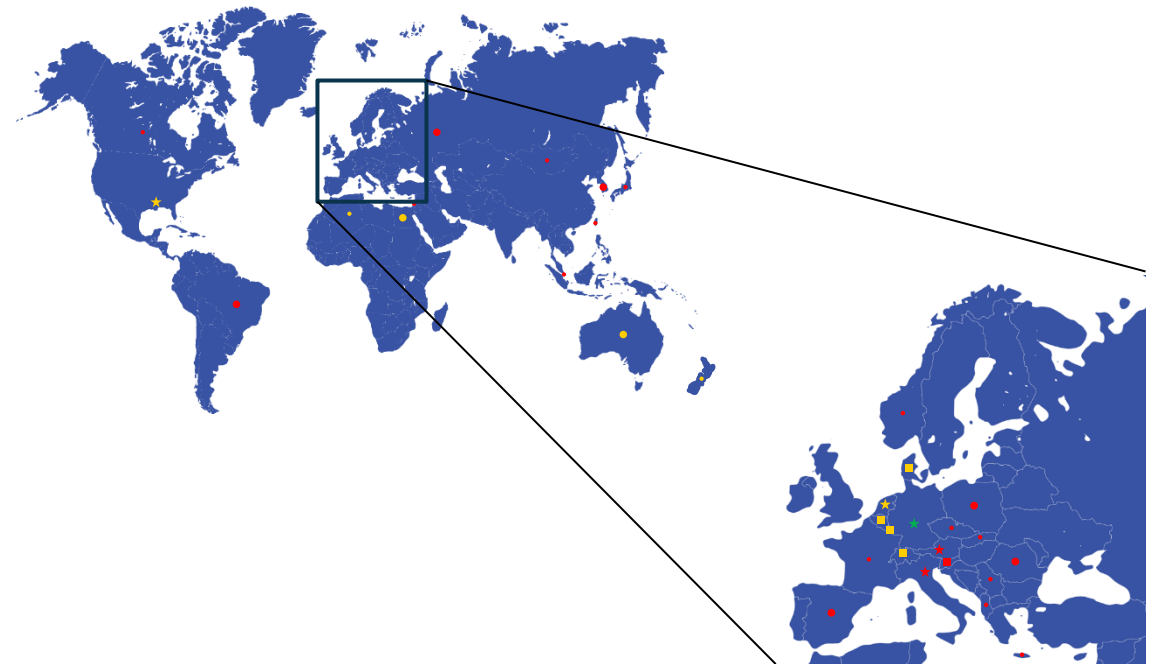
- Netherlands

RMU Inc.

- United States
- Canada

Delivery Business in various countries

- Austria, Italy, Spain, ...
- Singapore, ...



RMU – Product Portfolio

MESSNER® Aeration Panel

- Two Sizes: **Classic, Compact**
- Membrane Types for Different Applications

MESSNER® Control

- Interactive Control System
- Based on PLC Modules

MESSNER® LiftOut

- Portable Lifting Frame

MESSNER® ReNew

- Exchanged and Refurbishment

MESSNER® DosingUnit

- Acid Dosing System for Maintenance



MESSNER® Aeration Panel

- **Base plate:**
completely made of acid-proof stainless steel (AISI 316)
-> unlimited lifetime
- **Membrane:**
long-term stable, permanently elastic membrane made of TPU
without plasticizers or other additives
-> expected lifetime up to 20 years
- **Perforation:**
unique RMU perforation process to achieve an optimum bubble
size of 2 - 3 mm
-> highest oxygen transfer efficiency
- **Assembly :**
Fixed installation on the bottom of the basin, thus maximum
injection depth and optimum oxygen utilization without
sedimentation of activated sludge



Reference plant: WWTP Aachen Soers

- Location: Aachen, Germany
(municipal + partially industrial)
- Load: 3.000 l/s
458.300 PE
- Capacity: 6 Lines,
74.110 m³ aeration volume
- Aeration: 984 MAP Classic
17 Aerzen Delta Hybrid
- Result: Energy savings of more than 50% in the
biological tank
(includes blowers and flow boosters)



Reference plant: WWTP Aachen Soers



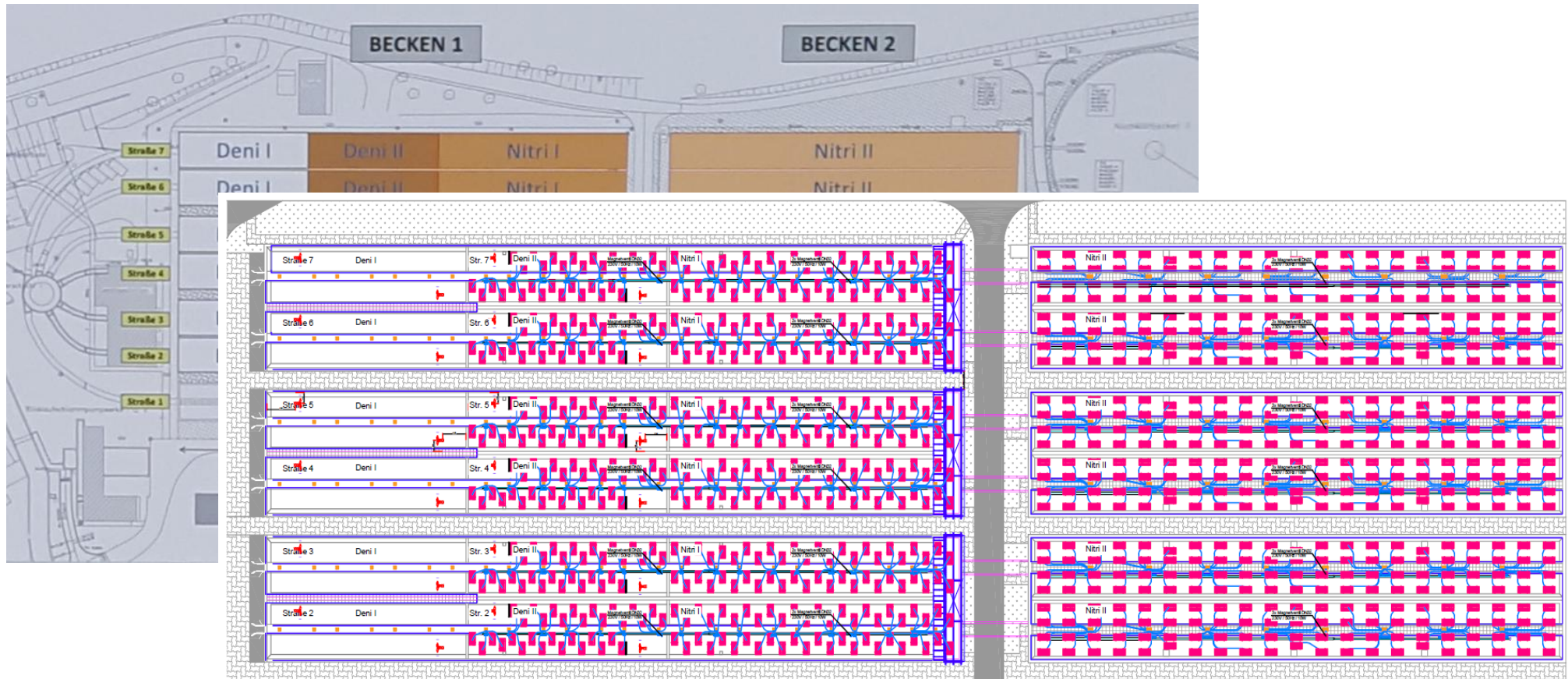
Initial situation:

- Normal aerators
- Turbo blowers



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Reference plant: WWTP Aachen Soers



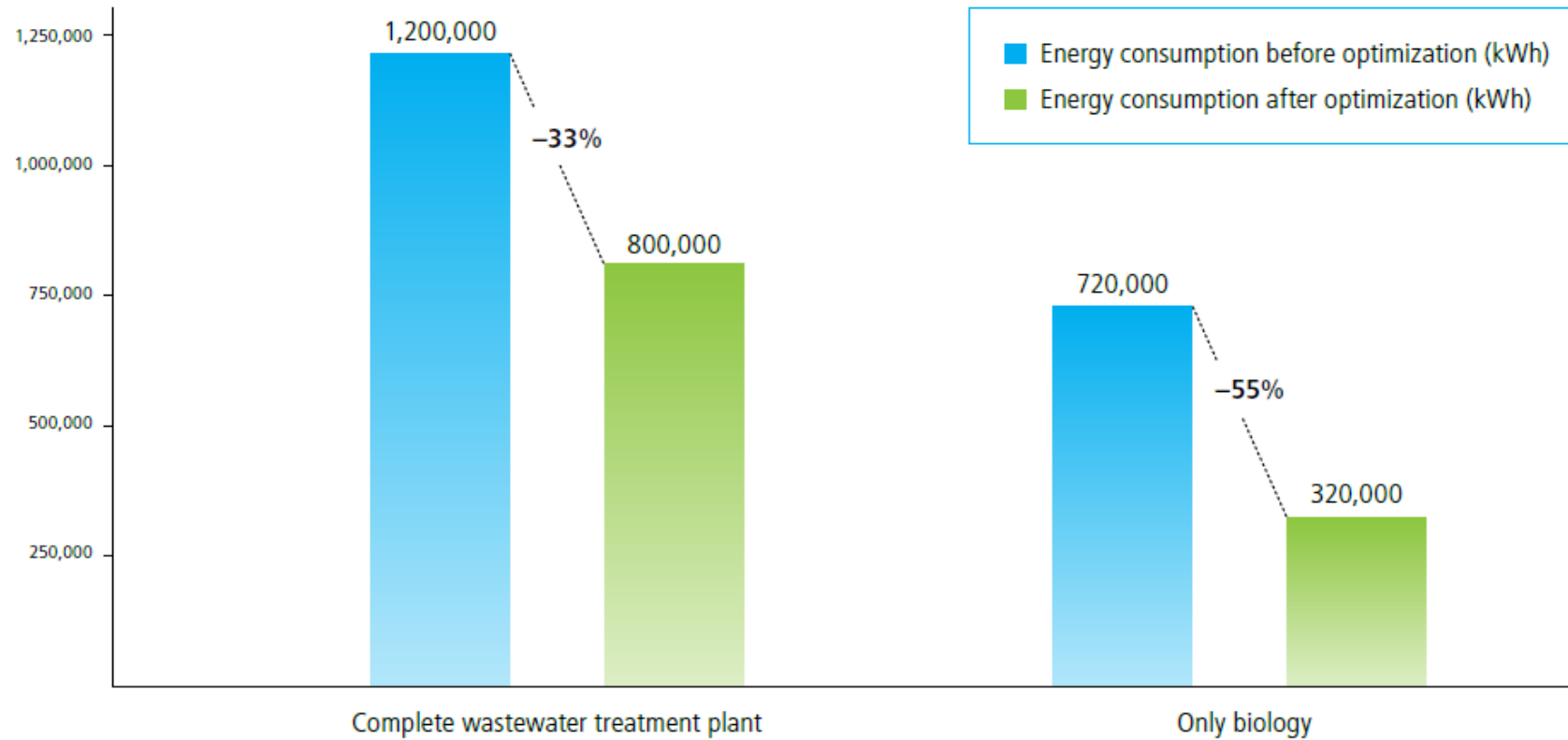
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Reference plant: WWTP Aachen Soers



„AERATION AT ITS FINEST!“

Reference plant: WWTP Aachen Soers



Advantages of the MESSNER® Aeration Panel

- Highest oxygen input and efficiency
- lowest power and CO₂ consumption
- TPU special membrane and perforation
- 316 stainless steel base material
- Service life expectancy approx. 20 years
- High operational reliability and stability
- Refurbishment possibilities after lifetime
- Very low maintenance (automated)
- Various applications (municipal and industrial)
- More than 40 years on the market with installations worldwide

