

# ABIONIK News

**No. 08**



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in Germany**



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Nagar**

**Our vision:** Improving life  
with clean air and water

**Dear business partners,  
dear readers,**

I am pleased to welcome you to our latest issue.

Summer is coming to an end and autumn is just around the corner

I would like to take this opportunity to introduce Mr Carlos Demmerle to you as International Sales Director worldwide. Mr Demmerle will take over from Cataldo Parise in the Abionik Group GmbH at the end of the year. Mr Demmerle is currently in an intensive induction phase, after which he will join our sales team. On behalf of all employees, I would like to give Mr Demmerle a warm welcome and wish him every success in his role.

Finally, I would like to comment on current global developments as usual. Unfortunately, there has been an increase in global conflicts recently, which is leading to price increases.

We at the Abionik Group are committed to not passing these costs on to you.

I am pleased to report that, despite the current challenges in the German economy and in other regions of the world, we have a very good order backlog and are therefore bucking the general market trend.



The current flood situation in Germany and its neighbouring countries highlights the need for action on the environment.

Please contact us to find out more about how we are contributing to clean water around the world.



## Our vision:

Improving life with clean air and water

It makes me proud to be CEO of such a good team and to present these exciting projects to you.

I hope you understand that I will now withdraw from the discussion. I hope you enjoy reading our latest issue.

**Yours sincerely, Daniel Crawford,**  
CEO ABIONIK



### PERSONALIA

Mr Carlos Demmerle will join Abionik Group GmbH as International Sales Director on 1 September and will gradually take over Cataldo Parise's responsibilities in the group.

Mr Demmerle is a trained process engineer and has more than 25 years of experience in various specialist and management positions in the international water and wastewater business.

Mr Demmerle is married with two sons (23 and 20 years old) and lives near Ulm.



## Research project - VINETA

Innovative low-pressure membrane processes as a modular solution for decentralized drinking water treatment

**The island states in the North and South Pacific are particularly affected by the consequences of climate change due to their geographical location and limited natural resources. Water plays a central role here not only as a vital resource, but also as part of the culture. Rising sea levels and changing rainfall patterns are leading to an increasing challenge in terms of water supply. Frequent droughts, sometimes lasting months, make access to drinking water difficult and have a significant impact on people's everyday lives. As a result, the region is one of the areas most affected by the effects of global warming worldwide.**

The VINETA project aims to analyze and optimize drinking water treatment in selected countries in Oceania. To this end, a needs analysis is being carried out for three different applications in order to develop suitable solutions for different scales. An important aspect of the project is the identification of suitable

open spaces that enable the use of solar energy. In this way, drinking water treatment can be operated independently of the conventional energy supply.

Together with local partners, customized concepts are being developed and refined. Once the concept phase is complete, low-pressure membrane filtration will be demonstrated on site. This technology was successfully brought to market maturity by Martin Systems GmbH. Until 2017, the Aqua CUBE was developed as part of a ZIM project to sustainably treat surface water in rural areas. In the VINETA project, this technology is now being adapted to the special conditions of decentralized operation in Oceania.

In addition to practical demonstrations, the project is also producing information materials for local stakeholders and training materials for operators. This should ensure long-term, sustainable operation and support the dissemination of the technology as part of the export initiative.

The three-year project is funded by the German Federal Ministry for the Environment, Nature Conservation, Nuclear Safety and Consumer Protection. Together with the Technical University of Berlin and the partners in the South Pacific (University of South Pacific (USP), Palau Public Utilities Corporation (PPUC)), a total of three Aqua Cubes will be installed.



Fig. 1



Fig. 2

# Membrane Filters for Membrane Bioreactor (MBR) Application

For municipal, industrial and maritime sector



Fig. 3



Fig. 4



Fig. 5

## 1st location - facility at the University of South Pacific

The first system was put into operation on November 29, 2023. (Fig. 1). A tree was planted for the Vineta project by the German Ambassador Mr. Prothmann and the Vice President of USP, Dr. Guilio Masasso Tu'ikolongahau Pâunga (Fig. 2).

The treated water is used as drinking water by both the University of the South Pacific (USP) and the fitness studio opposite.

## 2nd location - Naimasimasi community

In Naimasimasi, the opening of the Aqua Cube took place on December 1, 2023. (Fig. 3 and 4)

After the opening, the residents of the municipality of Naimasimasi were also able to use the treated water. In addition, a water pipe will be laid to the nearby school so that the pupils have direct access to clean drinking water.

## 3rd location - Ngaraard Primary School on Palau

The last Aqua Cube was commissioned and opened on November 4, 2024. (Fig. 5 and 6)

The elementary school in Ngaraad can now use the water from the Aqua Cube to prepare meals for the pupils. The residents of the surrounding communities also have access to the treated water via an external extraction point. This means they no longer have to travel all the way to the capital Koror to get clean drinking water.



Fig.6



## Odour Control system in Fathe Nagar, Hyderabad, in the Indian state of Telangana



We are thrilled to welcome you to the Municipal Sewage Treatment Plant at Fathe Nagar, Hyderabad, Telangana State – India. We are committed to environmental stewardship and ensuring clean air for all. Our

supplied Odour Control system plays a crucial role in managing the toxic pollutants effectively and responsibly, contributing to the health and well-being of in the community.

### Key Facility Details:

- Sewage Treatment Plant Capacity: 133 million litres per day (MLD)
- Odour Control System Capacity: 16.000 cubic meters per hour

### Supply Scope:

- “Bio-Trickling System at Primary Stage with Activated Carbon Filter at Polishing”
- “Internal, External & Tank Covering Systems”

Addressing the challenge of managing toxic odorous gases like Hydrogen Sulphide, Indoles & Skatoles, Methyl Mercaptans, Methylamines, Ammonia & other volatile organic compounds is crucial for the well-being of STP plant operators, neighbouring communities, environment, and the longevity of the plant equipment. We're committed to implementing effective measures to mitigate these hazards pollutants and ensure a safer and healthier environment for everyone involved.



# Clear Choice

for waste water and waste gas treatment

A comprehensive and innovative solution from LIKU-TECH! By offering Self Standing FRP Tank Covering Systems, FRP Internal & External Ductwork, and a Dual Stage Odour Control System (Bio-Tricking Filter and Activated Carbon Filter). We're not only addressing the emission of toxic odorous gases effectively but also ensuring a safer and more sustainable operation for the Hyderabad Metropolitan Water Supply & Sewerage Board.

LIKU-TECH's groundbreaking Odour Control System has proved to be a game-changer, not only by effectively eradicating odours to enhance the well-being of the surrounding community but also by establishing a foundation for progressive advancements in the region. The implementation of this state-of-the-art system represents a monumental step forward in environmental stewardship, demonstrating LIKU-TECH's unwavering dedication to sustainable solutions that contribute to a healthier environment for all. By eliminating noxious odours, this cutting-edge system not only enhances the immediate quality of life for residents but also sets a new standard for future developments, positioning the community for continued growth and prosperity.

Furthermore, the installation of this innovative Odour Control System & accessories signifies a firm commitment to safeguarding public health and infrastructure integrity. By significantly mitigating potential health risks and preventing equipment

corrosion, the Odour Control System not only benefits the plant operators by ensuring a safe working environment but also fosters a healthier community at large. This comprehensive approach to environmental protection underscores LIKU-TECH's mission to not only meet but exceed industry standards, setting a precedent for sustainable practices that prioritize the well-being of both people and the environment.

In essence, LIKU-TECH's Odour Control System serves as a shining example of how innovation can lead to tangible improvements in daily life while laying the groundwork for a more sustainable and prosperous future. Through this transformative technology, LIKU-TECH continues to drive positive change, showcasing a deep-rooted commitment to environmental responsibility and the creation of a better tomorrow for generations to come.



## Projekt: GochNess in Goch - swimming pool

### Location:

GochNess leisure pool in Goch,  
North Rhine-Westphalia

### Contract specification:

The contract specification for this unusual project for the FSM Steinhardt Branch was to install a hydraulic separation of the existing outdoor and indoor pools of the Goch-Ness leisure pool in Goch, North Rhine-Westphalia, using a stop log system.

This was realised with our HydroBeam stop log system using a two-field solution in the swimming area between the indoor and outdoor pools (see figures). The project was commissioned by the Stadtwerke Goch GmbH.

### Scope of equipment:

Two sets (24 units) of HydroBeam stop log system, type DBM 7 (100x150)  
Frame variant B for bolting to the wall of the structure

### Dimensions:

Width 2065 mm  
Height1 = 1460 mm  
Height2 = 2400 mm

### Design:

Due to the structural conditions, a so-called bolted frame variant was chosen. The cover of the stop log system was adapted to the requirements in the basin with the risk of injury in mind during swimming operations, and was designed with rounded corners and no sharp edges. In addition, the frames of the stop log system were statically reinforced due to the increased water pressure.

### Execution:

Due to the building requirements, a bolted frame variant was chosen. The cover of the stop log system was adapted to the requirements in the basin with the risk of injury in mind when the pool is in use, and was designed with rounded corners and no sharp edges. In addition, the frames of the stop log system have been statically reinforced due to the increased water pressure.



View of the outdoor pool before installation

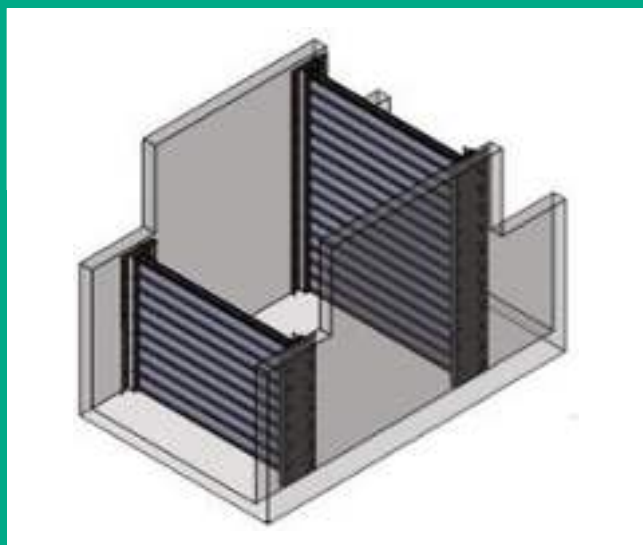


View of the indoor pool before installation



# Sustainable innovations made of stainless steel

Specialist in Urban Water Management



Design sketch of the HydroBeam Dam System

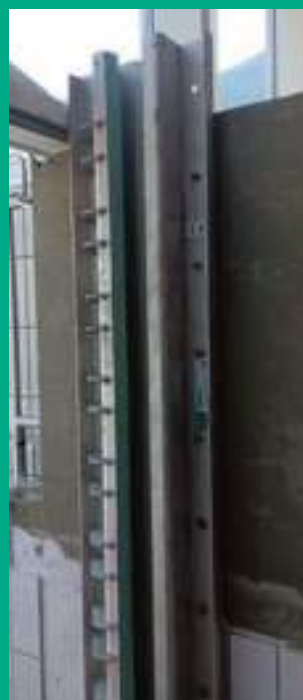


After installation – HydroBeam stoplog frame system

After installation – system with cover



Installation of the HydroBeam dam beam system



Mounting the stop log frame



## First Storm Screen in Great Britain (Wivelsfield) installed

We are pleased to announce that FSM Frankenberg has received an order for the first Storm Screen in the U.K.

Our local partner, WILO UK, was commissioned to supply an FSM Storm Screen to the Wivelsfield Pumping Station. We are pleased to be able to deliver the first screen of this type to the U.K.

The parish of Wivelsfield, a picturesque place, is located on a ridge that acts as a watershed between the Adur and Ouse rivers. The Pumping Station is located near Haywards Heath and Burgess Hill in the Lewes District of East Sussex, U.K.

After the installation of the new FSM Storm Screen, stormwater treatment will be significantly improved and the local watercourse protected from pollution.

We are pleased to be working with Wilo UK and are confident that the project will be successfully implemented.

For further information about the FSM Storm Screen, please do not hesitate to contact us.



## Braunfels wastewater treatment plant with FSM-Frankenberger filter belt screen

The Braunfels sewage treatment plant in Hesse is being equipped with an FSM Frankenberg filter belt screen.

The city of Braunfels is located in the eastern part of the Hintertaunus region at an altitude of about 240 metres, two kilometres south of the Lahn Valley and ten kilometres west of the district town of Wetzlar. The city of Braunfels has a population of about 12.000.



The sewage treatment plant has two inlets for cleaning the incoming wastewater. One of the two fine screens, which represents the first cleaning stage in the sewage treatment plants, should be modernised in order to continue to meet future requirements.

# The specialists for environmental technology

Machines for water and wastewater treatment



As part of the modernisation of the sewage treatment plant, it is also planned to replace the wash press that follows the screen.

The city of Braunfels expressed its interest in the products from Frankenger, our filter belt screen FRS 3 with flexible scraper and an FSM Frankenger screenings wash press of size SPW 200.

We are pleased to inform you that we were able to prevail against well-known competitors in the tender for the two machines. The FRS 3 filter belt screen and the SPW 200 screenings wash press have been installed by us and are in operation.

Mr Bastian, manager of the sewage treatment plant, was very satisfied with the cleaning performance of the FRS 3.

The cleaning performance has increased by 1,5 times. The connected screenings wash press, type SPW 200, also achieves very good values.

We at FSM Frankenger are pleased that we were once again able to convince the city of Braunfels of the quality of our products. We wish them all the best for the future and hope they enjoy our product.

## FSM Frankenger trains apprentices

We are delighted to welcome our new apprentices at our sites in Pohlheim and Walow.

In Pohlheim, we are welcoming two apprentices in the warehouse area specializing in warehouse logistics and two apprentices in construction mechanics in the production area.



In Walow, we are pleased to welcome two apprentices in the area of production as construction mechanics.



The training of new employees is of great importance to us, as we are dependent on their support in the future.

We wish our apprentices every success with their training.

[WWW.FSM-UMWELT.DE](http://WWW.FSM-UMWELT.DE)



## Our vision: Improving life with clean air and water

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A WILO COMPANY

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A WILO COMPANY

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