

EFFICIENT SOLUTION FOR SEDIMENTED SLUDGE REMOVAL

# SUBMERGED SLUDGE REMOVAL SYSTEM



**Biosis**  
Saneamento Ambiental



# BIOSIS

We are one of the leading Brazilian companies in equipment, engineering, and services for water and wastewater treatment. For over 15 years, we have been providing customized solutions for both industry and the public sector, focusing on effectiveness and efficiency.

## PRODUCTS AND SERVICES



**AERATION SYSTEM**



**REVITALIZATION**



**SPARE PARTS**



**SLUDGE REMOVER**



**STATIC MIXER**



**FILTRATION SYSTEM**

# OUR CLIENTS



## BIOSIS ACROSS BRAZIL







# SLUDGE REMOVER

## WINS TWO AWARDS IN 2024



SANITATION EQUIPMENT  
CATEGORY (INEC)



TECHNOLOGICAL INNOVATION  
CATEGORY (AESABESP)



# CHALLENGES WITH SLUDGE ACCUMULATION



SLUDGE BUILDUP IN CLARIFIERS CAN CAUSE  
SERIOUS OPERATIONAL ISSUES.



- Reduced storage capacity
- Compromised water quality
- Decreased treatment efficiency
- Increased maintenance costs





# BIOWASSERTRACK: THE ULTIMATE SOLUTION FOR SLUDGE REMOVAL IN CLARIFIERS



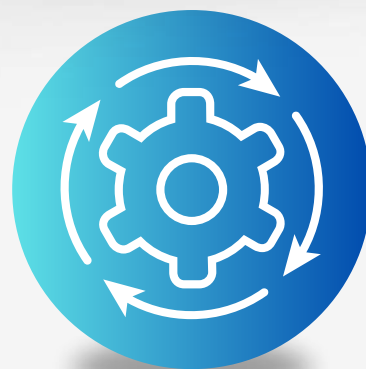
The **BioWasserTrack** is a hydromechanical, manageable, and automated system that continuously and systematically removes sedimented sludge, preventing buildup.

# ADVANTAGES OF THE SUBMERGED SLUDGE REMOVAL SYSTEM

Custom-Engineered for each clarifier, aligned with the operational profile of each treatment plant, focusing on efficiency and effectiveness.



ENSURES HIGH QUALITY  
OF CLARIFIED WATER AND  
SUSTAINABILITY IN TREATMENT



SIMPLIFIED, FLEXIBLE, AND  
PREDICTABLE OPERATION,  
ENABLING SUSTAINABLE  
PRACTICES FOR THE DISPOSAL  
OF DECANTED SLUDGE.



PROMOTES A SIGNIFICANT  
REDUCTION  
IN OPEX DURING THE  
DECANTATION PROCESS



ENHANCES PRODUCTIVITY, AS IT  
ELIMINATES THE NEED FOR  
CLARIFIER SHUTDOWNS FOR  
CLEANING.



# APPLICATIONS AND REQUIREMENTS

## WTP

### DECANTATION PROCESS IN WATER TREATMENT

- Rectangular clarifier
- Flat and uniform bottom
- Applicable to any process

## WWTP

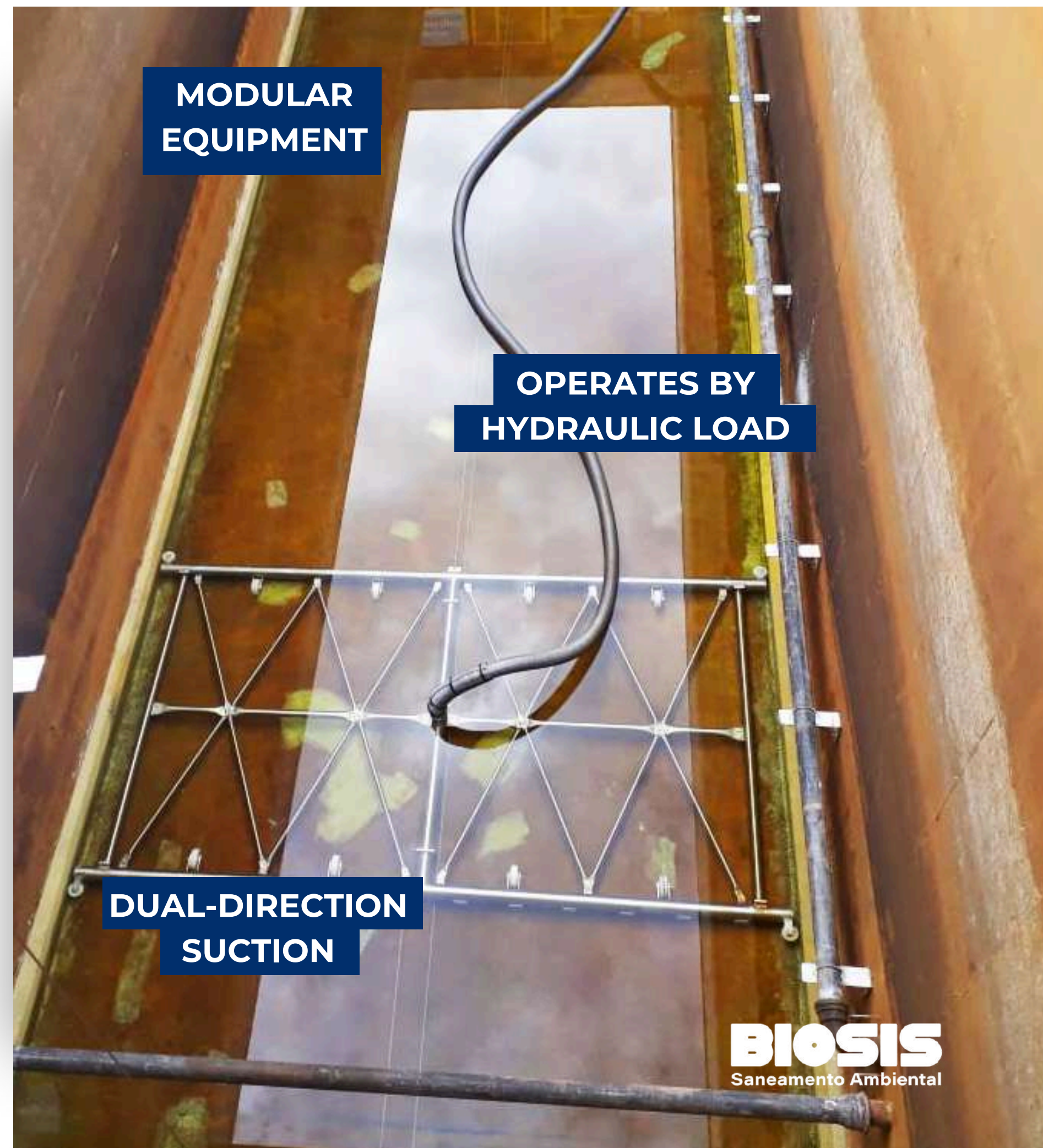
### DECANTATION PROCESS IN WASTEWATER TREATMENT

- Rectangular clarifier
- Flat and uniform bottom
- Applicable in the tertiary stage



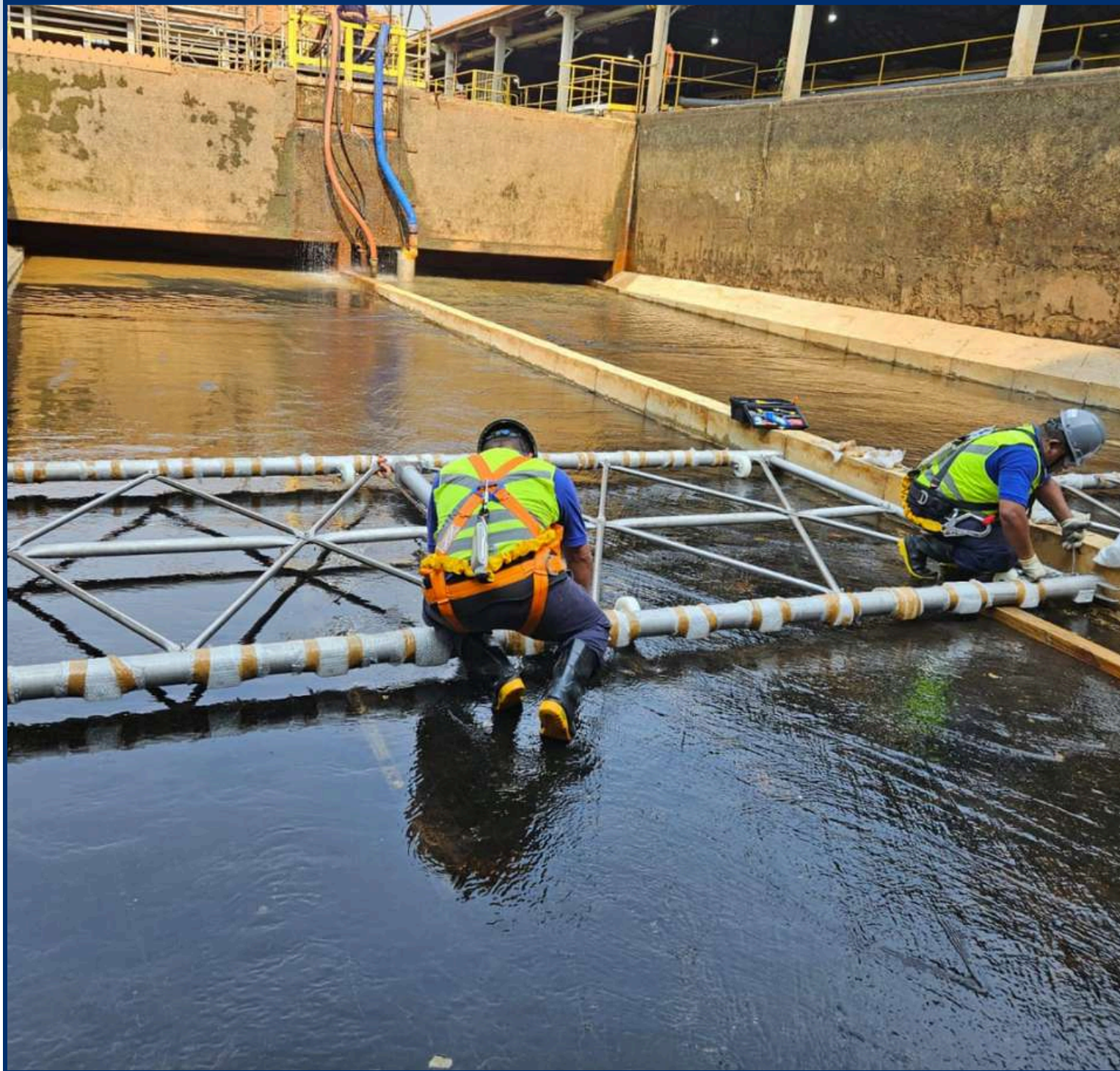
# MATERIAL QUALITY AND MODULARITY

- **High-Quality Materials:** Stainless steel structure and advanced engineering components.
- **Versatility:** Adaptable to tanks of various sizes.
- **Superior Durability:** Robust construction for a long service life.





# INNOVATION AND SAFETY



- **Easy Movement:** The BioWasserTrack moves smoothly on side rollers.
- **No Rails or Tubes:** Eliminates the need for rails or telescopic pipes.
- **Safe Operation:** Prevents jamming, derailment, and warping.
- **Higher Efficiency:** Ensures safer and more effective operation.



# AUTOMATION AND CONTROL



The control panel includes a PLC (Programmable Logic Controller) and HMI (Human-Machine Interface) to optimize sludge removal efficiency by adjusting flow rate and concentration.

Flow valves are operated by electric actuators, controlled via the panel's PLC communication system.





# BEFORE X AFTER



**WTP WITHOUT AN AUTOMATIC SYSTEM**

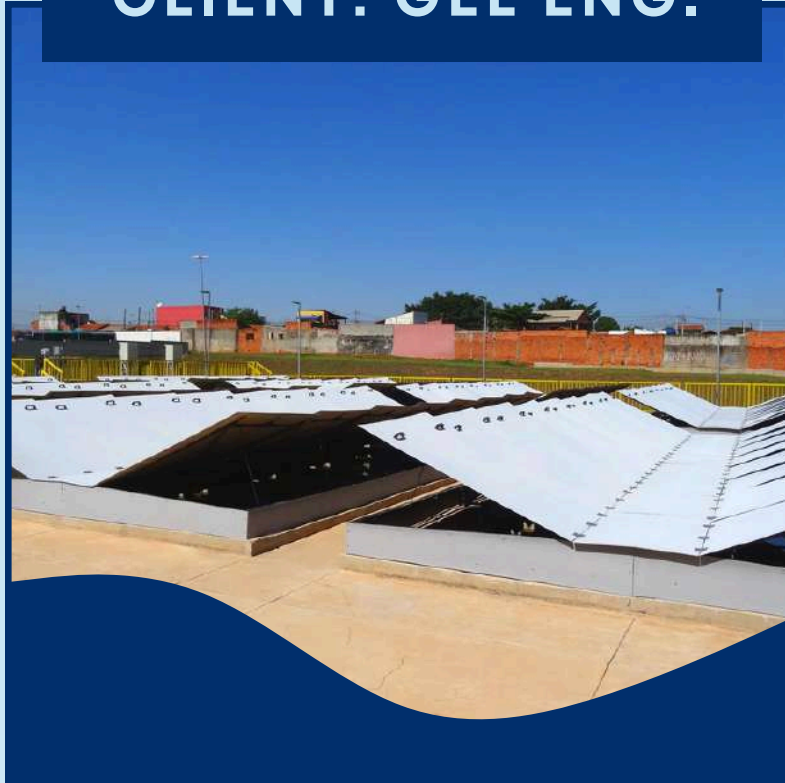


**WTP WITH BIOWASSERTRACK**



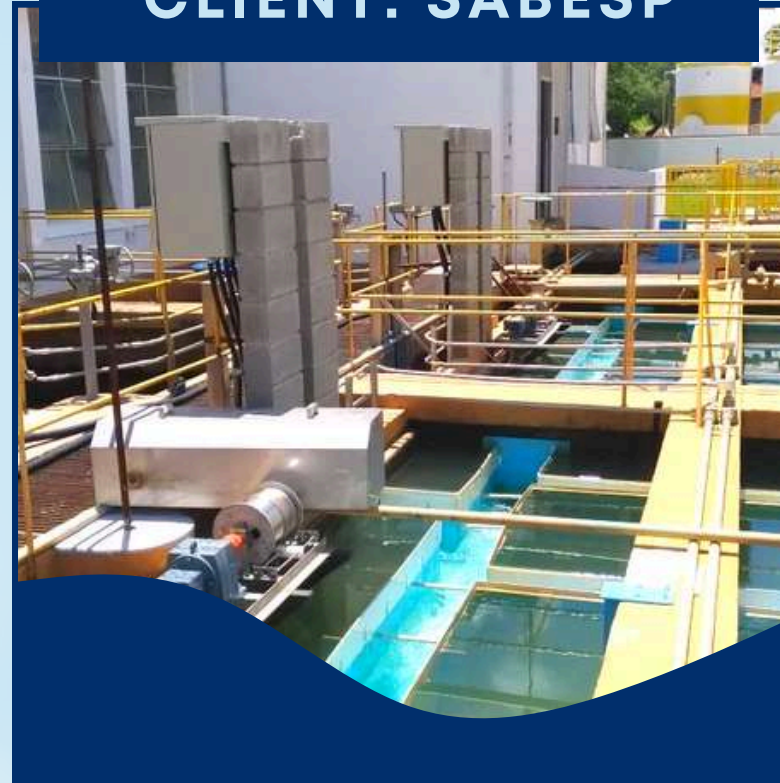
# SUCCESS CASES

CLIENT: GEL ENG.



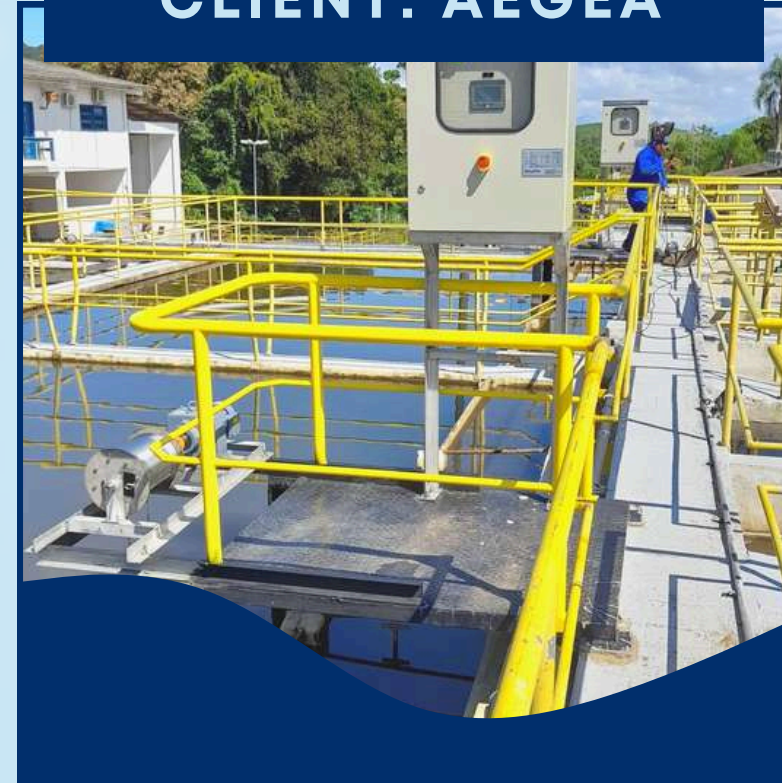
Plant: Vitória Régia WTP  
Flow rate: 0.75 m<sup>3</sup>/s  
Location: Sorocaba/SP  
Project: New WTP  
Quantity: 04 units  
Size: 5.00 x 2.60 m  
Commissioned: 2020

CLIENT: SABESP



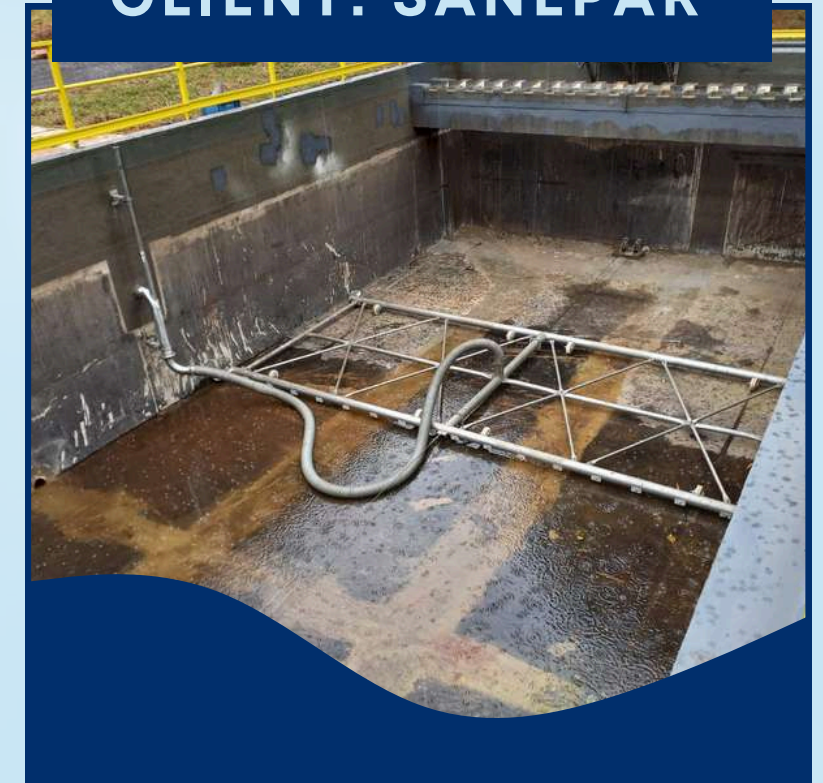
Plant: Espírito Santo do Pinhal  
Flow rate: 0.18 m<sup>3</sup>/s  
Location: Espírito Santo do Pinhal/SP  
Project: Expansion  
Quantity: 04 units  
Size: 5.90 x 3.10 m  
Commissioned: 2021

CLIENT: AEGEA



Plant: Rócio Grande WTP  
Flow rate: 0.17 m<sup>3</sup>/s  
Location: São Francisco do Sul/SC  
Project: Retrofit  
Quantity: 03 units  
Size: 6.20 x 3.00 m  
Commissioned: 2022

CLIENT: SANEPAR

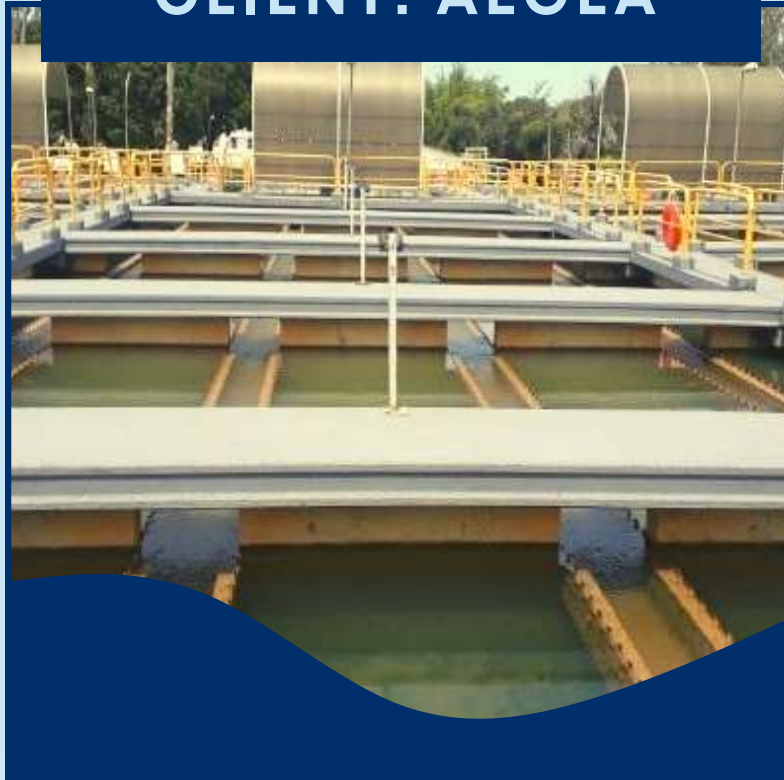


Plant: São Luiz WWTP  
Flow rate: 10 L/s  
Location: Cornélio Procópio/PR  
Project: New WWTP  
Quantity: 02 units  
Size: 6.00 x 3.00 m  
Commissioned: 2023



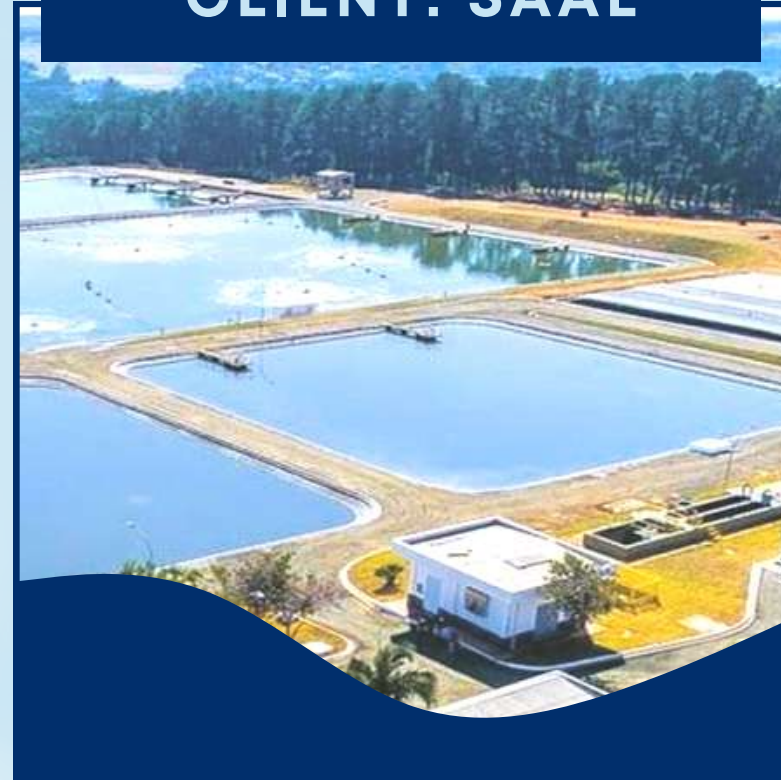
# SUCCESS CASES

## CLIENT: AEGEA



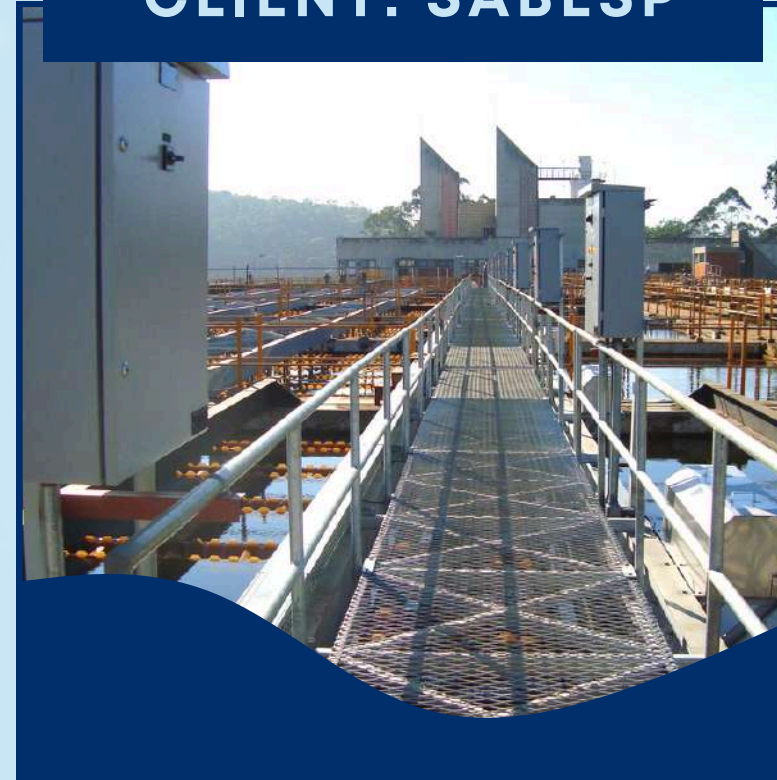
Plant: Juturnaíba WTP  
Flow rate: 1.2 m<sup>3</sup>/s  
Location: Araruama/RJ  
Project: Expansion  
Quantity: 03 units  
Size: 8.64 x 27.80 m  
Commissioned: 2003

## CLIENT: SAAE



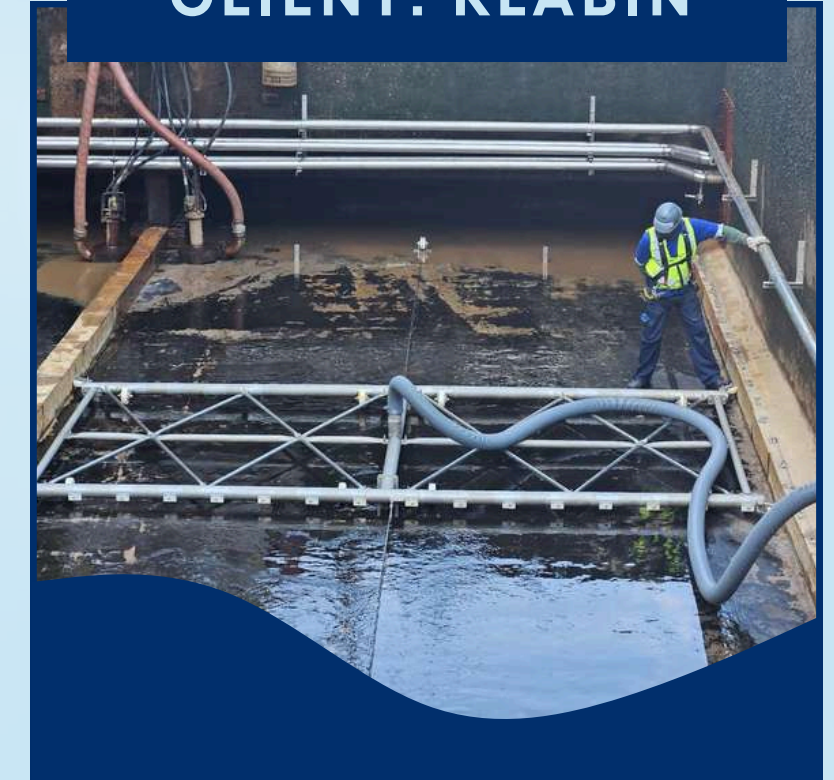
Plant: WTP VI  
Flow rate: 0.15 m<sup>3</sup>/s  
Location: Santa Bárbara D'Oeste/SP  
Project: Retrofit  
Quantity: 04 units  
Size: 10.50 x 22.08 m  
Commissioned: 2008

## CLIENT: SABESP



Plant: Rio Grande WTP  
Flow rate: 5.50 m<sup>3</sup>/s  
Location: São Bernardo do Campo SP  
Project: Retrofit  
Quantity: 12 units  
Size: 11.60 x 30.80 m  
Commissioned: 2009

## CLIENT: KLABIN

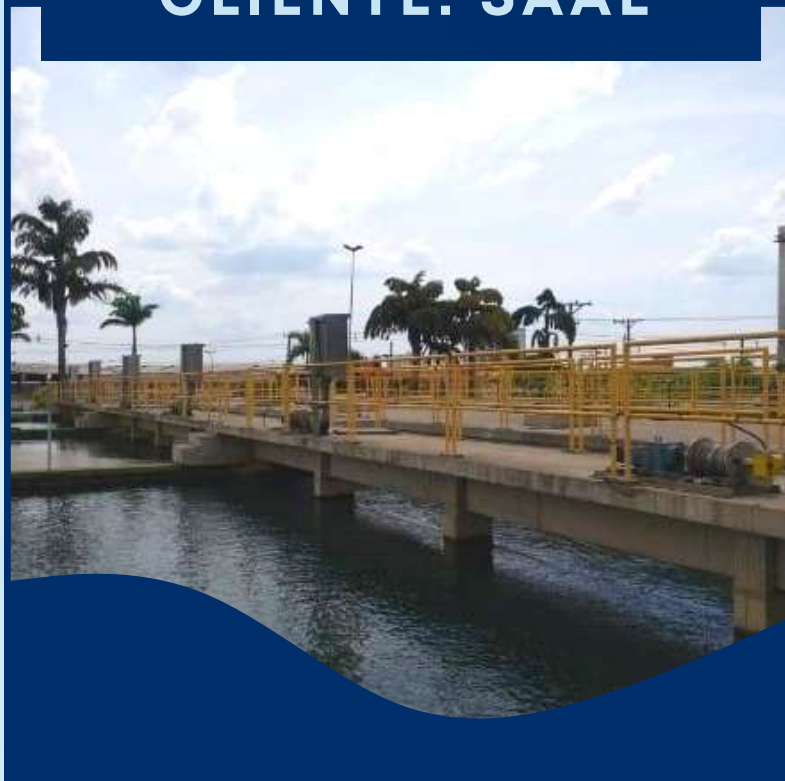


Plant: São Luiz WTP  
Flow rate: 10 L/s  
Location: Telêmaco Borba/PR  
Project: New WTP  
Quantity: 12 units  
Size: 5.70 x 3.00 m  
Commissioned: 2024



# CASES DE SUCESSO

## CLIENTE: SAAE



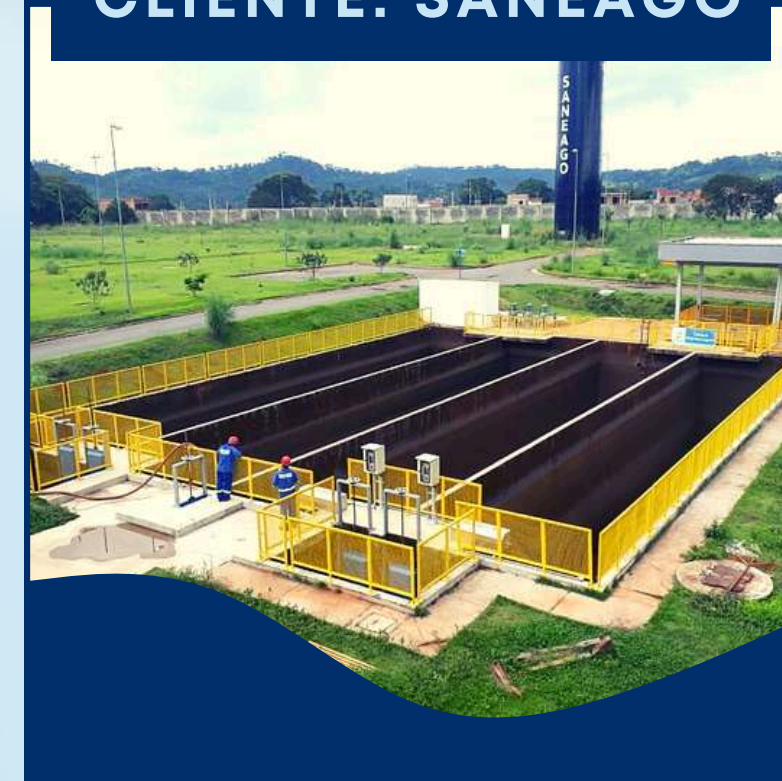
Plant: Cerrado WTP  
Flow rate: 3.00 m<sup>3</sup>/s  
Location: Sorocaba/SP  
Project: Retrofit  
Quantity: 12 units  
Size: 15.10 x 57.00 m  
Commissioned: 2009

## CLIENTE: SAE



Plant: Ituiutaba WTP  
Flow rate: 0.57 m<sup>3</sup>/s  
Location: Ituiutaba/MG  
Project: Retrofit  
Quantity: 04 units  
Size: 27.25 x 7.30 m  
Commissioned: 2019

## CLIENTE: SANEAGO



Plant: Mauro Borges WTP  
Flow rate: 5.33 m<sup>3</sup>/s  
Location: Goiânia/GO  
Project: Expansion  
Quantity: 02 units  
Size: 4.80 x 2.50 m  
Commissioned: 2019





## **PARTNERSHIP WITH BNDES**

Take advantage of BNDES financing benefits, making the acquisition of the BioWasserTrack more accessible and financially viable.



# CONTACT US

Business Hours

Monday to Friday: 8:00 AM – 5:00 PM

**WhatsApp:**

Chat with a Consultant



**Email:**

[comercial@biosis.eco.br](mailto:comercial@biosis.eco.br)

## ADDRESS

Av. Gen. Valdomiro de Lima, 647B -  
Jabaquara  
São Paulo – SP  
ZIP 04344-070

## CONTACT

Phone: +55 (11) 2613-8928  
Sales: +55 (11) 99173-7043  
Filters: +55 (11) 95060-3812  
Email: [biosis@biosis.eco.br](mailto:biosis@biosis.eco.br)

## SOCIAL MEDIA

 [www.biosis.eco.br](http://www.biosis.eco.br)  
 [biosistratamentodeefluentes](https://www.facebook.com/biosistratamentodeefluentes)  
 [biosisoficial](https://www.instagram.com/biosisoficial)  
 [biosisbrasil](https://www.linkedin.com/company/biosisbrasil)

**BIOISIS**  
**Saneamento Ambiental**





**Saneamento Ambiental**