

Specialized in the construction of concrete circular tanks for water purification stations, biogas plants, and tanks for industrial and agricultural applications.

# Building on a greener future together

#### WHO WE ARE?

ater treatment and environmental engineering have comprised our expertise for over 30 years. Bio-Dynamics offers a proven solution for the construction of round concrete tanks with diameters from 4.5 m to over 50 m with heights of up to 20 m and more. These can be constructed as open-top or with a roof; below or above the ground. Specialised formwork allows round tanks to be cast without seams. This unique method ensures watertightness and rapid construction. Bio-Dynamics offers more solutions than just the construction of the tanks. The equipment inside and next to the tank completes the project:

- For construction for water treatment facilities Bio-Dynamics supplies and installs equipment such as aeration windows, mixers, pumps with associated piping and electrical connections
- For the construction of biogas units and UASB reactors Bio-Dynamics supplies and installs equipment including insulation, heating pipes in the wall, wall cladding, liners and coatings, mixers, gas membranes, etc.
- For the construction of storage tanks Bio-Dynamics supplies and installs loading and unloading stations, mixers through the wall, etc.

"More than 2,000 tanks built in 10 years"

"Known at different technical inspection service such as SECO, VERITAS, APAVE,DWI..."

"Ten-year insurance policy for works in France"









#### **OUR MARKETS**

**Industry** - tanks used for the storage and processing of a wide range of industrial fluids, including process water, cooling water, waste water, Anaerobic Digestion of produced waste etc.

Utility - tanks for municipal sewage treatment plants, used in a variety of applications, including: Primary Settlement Tanks (PSTs), Final Settlement Tanks (FSTs), Clarifiers, Sludge Holding/Buffer tanks, Aeration tanks and Sludge Digesters. Tanks for municipal drinking water treatment plants

**Agriculture** - On farm slurry stores for regulatory storage of manure prior to on field application, complete with reception pits, and Anaerobic Digestion as part of renewable energy production.

#### **HOW WE BUILD?**

ur success in circular concrete tank construction is the technologically perfected steel formwork system. The concrete is cast in this formwork on-site (insitu). The internal circular structure ensures a perfectly round shape. This technology was deliberately developed to construct the wall without anchors or spacers between the panels. This results in maximum watertightness.



"Our project engineers will join you in finding a reliable "solution

"Tanks with diameters from 3m to over 50m with a heights of up to 30m and more"

"Tanks cast on-site from 20m<sup>3</sup>" to over 50,000m<sup>3</sup>"

Concrete tanks for the." storage of acidic products to "pH1

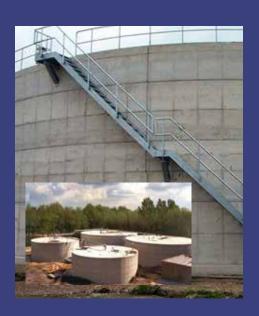


## **STORAGE TANKS**



### **QUALITY PURE AND SIMPLE**

Seamlessly cast tanks are ideal for the storage of water, be this rainwater, process water or drinking water. Manure and sludge storage tanks are cast in HSR concrete (High Sulfate Resistant). A lining can also be cast or a coating applied for the protection of concrete to pH 1.





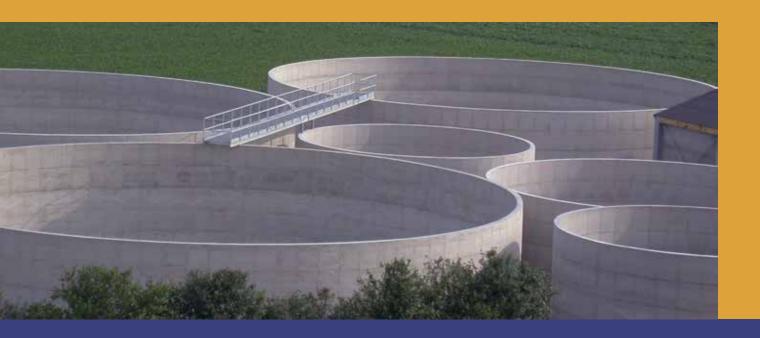




"Concrete roofs suitable for goods transport; PVC roofs for restricting odour nuisance"

"Bespoke supply of unloading and receiving stations, pump wells, pumps and piping"

### **WATER TREATMENT**





"Aeration tanks are usually constructed at a height of 7 m to 10 m to ensure the most efficient absorption of oxygen"



"The floor of settlement tanks is cast at a gradient as specified by the customer"





#### **PURE SERVICES**

Round tanks are the most economic design for water treatment. Concentric constructions offer advantages with respect to oxidation and nutrient removal.

In settlement tanks the supply pipe is also cast in the central column. Bio-Dynamics will also take responsibility for the production and installation of aeration windows, banana mixers, squeegee bridges and overflow drains if required.

# **BIOGAS & INDUSTRIAL FERMENTATION**









### **GREEN ENERGY**

Bio-Dynamics builds mesophilic or thermophilic digesters/fermenters/ reactors and associated storage tanks for biogas installations. Bio-Dynamics can protect the top of the inside wall with a PE lining (cast in at the same time) while also installing the heating pipes and insulation in the wall or in the floor (also cast in at the same time). Mixing wells are also often used as a "kitchen". Simple and particularly reliable.



# **TURNKEY SOLUTIONS**

















### **THOROUGH FINISHING**

With the ability to provide a concrete tank as one finished entity, Bio-Dynamics offers the option of adding certain parts to the tank for building services engineers, and engineering departments.

















































































































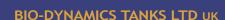












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