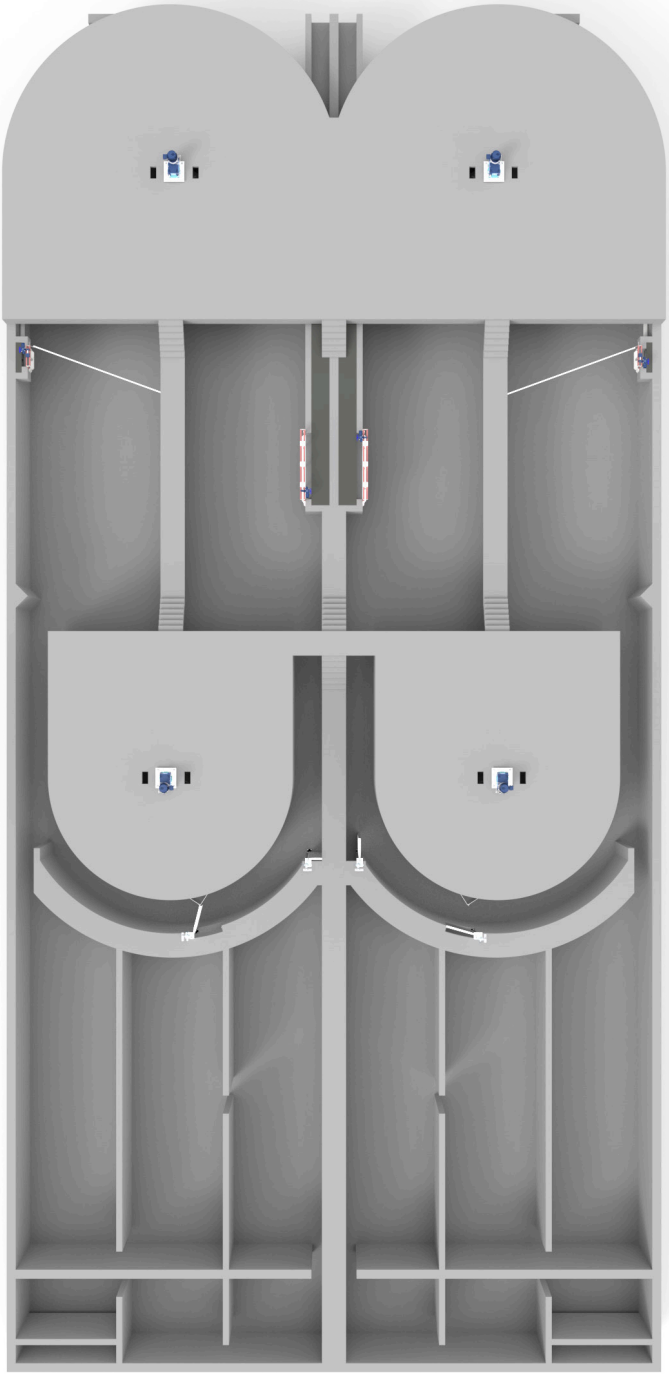
Carrousel® SelectIR™

HIGH-DENSITY SLUDGE SYSTEM.

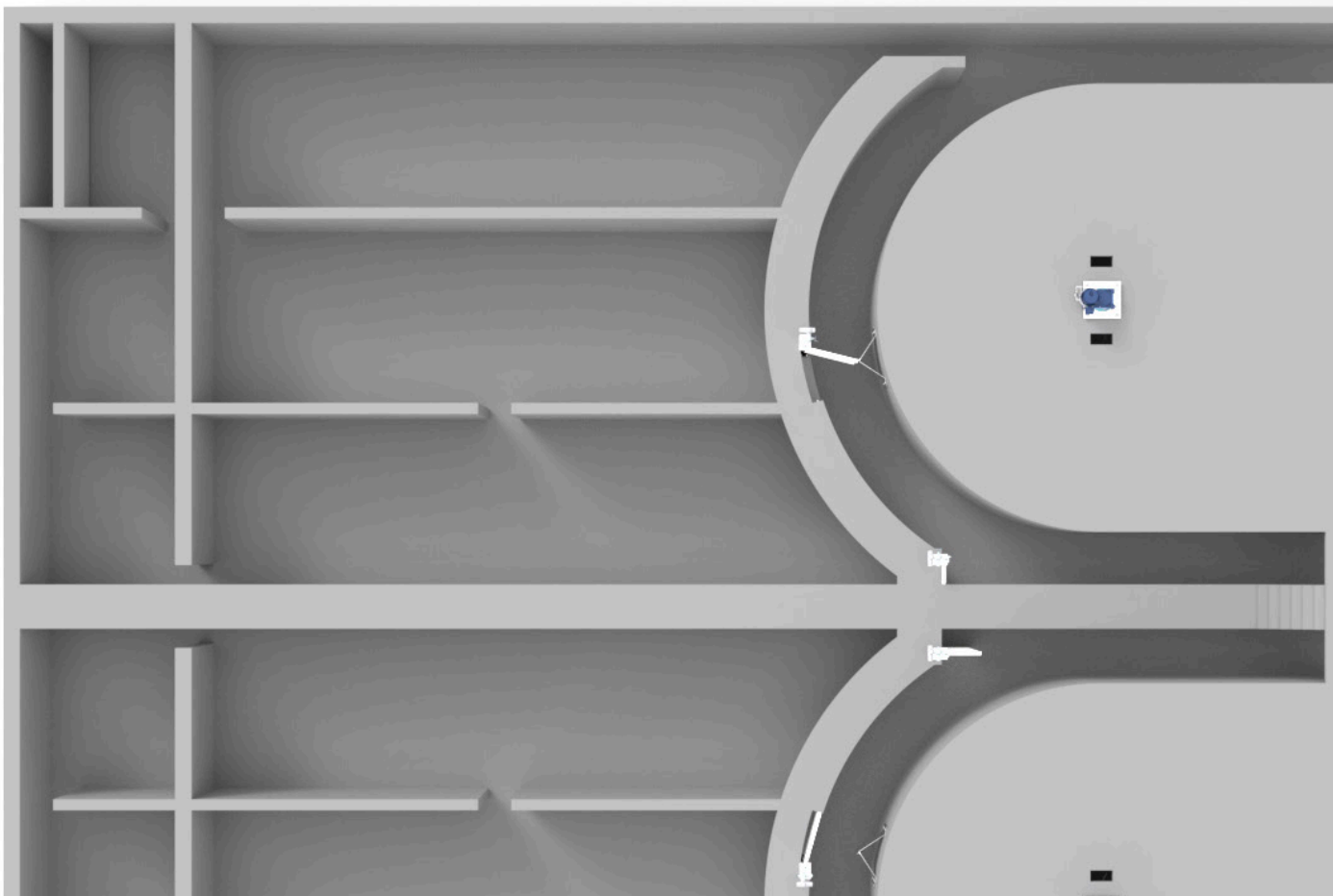


OVIVO

got carbon ?™

SelectIR™ represents a significant advancement in the field of wastewater treatment. Designed by **Ovivo** and powered by strategic partnerships, this innovative technology is part of the **Carrousel® Biological Nutrient Removal** (BNR) product line.

Targeting **enhanced efficiency in carbon management** for **BNR enrichment** and **growth** of **Aerobic Granular Sludge (AGS)**.



A STEP FORWARD IN BNR TREATMENT

- **ENHANCED CARBON MANAGEMENT:** Optimizes carbon availability for BNR processes. Harvests carbon from the biomass via a fermentation cycle.
- **HIGH-DENSITY SLUDGE PROCESS:** Incorporates insights from Aerobic Granular Sludge (AGS) and biological selectors to promote BNR enrichment and enhance settleability.
- **DESIGN BASED ON THE WELL-KNOWN A2C™ CARROUSEL®** BNR System with new and simple tools for carbon management in the anaerobic/anoxic (AN/AX) basins.
- **BIOMIX™ COMPRESSED-AIR MIXING:** Provides unlimited options to deploy mixing energy, intensity, and frequency. Gentle and pulsed mixing enables a biomass blanket during the fermentation cycle to harvest carbon for BNR purposes.
- **REAL-TIME VISIBILITY WITH SENTRY™ BIOSENSOR** of the influent carbon diurnal profile offers enormous opportunities to improve BNR performance, promote AGS growth, and eliminate chemicals.



EnviroMix

BIOMIX™ COMPRESSED-AIR MIXING

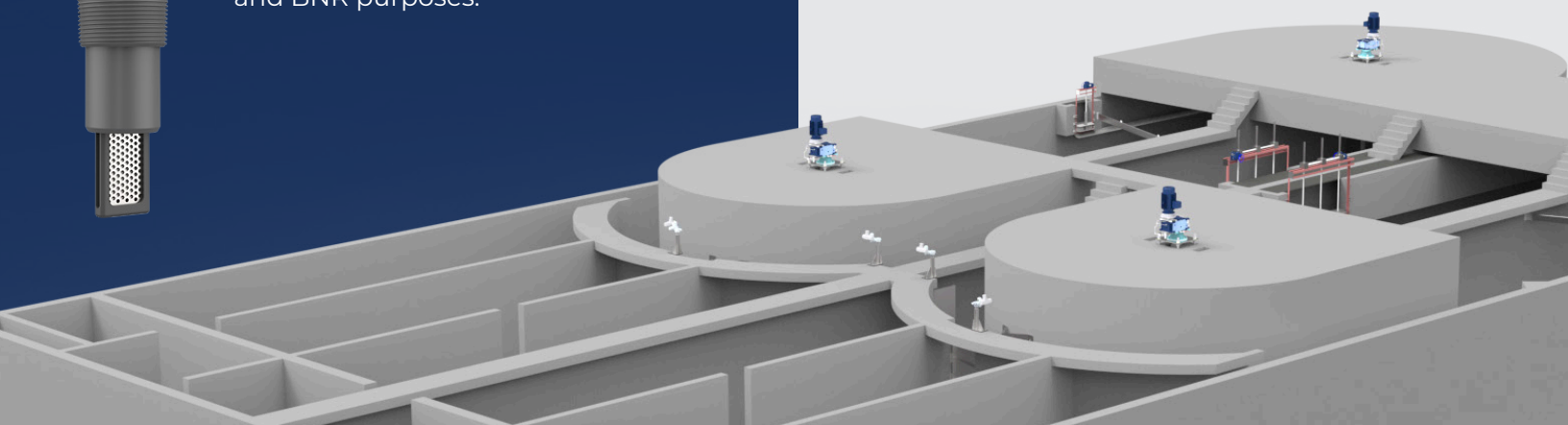
Simple and robust mixing technology with unlimited possibilities to fine tune multiple mixing conditions in the AN/AX selectors.



sentry™

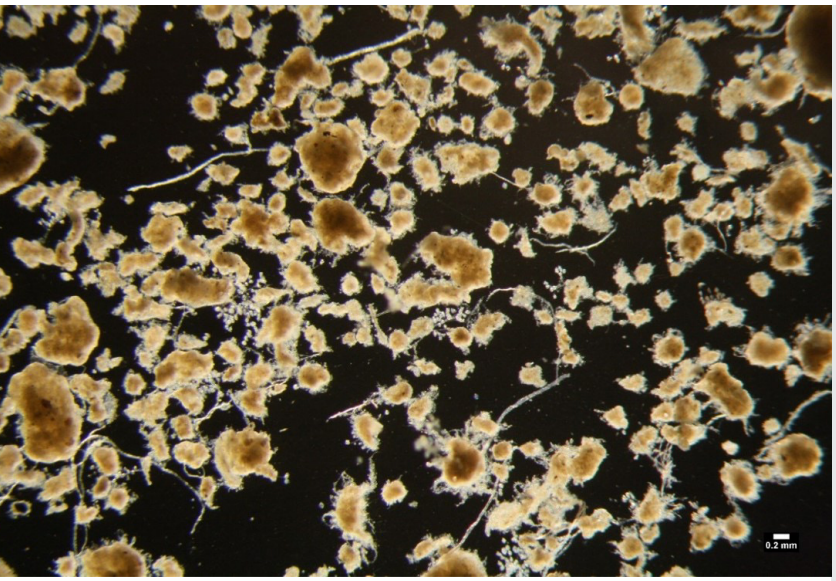
SENTRY™ BIOSENSOR

Provides real-time carbon monitoring to optimize operating strategies for biological selection and BNR purposes.



HIGH-DENSITY SLUDGE DESIGN

Promotes **growth** of AGS granules in the MLSS for **BNR enrichment** and **enhanced settleability**.



MLSS = SMALL GRANULES AND FLOCS
GRANULE SIZE = 200 – 600 MICRONS

IMPROVED BNR PERFORMANCE

Maximizes carbon availability for efficient and robust nutrient removal. BNR plants can rely on a more stable carbon feed by utilizing the carbon in the influent as well as the carbon harvested from the biomass via fermentation.

ENHANCED SLUDGE SETTLEABILITY

Small AGS granules in the biomass provide consistent good settling rates (SVI<100 mL/g) enabling designs and operation with MLSS > 5,000 mg/L for more capacity in smaller tanks.

NEW TOOLS

For the AN/AX basins are of ease of operation and maintenance and are fully integrated in the Oculus™ controls system. The rest of the equipment that makes SelectIR™ is the traditional Carrousel® core equipment.

ANAEROBIC / ANOXIC SELECTOR DESIGN

Innovative design that can implement Food-to-Microorganism optimization, a MLSS fermentation cycle, and storm mode.

