# gradiant SOLUTIONS FOR THE FOOD & BEVERAGE INDUSTRY

As a global solutions provider for advanced water and wastewater treatment, Gradiant's expertise in water helps brand owners and manufacturers maximize production and achieve sustainability goals.

## FOOD & BEVERAGE



Water is a vital ingredient for food & beverage industries — from dairy products to packaged foods to beer — essential and enjoyed in our everyday lives. Food and beverage manufacturers need to maximize water quality and efficiency and concurrently ensure sustainability across their operations.

Producers are facing growing pressure from consumers and governmental agencies to ensure their operations are environmentally friendly and sustainable. In food processing, the quality of ingredient water is paramount, and the process also produces substantial volumes of wastewater. Oftentimes, the key performance metrics for a facility revolve around water use efficiency and cost management.

Gradiant serves clients in the food & beverage industry with one of the most comprehensive and innovative solutions portfolios to better manage water and process resources. Our patented technologies efficiently and effectively treat water and wastewater across the entire site, increase process efficiency and reliability, and treat waste streams to help clients minimize their water and carbon footprints and address sustainability goals.



### WE HAVE PROVEN KNOW-HOW TO:



**Yield the High** Value End-Product the Industry **Demands** 



**Produce Consistent High-quality** Ingredient and **Process Water** 



**Maximize Water Recovery to Reduce** Freshwater **Withdrawals** 



Customize Solutions for Complex Process **Streams** 



Ensure **Environmental** Discharge **Compliance for Business Continuity** 



**Design and Operate Facilities with Access** to the Latest Al Technologies

## DIFFERENT BY DESIGN



Unlike traditional water companies, Gradiant offers more than just technologies – we provide solutions that make a difference in your operations.

Our relentless focus on value ensures that whatever solution we develop will address your specific challenges and will do so at the lowest total water cost. This approach not only considers capital costs but also the operational costs that endure over time.

We have the technical know-how, project delivery expertise, and AI and machine learning to ensure your facility is designed and operated at the best across its lifetime.

## **OUR SOLUTIONS ENABLE UNPRECEDENTED** PERFORMANCE



**Process Yield** 



**Reduced Water and** Carbon Footprints



**Lower Capital and Operational Costs** 



**Flexibility for Integration** into Existing Water and **Wastewater Processes** 



**Higher Operating Efficiencies** 

# DRIVING WATER REUSE IN FOOD AND BEVERAGE

Food and beverage manufacturing is a water-intensive process – not only in the water used for the product, but also in the various processes supporting production, such as heating and cooling. Over the past decade, the sector has committed to slashing its freshwater use, aligning with broader sustainability goals that are shared by enterprises and their supply chains.

Reducing water consumption has been achieved through focused conservation and process enhancements, including the adoption of high-efficiency equipment and optimized cooling tower cycles. Yet, as the low-hanging fruits of conservation are picked clean, the spotlight turns to pioneering solutions capable of recycling wastewater. Meeting the stringent standards of processing environments and justifying the investments these innovations demand calls for cutting-edge technologies paired with deep engineering expertise. Together, these elements are essential in crafting solutions that are not only effective but also economically viable.

Gradiant offers a robust suite of wastewater treatment & recycling solutions, expertly tailored to seamlessly integrate with any operational scheme. Our innovative technologies are carefully selected to ensure effective treatment solutions, ensuring that each project meets stringent standards with maximum efficiency.



#### SmartOps Al

Digital ecosystem for the Control, Predict, and Perform of water treatment facilities

– based on our foundation of systems expertise learned from delivery and operations of projects around the world.

## Selective Contaminant Extraction (SCE)

Broad portfolio of technologies that combines physical and chemical processes to target a wide range of difficult-to-remove contaminants at varying loads.

#### BioInifinity (Bio-I)

Suite of high-efficiency, patented and proprietary biological process technologies for the removal of organics to solve wastewater challenges.

## RO Infinity

Advanced platform of membrane-based solutions for complex water and wastewater challenges.
Our patented SBRO and CFRO technologies can increase water recycling rates by >50%.

## Free Radical Oxidation (FRO)

Suite of cost-effective
Advanced Oxidation
Processes (AOP) for the
removal of Total Organic
Carbon (TOC)and a wide
range of non-biodegradable
organics from the most
challenging wastewaters.

## **CONTACT US**

Gradiant serves its clients around the world from our global headquarters in Boston, regional headquarters and Global Innovation Centers in Singapore and Abu Dhabi, and offices located in 15 countries.



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## Have a question? Contact us at: gradiant.com/contact

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