

Canada Clean Tech

Utilize Nano technology to harness the power of the unseen, to clean the world's water & treat its sludge issues to combat the effects of climate change.

Via providing modular water & wastewater treatment solutions based on nanotechnology to serve industry and under served communities in countries across the world.



What We Do?

Solving Contaminated Water

Canada Clean Tech solves contaminated water problems for industry and communities worldwide.

INNPT Nano material

Canada Clean Tech solves these problems through the provision of our INNPT Nano material for existing treatment system retrofits.

Engineering Services

Canada Clean Tech solves these problems through the provision of our Engineering Services.

Modular System Solutions

Canada Clean Tech offers Modular System Solutions in 4 Available System Modules to Serve Our Clients 5,000 m³ / d, 20,000 m³ / d, 50,000 m³ / d & Mobile Truck Mounted Unit 30 m³.

What Makes Canada Clean Tech?

Clean Clean Tech has developed unique patent pending technologies for water treatment and sludge remediation that can significantly reduce the CAPEX and OPEX costs for treatment plant construction.

The team at Canada Clean Tech. has in-depth knowledge of Nano particle technology for water and wastewater treatment, allowing them to provide innovative solutions.

Canada Clean Tech. team are visible experts in the field of water, wastewater treatment, and reuse, bringing a wealth of experience and knowledge to their clients.

Canada Clean Tech has a keen understanding of their clients' needs and how to best solve their water and wastewater treatment challenges.



ICEBT

Integrated Chemical Enhanced Biological Treatment (ICEBT) is an Integrated Nanocomposite based technology. It is designed to increase the allowable hydraulic loading and improve pollutant removals in wastewater treatment facilities. ICEBT technology is used either before primary clarifiers, or other dedicated physical separation processes, after secondary clarifiers. ICEBT technology is an effective way of reducing the load to downstream biological processes, or in some cases for direct discharge.



ICEBT

ICEBT is a combined of

With all above processes included in **ICEBT technology allows high-rate sedimentation**

- Enhanced high-rate clarification (HRC) processes

Dense sludge is a HRC process that combines:

- chemical coagulation
- sludge recirculation
- fast settling, whereby solids inherent to the influent water are recycled to increase particle density and settling velocities

Ballasted flocculation is the clarification processes that increase particle size and density, and hence settling velocity, by binding solids to a weighting agent or "ballast" with metal hydroxide floc that generated from ANOC compounds when reacted with wastewater. ANOC includes in its composition a small sand particles (micro sand) which are the most common ballast



Advantages of ICEBT

1. **Full-time Treatment Method:** ICEBT is a full-time treatment method that can be used continuously to treat wastewater.
2. **Maintains Alkalinity and pH:** ICEBT helps maintain the alkalinity and pH levels in the wastewater treatment process.
3. **Three Basic Processes:** ICEBT utilizes three basic processes to achieve effective wastewater treatment.

Advantages of ICEBT SYSTEMS

1 Absolute Most Capacity

ICEBT systems allow facilities to get the absolute most capacity out of existing and new facilities, minimizing the cost of OPEX and CAPEX to the government.

2 Provide Some Degree Of Treatment

ICEBT systems can provide some degree of treatment to all the flow received at their facilities, regardless of the magnitude and duration.

3 Remove More TSS and COD/BOD

Primary Clarifiers can potentially remove more TSS and COD or BOD for less operational cost than any other treatment process in use today.

Advantages of ICEBT SYSTEMS

1 CSO and Storm water Treatment

ICEBT systems allow primary clarification to find extensive application in combined sewer overflow (CSO) and storm water treatment systems.

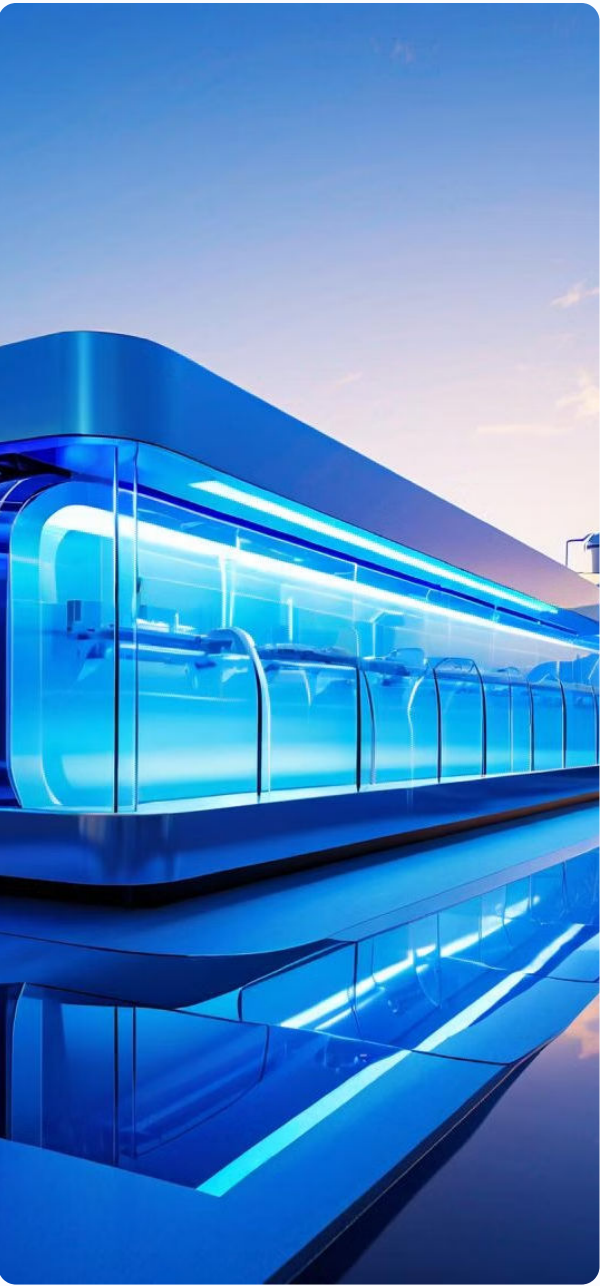
2 Maintaining Biological Performance

The ANOC material allows a higher peak overflow rate during peak flow events, while still maintaining the biological treatment process performance.

3 Increased Settling Velocity

The ANOC material increases the settling velocity of suspended particles, which is a key characteristic for the performance of all clarification devices.





Advantages of ICEBT SYSTEMS

1

Cost Savings

Reduced operating costs

2

Energy Efficiency

Lower energy consumption

3

Enhanced Treatment

Improved pollutant removal

Cutting-edge ICEBT systems offer significant cost savings, energy efficiency, and enhanced treatment capabilities.

ICEBT Technology Overview

▼ Pre-Treatment

ICEBT technology is used either before primary clarifiers, or other dedicated physical separation processes, after secondary clarifiers.

▼ Load Reduction

ICEBT technology is an effective way of reducing the load to downstream biological processes, or in some cases for direct discharge.

▼ Process Components

ICEBT is a combined of Enhanced high-rate clarification (HRC) processes, Dense sludge, and ballasted flocculation.

Key Advantages of ICEBT



Reduced Dosage

ICEBT technology uses dense sludge plus ballasting flocculation techniques to reduce the ANOC doses to 20% of traditional metal salt dosage used in normal HRC process volume which reduces sludge production.



Wide pH Range

ANOC material coagulants compounds are used over a wide range of pH from 4.0 to 11.0.



Saves Time and Budget

Using ICEBT Technology avoids you from wasting time with traditional treatment methods and saves your budget too.

ICEBT System Components



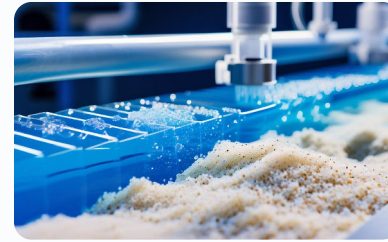
ANOC System

The ANOC system is a key component of the ICEBT technology, providing advanced and enhanced treatment capabilities.



MBBR System

The MBBR system is another integral part of the ICEBT technology, enabling efficient biological treatment.



Ballast Flocculation

Ballast flocculation with micro sand is a critical step in the ICEBT system, enhancing settling and solids separation.



Disinfection

The UV disinfection system is the final step in the ICEBT process, ensuring the treated water meets stringent quality standards.