



SCIENCO/FAST
a subsidiary of BioMicrobics, Inc.

With decades of history unlike any other, the origins of SCIENCO® & FAST® can be traced back to the 1940's in St. Louis, MO for water and salt management systems. In 1981, Scienco/FAST combined to produce internationally recognizable top-quality water, wastewater, and maintenance products focused on marine, commercial food and beverage, and agricultural market treatments with top-notch field services. SCIENCO's current commercial product lines combine proven performance with long-term reliability and many low-cost options.

INNOVATIVE BALLAST WATER TREATMENT PRODUCT

MarineFAST
SEWAGE TREATMENT SYSTEMS

Bio Barrier Marine MBR
MEMBRANE BIOREACTOR

PORTA/FAST
COMPLETE PORTABLE/PERMANENT RESTROOM

SCIENCO InTank BWTS
Ballast Water Treatment System

SEWAGE SYSTEMS
Modular Systems to Offshore Application

FAST SEWAGE SYSTEMS
Complete Package Units for New or Existing Vessels.

50+ YEARS OF FAST® TECHNOLOGY!

Certified, Advanced Marine Wastewater Treatment

After the first system installed in 1969, today's MarineFAST® (LX-, M- & MX-, & DV-Series) Type II Sewage Treatment Systems have developed into the most reliable system on the market.

Since the 1970's, almost all have remained in continuous operation and compliance with minimal maintenance. The MarineFAST® provides long-term performance for the life of the vessel!



SCIENCO InTank BWTS
Ballast Water Treatment System

USCG and IMO type approved to the revised G8 requirements



UnRestricted ballast flow with filter-free design



All the advantages with none of the power demand in port



InVoyage™ + InControl™ = InTank™
BALLAST WATER TREATMENT SYSTEM

BIO MICROBICS
BETTER WATER. BETTER WORLD.

16002 West 110th St. • Lenexa, KS 66219 USA
1-800-753-3278 • ph: 1-913-422-0707 • f: 1-913-422-0808
www.biomicrobics.com • sales@biomicrobics.com

SeptiTech
a subsidiary of BioMicrobics, Inc.
69 Holland Street • Lewiston, ME 04240 USA
1-800-318-7967 • ph: 1-207-333-6940 • f: 1-207-333-6944
www.septitech.com • info@septitech.com

SCIENCO/FAST
a subsidiary of BioMicrobics, Inc.

12977 Maurer Indust'l Dr • Sunset Hills, MO 63127 USA
1-800-652-4539 • p: +1(314)756-9300 • f: 1(314)756-9306
www.sciencofast.com • solutions@sciencofast.com

SCIENCO/FAST
Scienco® InTank® Division - Texas Office

30525 First Street Suite A • Fulshear TX 77441 USA
Mobile (24hr): +1 (832) 640-9221 • f: +1 (314) 756-9306
www.intankballast.com • intank@sciencofast.com

www.intankballast.com

BETTER WATER. BETTER WORLD.®

www.intankballast.com

SIMPLE • LOW COST • ROBUST



Introducing a simple, robust and reliable BWTS solution - Scienco® InTank™

Scienco® InTank™ is the only Type Approved “in voyage” Ballast Water Treatment System (BWTS) that allows a vessel to continue normal cargo operations, and maintain complete control over its ballast water compliance.

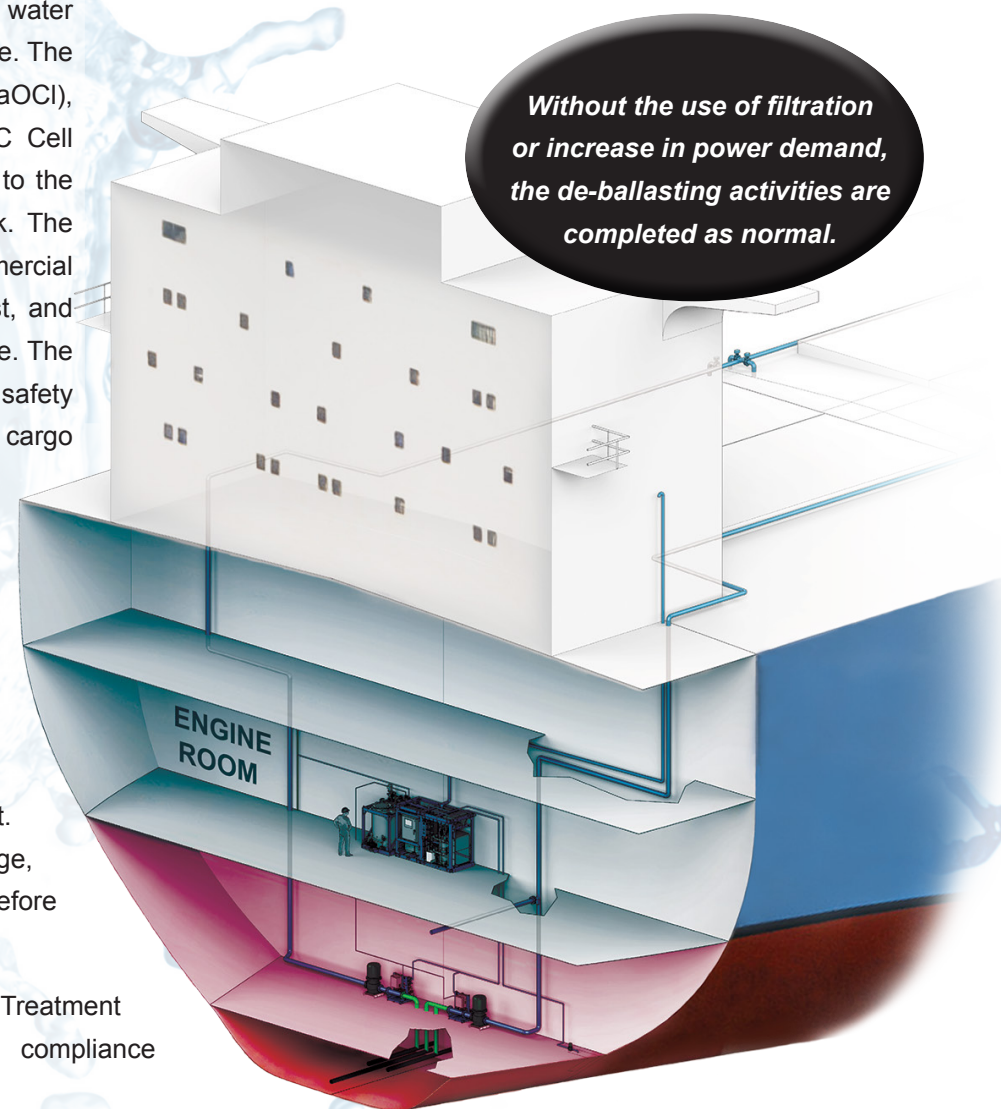
USCG and Revised G8 Type approved, the unique, sophisticated, robust Scienco® InTank™ BWTS treats and neutralizes ballast water in the ballast tanks during

the voyage. A small percentage of ballast water is circulated from one ballast tank at a time. The active substance, Sodium Hypochlorite (NaOCl), is added (produced on board by an EC Cell or from Bulk Chemical storage, or both) to the circulation loop and returned to the tank. The Scienco® InTank™ BWTS provides commercial vessels with a simple, low operating cost, and robust solution to ballast water compliance. The vessel and crew will perform at the highest safety and reliability standards without impacting cargo operations, at the lowest cost possible.

The treatment is monitored using the TRO concentration of the circulated ballast water. Treatment is completed during the voyage, neutralization is completed days before discharge.

The treatment is monitored by measuring the TRO levels in of the circulated ballast. Treatment is completed during the voyage, neutralization is completed hours/day before discharge.

The Scienco® InTank™ Ballast Water Treatment System provides a recorded technical compliance confirmation before discharge.



The most confidence of compliance with the least impact to operations!

Operational Benefits:

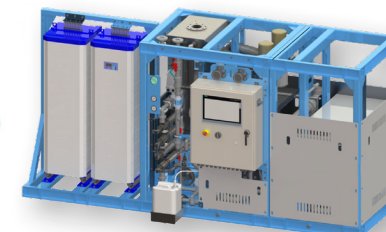
- Complete cargo handling and all ballasting operations as normal.
- Filter-free design.
- No additional power use during cargo operations.
- Quality of ballast water does not influence the InTank systems .
- Gravity flow ballast or de-ballast without limitations.
- Complete automatic treatment cycle while at sea.

Compliance Benefits:

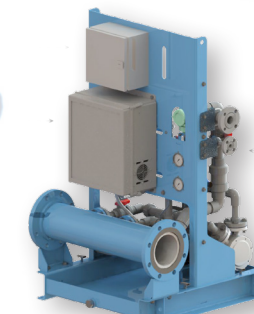
- Treatment and neutralization cycle performed during voyage – Technical Compliance recorded before discharge.
- Full treatment cycle includes 2 dosing cycles to prevent regrowth.
- Treatment efficacy is assessed and adjusted for each ballast condition.
- In case of a malfunction system can be repaired during the voyage.

Installation Benefits:

- No filters.
- Small footprint (7M²).
- System size adjusted to available treatment time (voyage time).
- All components could be installed during voyage, minimal dry-docking time required.



Electrochlorination Module (EC)



Dosing Module (DM)



Dechlorination Module (DC)

Not shown, Bulk Chemical Module (BC)

Scienco® InTank™ BWTS – Electrochlorination (EC) Module

MODEL SIZES	Rated Production Capacity (kg/hr)	SW Feed Flow Required (m³/hr)	Footprint Dimensions(m)			Dry Weight (kg)	Operating weight (kg)
			Length	Width	Height		
EC04	4	2	2.8	1.2	2.0	2178	2300
EC08	8	4	2.8	1.2	2.0	2314	2504
EC12	12	6	3.9	1.2	2.0	2835	3105
EC16	16	8	3.9	1.2	2.0	2972	3259

Scienco® InTank™ BWTS – Dosing Module (DM)

MODEL SIZES	Pipe Size (DN)	Footprint Dimensions(m)			Dry Weight (kg)	Operating Weight (kg)
		Length	Width	Height		
DM065G [DM065X]	65	0.7	0.8	1.0	177 [208]	184 [215]
DM080G [DM080X]	80	0.7	0.8	1.0	182 [212]	191 [221]
DM100G [DM100X]	100	0.7	0.8	1.0	190 [220]	201 [231]
DM150G [DM150X]	150	0.7	0.9	1.0	211 [242]	230 [261]
DM200G [DM200X]	200	0.7	0.9	1.0	238 [269]	268 [298]
DM250G [DM250X]	250	0.7	1.0	1.0	282 [312]	337 [367]

NOTE: Differences in the key parameters associated with the Explosion-Proof. EX-Rated [X] models are shown in square bracket.

Scienco® InTank™ BWTS – Dechlorination (DC) Module

MODEL SIZE	Storage Capacity (L)	Footprint Dimensions(m)			Dry Weight (kg)	Operating weight (kg)
		Length	Width	Height		
DC1500	1500	1.5	1.6	2.0	545	2556

Scienco® InTank™ BWTS – Bulk Chemical (BC) Module

MODEL SIZE	Treatment Capacity (kg/hr)	Storage Capacity (L)	Footprint Dimensions(m)			Dry Weight (kg)	Operating weight (kg)
			Length	Width	Height		
BC1500	37- 371	1500	1.5	1.4	2.0	535	2337

DNV Certificate

on behalf of the Norwegian Administration to the MPEC 279 (70) "New G8" standards Ballast Water Management / Ballast Water Treatment

