



RT PURE - M Marine Black and Gray Water Treatment Plant

Titanium Tantalum Products Limited - TiTaN was established in 1981 and encompasses a wealth of expertise and resources. With more than 300 staff **TiTaN** manufactures over 125 products complying fully to International standards. **TiTaN** is a certified **ISO 9001:2000** engineering company **possessing ASME U, U2 & R stamps** specialising in the design, engineering, manufacture & supply of exotic metal equipments & parts. **TiTaN** supplies internationally across a broad range of Industrial sectors.

The System:

The system was developed for the removal of contaminants from sewage generated from marine vessels and installations. The process the use of both physical and electrochemical operations. The output produced is a treated water and solid waste suitable for safe discharge into the marine environment as to internationally recognized **IMO** standards.

The system is skid mounted for ease of operation in offshore marine usage.

The Process:

The black and gray water is collected from various sources into the surge tank. The water is then macerated and pumped into an electro-oxidation reactor where all the pathogens are killed. The water is then passed into an Electro-Coagulation reactor to neutralize the suspended particles and to increase the agglomeration. In this reactor a small quantity of de-foaming liquid and air from a pressurizing unit is added. The treated water then flows to a settling tank and then finally to a treated water tank where it is discharged to the sea.

Capacity Range:

The RT Pure M Models have a wide capacity range to suit any type of marine installation. The capacities are derived into two modes as – only black water – or both black and gray water. These are as per **IMO** guidelines. If required higher capacities can be achieved by an array of two or more units.

The following table gives the models and there treatment capabilities:

Model	No of Persons		Treatment Capacity (LPD)
	Black Water	Black & Gray Water	
RT PURE M 15	15	7	1780
RT PURE M 25	25	12	2900
RT PURE M 50	50	20	5800
RT PURE M 75	75	30	8650
RT PURE M 100	100	40	11400
RT PURE M 150	150	64	17000
RT PURE M 200	200	86	22400
RT PURE M 250	250	110	27900
RT PURE M 400	400	178	44500
RT PURE M 500	500	225	55400

Certifications



Clients

Some of TiTaNs global clients :

LG Engineering & Construction, Aramco, Kawasakhi, Jana, Reliance Industries, Nirma, Solvay, Flow Serve, ITT, L & T, GE, Qatar Gas, Qatar Fertilizers, Orchid Chemicals, ONGC, Uhde, Lurgi, Sinar Mas.

Standards

ASME TEMA ANSI NACE API DIN BS
AD-Merkblaetter

Design Software :

PV Elite HTRI VISIMIX CAD / CAE CAESAR

Titanium Tantalum Products

86/1 Vengaivasal Main Road
Gowriwakkam Chennai,
India.
www.titanindia.com

ravian GB Ltd

3000 Hills Wood Drive
Chertsey KT16 0RS
United Kingdom
T ++ 44 207 000 1949 F ++ 44 207 000 1953
www.ravian-gb.co.uk