

Unic Care Technologies
Since 2009

Riosiz Technologies
Since 2011

Usm Unic Care Technologies Pvt Ltd
Since 2016













WATER & AIR DISINFECTION AND ODOUR CONTROL SYSTEM





Ozone Generator

- ► Faster disinfectant (3000 times faster) Destruction of bacteria, viruses, yeast, molds, mildew and most organic & inorganic contaminants
- No harmful by-products reverts back to oxygen
- Effectiveness can be measured with a simple ORP meter and ortho-toluidine
- Kills all water borne pathogens on the given practical safe dosage
- Oxidizes and destroys oil and other contaminants in water

Specialised UV System

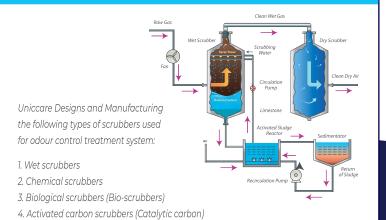
UV water disinfection technology to kill bacteria, viruses, algae, molds, and other microorganisms that replicate and develop. UV disinfection kills bacteria by destroying their DNA, rendering them lifeless and unable to reproduce.

- ▶ Environmentally friendly
- ▶ Effective
- ▶ Economica
- Chemical-free and safe
- Easy to Control





Scrubber



Based on the industries and odour compounds the scrubber types selected from the above list.

WASTE WATER TREATMENT AND SLUDGE MANAGEMENT SYSTEM





Sludge Dewatering Screw Press

In the process of waste water treatment, water-containing sludge of different properties is generally produced.

The sludge dewatering equipment mainly reduces the water content of the sludge, and reduces the sludge volume, thereby bringing convenience to the subsequent treatment or disposal of the sludge.

Dissolved Air Floatation System

USM Uniccare Technologies Pvt Ltd dissolved air floatation system provides high-quality, efficient clarification of suspended particles from waste water.

DAF is a wastewater clarification process for the separation of solids, grease, and oils. The system helps concentrate sludge, removes a wide range of suspended solids (fats, oil, and grease) in wastewater and reduces COD and BOD.



Paddle Dryer

A paddle dryer is a machine that uses rotating paddles to dry materials by agitating and moving them through a cylindrical shell. The paddles are heated externally, and the material is fed into the dryer from an inlet.

MOC: MS, SS304 & SS316

Heating Media: Steam / Thermic Oil

Capacity: 50 kg/hr to 1500 kg/hr, High thermal efficiency

Rotary Drum Filter

- > TSS load reduction in primary treatment
- TSS reduction rates up to 30% for filterable solids
- ▶ Cost effective solid removal system
- Low head loss even when the screens are fouled
- Precise, specially sized solids filtering system
- Continuous filtering even during backwashing with no interruption in flow





Biogas Methanisation Plant

- The waste when utilized effectively can deliver valuale products
- The best approach to use bio waste is to feed it in Biogas plants
- A biogas plant produce 40kg of Bio CNG from 1 MT of bio waste along with a number of bi-products



Digestible organic waste **GARBAGE IN** Green waste Bio Electricity IS NOT Animal and Food waste Bio CNG **GARBAGE OUT** Industrial organic effluent waste Bio Carbon Dioxide **BIO GAS** Dedicated energy corps Bio Sulphur Powder PLANT Organic Municipal waste Solid Bio Fertilizers Sewage sludge Liquid Bio Fertilizers Alcoholic & Non Alcoholic Beverages Carbon Credits Leather & Textile waste

Biogas Upgradation Plant

Features of biomethane generation plant:

- ▶ High methane recovery >99%
- Low energy demand
- Design for long lifetime
- ▶ Fast startup, fully automatic
- ▶ C02 Recovery Possible
- ▶ Annual Operation & Maintenance
- ▶ Automatic adjustment to biogas quality
- ▶ Remote Control & Monitoring
- Containerized units



H2S Purification Plant by Ferrosorp



- Well proven, non-hazardous product
- ► Low removal costs for H2S compared to other leading technologies
- ► High loading capacities due to selective desulphurisation
- Fast reaction, achieves 0 ppm H2S at outlet Easy handling

H2S Purification Plant by Ozone

Ozone successfully treat H2S with conversions above 90%. This means that ozone is capable of reducing the H2S concentration from 5000 - 10000 ppm to 500 - 1000 ppm before the methane upgrading stage.

In this case, high concentrations of (H2S) are already formed in the digester, where ozone can be injected to reduce this issue.



Gas Separation & Refrigerant Products



PSA & VPSA Nitrogen Plant



Application

- ▶ Tyre filling (Automotive, Aircrafts, Dumpers, Mine Trucks)
- ▶ Fuel Tank Inerting
- Autoclaves and Furnaces
- Blanketing for many industries (adhesives, pesticides, agro, pharmaceuticals)
- Metal processes
- ▶ Oil & Gas and Petrochemicals
- Laboratories (LCMS, Turbo Vap, GC, GCMS)
- ▶ Flex printing
- Nitrogen in Food Packaging

PSA & VPSA Oxygen Plant



Application

- ▶ Fish Farming
- Sewage Treatment
- Welding and Brazing
- ▶ Battery Manufacturing
- ▶ Cement and Lime Kilns
- Melting
- Pulp & Paper
- Mining & Gold Processing
- Ozone Generator

- Medical
- Rough Cutting
- ▶ Mini Steel Mills
- Metal Spraying
- ▶ Furnace Enrichment
- Chemical Oxidation
- ▶ Fermentation

Refrigerant Air Dryer

- ▶ High quality heat exchangers with low pressure losses
- ▶ Energy saving mode shuts dryer off during low loads
- ▶ Anti freeze mode shuts dryer off to avoid icing
- ▶ Effective condensate separation
- Easy to install, operate and maintain
- ► Simplified access to unit for easy maintenance



Industrial Water Chiller

- Chilling water
- Plastic Injection Moulding
- ▶ Heat treatment furnace oil cooling
- Black Anodizing
- Vacuum Pressure Impregnation, etc.



Water Treatment Plant Products







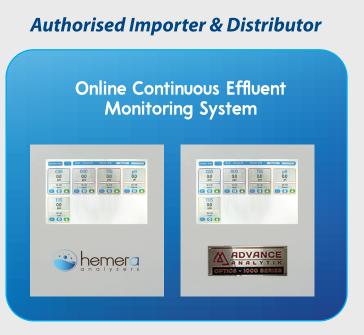












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