

NATURECLEAN – EEC

NATURECLEAN - EEC DESAL – SEA – BRACKISH – FRESH WATER RO
– UF DRINKING WATER PLANTS - UV DISINFECTION

- ❖ Reverse Osmosis Systems for Desalination and Black Water
- ❖ High Speed Waste Water Systems.
- ❖ Toxic Waste Cleanup Systems.

- Quality Custom Design RO - UF Membrane Plants
- Designed With Membrane Protection
- Skid Mounted or Containerized
- Energy Recovery Pumps Saves Up to 50%
- Fully Automatic And easy to Operate
- Competitive Edge – No Compromise



NatureClean



New Baghdad Airport 2008

NATURECLEAN - EEC DESAL ASSURED QUALITY DRINKING WATER

Develop New Water Resources

In a single step, NATURECLEAN - EEC DESAL filters, softens and disinfects brackish and seawater resources to produce water that easily meets the WHO's regulations on surface water treatment and safe drinking water. NATURECLEAN - EEC DESAL clears away naturally occurring organics and minerals, as well as contaminants from pollution. NATURECLEAN - EEC DESAL effectively reduces salts, hardness, nitrates, pesticides, color, bacteria, viruses, and the precursors of disinfection byproducts.

NATURECLEAN - EEC DESAL Systems

NATURECLEAN - EEC DESAL custom designs systems; for certain application, pre-fabricate RO plants for fast delivery and easy integration into any new or existing water treatment facility. With a single electrical interface and the necessary hydraulic connections, NATURECLEAN - EEC DESAL systems are on line delivering demineralized water at capacities from 50 gpm to millions of gallons per day.

Process Description

Pretreatment

This procedure is typically required to insure stable, long-term RO system performance and membrane life. In general, surface, sea and wastewaters require more pretreatment than well water supplies. Pretreatment may include clarification, filtration, ultra filtration, pH adjustment, removal of free chlorine, antiscalant addition and 5-micron cartridge filtration.

RO Membrane Elements

Based on superior membrane properties (high rejection of TDS, silica and TOC and excellent chemical and biodegradation resistance), NATURECLEAN – EEC uses spiral-wound thin-film composite RO elements manufactured by all the industry's leaders. With large-volume buying power, NATURECLEAN – EEC is a low cost supplier of membranes, system spare parts, antiscalants, membrane system cleaning chemicals, cartridge filters and UV sterilizers.

NATURECLEAN – EEC DESAL - RO System Design

Spiral-wound RO membrane elements are housed in cylindrical pressure vessels, with as many as seven interconnected elements per vessel. Vessels piped in parallel constitute a single hydraulic stage, which typically yields 50% recovery of product water based on the feed rate. The first-stage concentrate usually feeds one or more downstream stages. Two-stage systems yield about 75% recovery; three-stage systems yield about 85%, depending on concentrate chemistry. Pressure vessels are staged in a tapered array to provide adequate feed/concentrate flow rates and maintain proper differential operating pressures

NATURECLEAN – EEC completely integrates trailer and skid-mounted systems for simple installation and operation. Standard units are alarmed for feed pressure and equipped for remote operation with automatic start/stop signals from a level-sensing switch at the product water tank. Standard components include 5-micron cartridge filter, multistage centrifugal feed pump and conductivity meters. Options include PLC control, additional alarm points, pH meter, control, clean-in-place (CIP), chemical addition subsystems, variable frequency drive pumps, remote monitoring and comprehensive SCADA packages to enhance system analysis interface.

NATURECLEAN - EEC



NATURECLEAN – EEC manufactures RO plants for both sea and brackish water and UF systems for tap water and industrial applications.

When it comes to Drinking Water Plants from NATURECLEAN – EEC, “nothing is standard”.

Each plant is carefully designed to the clients’ application so as to optimize the effluent quality and membrane life.

The client can rest assured that he/she will have quality WHO approved water, a RO/UF systems that is easy to operate and maintain, and is designed to last for many years.

The NATURECLEAN – EEC DESAL system is skid mounted, fully automatic, and ready to be operated once installed.

We’re on the Web!

See us at:

Natureclean.com

NATURECLEAN
P.O. Box 1109
Ukiah, Ca 95482

David Milner 707-489-4319
dmilner@natureclean.com

Bob Dunlap 707-391-5432
bdunlap@natureclean.com

Steve Dangler 707-489-7613
sdangler@natureclean.com

FAX: 707-462-3274

Systems Throughout the World

- Royal Caribbean Cruise Line 
- Coca - Cola 
- USA Military 
- Volkswagen 
- Toyota 
- US Coast Guard USCG 
- Chevron 
- Bechtel Engineering 
- Texaco 
- The Norwegian King's Ship 
- US Air Force 
- The Senai University 
- Statoil 
- Norsk Hydro 
- Motorola 
- Exxon 
- Arco Oil and Gas 
- American President Line 
- Pacific Bell 
- GREENPEACE 

WE BRING THE WORLD TO YOU

It is time to overcome the challenges with fresh thinking and bold new ideas. We are finding solutions to the environmental crisis. Together we can invest in the future to achieve balance with our Earth. We use technology and nature for a clean environment.

Our business philosophy is one of sustainability and responsibility. It is based upon respect for the natural environment; we are all dependent as well as considerate for human and social factors.

We understand that bacteria and other micro-organisms are the basis for life on this planet and that they have been cleaning up the environment for millennia and will continue to do so. We know that by working with nature instead of against it we can eliminate toxics from our living and working areas and re-claim land taken out of production due to mineral salts and other pollutants.



Celebrate the Resolution of World business. No longer are we bound by borders. We can bring the best to each country for its best interest. Together we can share the knowledge of the World. Stay on the edge of the future with NatureClean.