

## Compact Modular

### Nanofiltration Plant

50<500M<sup>3</sup> / DAY

Nano-Filtration Table of Treatment			
Parameter		Raw Water	Final Water
pH	-	2.0 > 9.5	Typically 8.0
Turbidity	FTU	Max. 10	Less than 0.2
Colour	Deg H	Max. 430	Less than 2
Iron	µg/l	Max. 3670	Less than 7
Total Mn	µg/l	Max. 430	Less than 10
Total Al	µg/l	Max. 860	Less than 9
Susp Solids	mg/l	Max. 5.0	trace
TOC	mg/l	Max. 43	Less than 10

## THE MODULAR

# WATER TREATMENT

EXPERTS

A range of robust solutions based on Nanofiltration treatment for the supply of excellent quality water from extremely poor quality raw water sources. This range is particularly suited to municipal water supplies and industrial applications. Typical plant capacities range from 50 to 500m<sup>3</sup>/day.

Each plant is contained within an innovative Transportable Treatment Unit (TTU). This is a plug and play water treatment plant housed within a steel frame building and base frame which can be fully assembled, factory tested and commissioned within our purpose built facility. All plants are fully proven before leaving our premises.

### Our compact modular range includes the following as standard

- BIM compliant autodesk inventor 3D model
- Factory assembly
- Factory testing and commissioning
- Duty standby equipment
- Water quality sampling instruments
- Integrated HMI (human machine interface)
- Telemetry
- IMCC (intelligent motor control centre)
- Profibus communications network
- Remote plant control

### The following ancillaries / enhancements can be provided

- Reverse osmosis
- Chloramination
- Plumbosolvency dosing
- UV disinfection
- Soda ash dosing (pH correction)
- Mess facilities

### DISINFECTION DOSING

Sodium hypochlorite dosing including

- CHEMICAL TRANSFER
- DILUTION & STORAGE
- DOSING PUMPS

### PRE-FILTRATION

- 2MM BASKET STRAINERS
- REMOVAL OF COARSE SOLIDS

### FEED & RECIRCULATION PUMP SKIDS

### EMERGENCY EYEWASH STATION

### NANOFILTRATION MEMBRANES

Nanofiltration membranes remove

- COLOUR
- CRYPTOSPORIDIUM
- PARTICLES AS SMALL AS 2000 AMU

### LIMESTONE CONTACT TANK

For pH correction and remineralisation

### CLEANING / HOLDING WASTE TANK

Contained within TTU base frame for storage of membrane by-products which are trickle fed to the waste discharge

### FINAL WATER UPLIFT PUMPS (IF REQUIRED)

### CHLORINE CONTACT PIPE

Contained within TTU baseframe

### RAW WATER

### TREATED WATER TO SUPPLY



### Why Nanofiltration?

- No chemical / sludge removal
- Fully automated membrane cleaning system
- Low chemical usage
- Unmanned operation
- Remote monitoring
- Profibus enabled
- Duty stand-by system
- Energy efficient management system