TRANSPORTABLE TREATMENT UNIT

Lean Spec Modular

Nanofiltration Plant

20<100M³ / 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 lean specification, 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 private/small municipal water supplies or light industrial applications. Typical plant capacities range from 20 to 100m³/day.

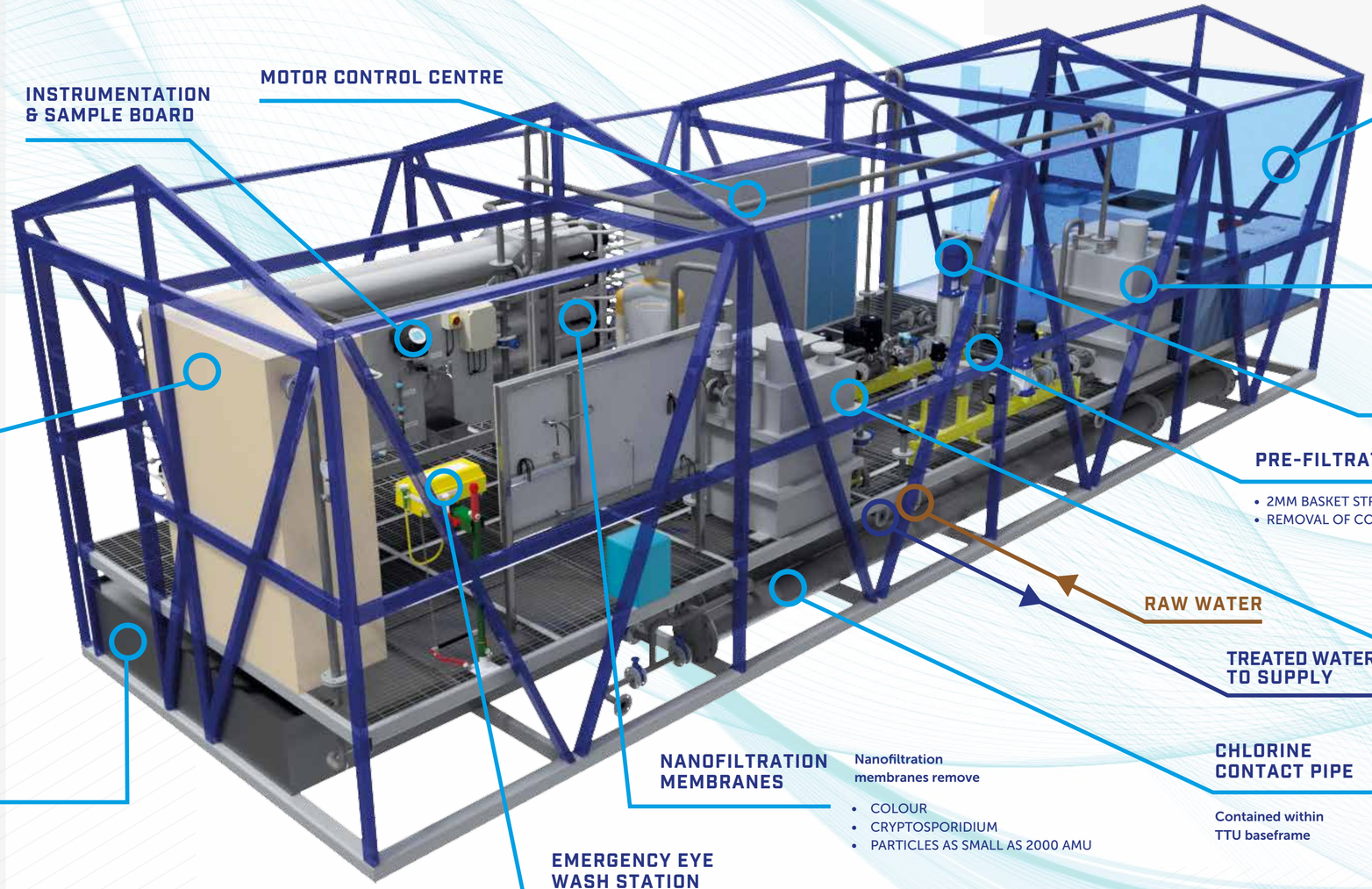
Each plant is contained within an innovative Transportable Treatment Unit (TTU). This is a plug and play water treatment plant housed within a steel frame building which is fully assembled, factory tested and commissioned within our purpose built facility. All plants are fully tested and accepted before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

Our lean spec treatment range includes the following as standard

- BIM compliant autodesk inventor 3D model
- Factory assembly
- Factory testing and commissioning
- Duty only plant/equipment
- Water quality sampling instruments
- Integrated HMI (human machine interface)
- Telemetry

The following ancillaries / enhancements can be provided

- Duty/standby plant and equipment
- IMCC (intelligent motor control centre)
- Profibus communications network
- Remote plant control



INSTRUMENTATION & SAMPLE BOARD

MOTOR CONTROL CENTRE

MESS FACILITIES

Typically comprises

- COMBINED LABORATORY AND CANTEEN
- WC

CLEAN IN PLACE (CIP) TANK

FEED AND RECIRCULATION PUMP SKIDS

PRE-FILTRATION

- 2MM BASKET STRAINER
- REMOVAL OF COURSE SOLIDS

DISINFECTION DOSING

Sodium hypochlorite dosing including

- CHEMICAL TRANSFER
- DILUTION & STORAGE
- DOSING PUMP

CLEANING WASTE HOLDING TANK

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

RAW WATER

TREATED WATER TO SUPPLY

LIMESTONE CONTACT TANK

For pH correction and remineralisation

NANOFILTRATION MEMBRANES

Nanofiltration membranes remove

- COLOUR
- CRYPTOSPORIDIUM
- PARTICLES AS SMALL AS 2000 AMU

CHLORINE CONTACT PIPE

Contained within TTU baseframe

EMERGENCY EYE WASH STATION

TRANSPORTABLE TREATMENT UNIT – PRODUCT BROCHURE

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Why Nanofiltration?

- No waste sludge's produced
- Fully automated membrane cleaning system
- Low chemical usage
- Unmanned operation
- Remote monitoring
- Energy efficient management system

ROSS-SHIRE ENGINEERING