

CALCLEAR WATER

DESCALING WATER PROCESS SYSTEMS

CALCLEAR Hydro 200 with prewound 100 -200mm diameter pipe

The CALCLEAR system is unique in combining:

- ❖ An effective de-scaling and scale prevention system (without the use of chemicals).
- ❖ An economical supply of softened water (without salt or back washing).

In simple terms, the CALCLEAR technology works by changing the mineral crystals in water into tiny particles, thereby offering a treatment that is both prevention and cure for most of the scaling and corrosion problems caused by water.

CALCLEAR is an EMF pretreatment water system to prevent scaling of membranes and pipes and provides softened water. The CALCLEAR Units create an EMF field which keeps minerals in solution and reducing scale formation without chemicals.

HOW CALCLEAR SOLVES THE PROBLEMS.

- Ionises entire water flow to which it is fitted.
- De-scales plumbing , boilers, pipework, pumps, valves, washing systems, and all appliances connected to the treated flow, whilst still in service.
- Saves on energy bills – no scale to heat
- Saves on repair and service bills
- Prolongs equipment life
- Reduces need for acid de-scaling
- Minimises chemical water treatments – makes detergents more effective
- Minimises equipment downtime

- Minimises water pre treatment
- Minimises effluent treatment.
- CALCLEAR COMPUTER PROGRAMME runs on approx \$25 electricity per annum
- CALCLEAR is maintenance free
- CALCLEAR uses NO CHEMICALS

WHERE CAN I USE IT?

CALCLEAR USES AND APPLICATIONS.

The CALCLEAR Water Conditioners can be used in Kitchens, Restaurants, Fast Food Outlets etc. to de-scale whilst still in service:

Water Heaters ,Dishwashers (Cutlery, crockery and glassware dry residue free and sparkle again)
Steam Ovens / Ice Making Machines , Irrigation systems, Industrial applications

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CALCLEAR can also be used in Laundries to :

- Reduce detergents and chemical needs
- De-scale boilers , heating elements and appliances whilst still in service
- Reduce cooling tower scaling *Economically soften your water supply
Reduce energy consumption * Reduce boiler heating time
- Reduce maintenance and repair bills
- Increase service life of appliance and fittings

This has been successful in treating scale build up in pipes caused by all heavily mineralised water and improved other such costly problems as the treatment of all minerals including calcium, manganese, silica, iron & iron bacteria build up in pipework and membranes.

BENEFITS : –

- 1) **Capex savings** - fewer fittings, salt softener, descalants, and filter equipment are required.
❖ Simple Installation –

CALCLEAR PATENTED Prewound pipes are supplied to ensure customised application. These are installed before the RO membranes to provide treated water keeping minerals in solution to the process and prevent scale formation. Because load current is a variable under constant scrutiny by the microcontroller, this means that fault conditions can be easily detected and therefore alarms can be generated should a coil go open-circuit for example. This is a function not available on other systems.

2) Installation customization -PROGRAMMING OUTPUT

One of the benefits of the present CALCLEAR'S computerized design allows for factory **programming output** which adapts the strength of current required to suit varying distance from controller to coils . Similarly frequencies are able to be programmed to suit varying water quality and mineral analysis. The 2A current delivers a powerful field which provides a considerable margin to guarantee effectiveness in the application.

Initial LED's sequence will show RED, then RED/ GREEN and then GREEN whilst operating fully. Any RED lights will indicate failure in a circuit and our technical department should be notified.

3) Energy efficiency –

The CALCLEAR Hydro 80-200 achieves its universality by using a processor controlled current source to maintain the field current at a predetermined setpoint irrespective of the load.

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4.) .Opex saving

CALCLEAR saves on membrane replacement, chemical descalants, electricity, chemicals, salt and maintenance. **Labour savings** are achieved because maintenance is reduced.

5) Environmentally friendly : -able to be Solar powered

The **Calclear** system therefore doesn't have to be tuned and is maximally energy efficient, lending itself better to limited power scenarios such as solar power.

