

## ***The Advantages of Porta Treatment***

**Porta Treatment** offers the benefits listed below. Other treatments may offer many of these, but not all, and for this reason **Porta Treatment** stands out from the crowd:

- **Independent of water source**, waters of radically differing characteristics can be used without altering the treatment regime;
  - No testing of feedwater is ever necessary;
- **Use any water source**. All sources of water are suitable for use from the purest to the most saline or contaminated;
  - Works with "soft water" as well as it works with "hard water";
  - Boiler water chemistry absorbs any differences in water quality;
- **Zero internal scaling** of boilers in all but the hardest of hard water areas;
  - Old scale removed;
- **Zero internal corrosion** of boilers;
  - High carbonate levels in the water prevent corrosion;
  - Boiler surfaces are protected by a layer of magnetite;
- **Zero caustic embrittlement** despite very high boiler water alkalinity;
- **No adherent muds or clays** inside boilers. All suspended solid matter is fully mobile at all times;
- **Significantly fewer washouts**, reduced to one or two a year even in the hardest of hard water areas;
- **Effectively eliminates blowdowns**, a big fuel saving and a reduction in thermal stress. A handful remain necessary in the hardest of hard water areas;
- **Powerful antifoams** control foaming and boiler water carryover;
- **Significantly less wear and tear** in service due to technically pure steam being supplied through a controlled foam layer;
  - Stops build up of material in superheater elements, eradicating overheating and ensuring maximum superheater performance;
  - Stops build up of materials in passages, ports, valves, auxiliaries, around valve and piston rings, valve and piston heads etc.;
- **Zero scaling** inside pipes, injectors etc., effectively eliminated in all but the hardest of hard water areas;
  - Zero scaling in water tanks,
  - Old scale removed;
- **Prevents corrosion** on the water side of tanks and associated items;
- **Treatment continues to work** even when the boiler is not in steam and also whilst treated water stands in tanks, even for prolonged periods;
- **Wide tolerances** for success. Close chemical control of boiler conditions are not required;
- **Rough handling** for chemical dosing. There is no need to measure doses accurate "to the gram" for success and core chemicals are non-harmful.

These factors add up to virtually zero boiler maintenance being required on the water side. The life of the water tanks will be considerably increased, especially when dealing with newly constructed or re-plated tanks.

Boiler component life becomes determined by fireside degradation and external corrosion etc. The water side of boilers are effectively kept "as new" regardless of time in service.

But remember ***Porta Treatment*** cannot solve thermo-mechanical design faults leading to stress failures or incorrect operation and/or maintenance.