

# Your quick start guide to boost boilerhouse efficiency



Running costs have always been important for your boilerhouse (even though some operators and managers don't always focus on it).

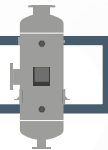
We now live in an incredibly stressful world. We're all under pressure to reduce countless measures from fuel consumption and carbon emissions, to water

use and ultimately... our operating costs. So where is it best to start?

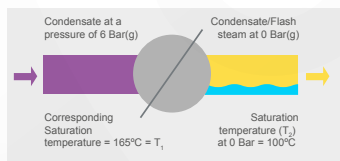
Well, with a few adjustments, your boilerhouse could be cleaner, more efficient and putting more money onto your bottom line.

Here's my quick start guide to boosting your boilerhouse. I promise you, this is well worth the time.

## 3 Flash steam recovery



Flash steam recovery does exactly what it says on the tin; it recovers energy from flash steam. Why? The reason is obvious. Using a flash vessel you can recover energy by separating the flash steam from the condensate.

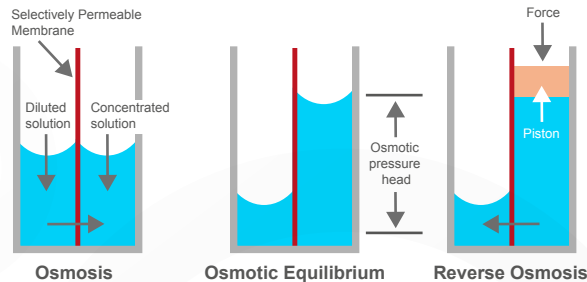


Feeding this back into the system can save up to 26% in energy and recover 80% of heat from blowdown. So, it's a simple bit of kit that packs quite a punch in environmental benefits and cost savings.

## 1 Try reverse osmosis

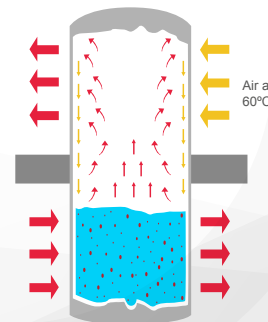
I won't go into the technicalities (because you probably already know), but Reverse Osmosis (RO) is a water purification technology that uses semipermeable membranes with super fine pores that remove 98% of all salts. What's in it for you? Quite a lot actually.

If you extract these minerals from your water, you'll potentially reduce the boiler scaling, lower your energy consumption, reduce water losses and save on maintenance, treatment and fuel. Not bad is it? Try RO for purer water in your system.



## 4 Exhaust gas heat recovery

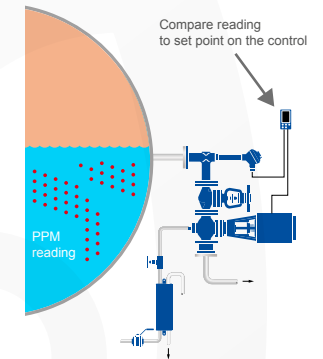
As we all need to find ways to reduce our carbon emissions, exhaust gas heat recovery is a wonderful application for economisers in steam power plants. Recovering exhaust gas heat boosts the temperature of the water before it enters the boiler. This is a good bet for reducing fuel and energy bills as there is less energy needed to heat the boiler water. Carbon emissions are significantly reduced as well. It's a win / win.



## 2 Use a TDS control

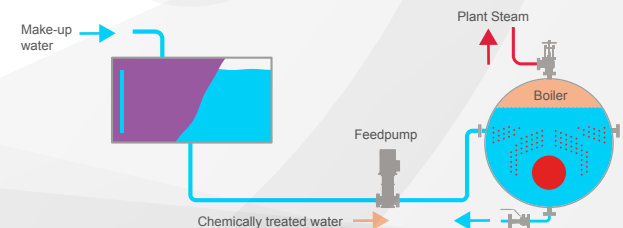
How many of us already use automatic TDS controls? I imagine it's not all of us. If you don't, then you're missing a trick. The automatic control of Total Dissolved Solids measures conductivity in the boiler water, then compares it to a set point specific to the boiler and it will automatically open a blowdown control valve if the TDS are too high.

This is great because it gives you a clean and dry steam supply - essential if you're looking to boost efficiency. It's also better at saving energy and treated water than a manual blowdown. I'll let you do the maths but obviously this'll save you money.



## 5 Steam system conditioning

A clean boiler brings its own benefits but what about the rest of the system? Steam system conditioning improves the overall quality of steam by treating the water and condensate within your system. This type of conditioning service can really bump up the efficiency of your boiler and deliver a whole range of other benefits including reduced chemical usage and greater reliability.



If you need a helping hand with any of the information in this quick start guide, please contact the Spirax Sarco team on [lets.talk@uk.spiraxsarco.com](mailto:lets.talk@uk.spiraxsarco.com) and we'd happy to help.