



# Boiler Solutions



Boiler Optimization Solutions



## Efficiently operating a boiler facility reduces fuel usage, providing major savings in operating costs

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### Boost your boiler's efficiency

Improve your boiler's functionality and extend its lifespan with our advanced treatments that effectively remove harmful deposits, reduce fuel consumption, and safeguard your system against corrosion.

### Fluence approach

Water sourced from cities or wells frequently contains elevated levels of dissolved solids and minerals. These elements have the potential to cause harm to industrial machinery, such as boilers and pipes, by inducing scaling and corrosion. Traditional chemical treatments are costly and still don't entirely prevent these issues.

Fluence boiler optimization introduces a solution using ultrafiltration (UF) and reverse osmosis (RO) to thoroughly remove minerals and dissolved solids, such as silt and salt, effectively addressing the problem of scaling and corrosion. This approach increases the reliability of your boiler system and significantly reduces potential downtime and the costs associated with boiler repairs or replacements, which could dramatically disrupt plant operations. Additionally, it eliminates the safety hazards associated with handling dangerous chemicals.

Our team of highly skilled and experienced engineers is equipped to design custom solutions for boilers of any type and size across various industrial processes. Our boiler optimization strategies prioritize cost reduction, minimal chemical usage, safety, and system reliability.

# Reverse Osmosis

Reverse osmosis is a highly effective water purification process that rejects minerals and ions dissolved in water.

This process, which is used in a variety of applications, is based on the principle of membrane separation, where a semipermeable membrane acts as a barrier to dissolved impurities and allows purified water to pass through.



The reverse osmosis process consists of pumping water at high pressure through a semipermeable membrane, which allows the passage of water and rejects macromolecules and ionized dissolved species (mineral salts).

## Flexibility



Installation of the reverse osmosis system can be done inside your plant or housed separately using our EcoBox system.



- No operator needed
- Monitored remotely
- Combined or separate
- Pre-engineered or skid-mounted
- Pick a size 20' or 40'



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# Advantages:



Energy/CO2  
savings

5%



Chemical  
use down

80%



**It's hard to reduce energy costs and improve sustainability to get an ROI in one year. Here's how you do it...**

Maximizing the efficiency of boiler operations is not just an engineering goal; it is the MOST powerful lever you have to drive down operating costs.

By utilizing the Fluence Boiler Optimization systems and minimizing fuel usage, you are not merely saving on expenses, we are reducing CO2 emissions, an act of economic and environmental stewardship.



# Say YES and:

**Save money  
and increase  
efficiency**

**Reduce  
water  
softening  
expenses**

**Reduce  
CO2  
emissions**

**Save  
energy**

**Save  
water**

**Save  
manpower**

**Reliable  
operations  
with less  
downtime**

**Extend  
boiler life**

**Prevent  
boiler rupture  
and leaks**



“Fluence can help you save by innovating your boiler operations.”



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