



Improving the availability and efficiency of energy recovery facilities in turning waste into power

EUROPE - UNITED KINGDOM



Safe explosive cleaning

Energy Recovery Facilities

An innovative solution for online and fully automated boiler cleaning that uses safe explosive technology

KEY FIGURES

£0.6m Investment

50% Operational service savings from cleaning each ERF

92.5% High ERF availability - increased efficiency





Facility Facts

Operator:
Veolia Environmental Services

UK ERFs using the technology:

Marchwood ERF in Hampshire

Portsmouth ERF in Hampshire

Tyseley ERF in Birmingham

Challenge

To develop an innovative online boiler cleaning system that provides an alternative to previous soot blower cleaning regimes and delivers accompanying benefits in plant efficiency and availability.

A solution was needed that as well as removing the need for offline manual boiler cleaning would reduce associated running costs by avoiding useful steam loss and tube corrosion.

Objectives

- **Increase plant availability** by avoiding unscheduled downtime for maintenance
- **Enhance production capacity** by using steam more efficiently for power generation
- **Reduce operating costs** by using a more efficient boiler cleaning system with associated benefits in terms of using the steam generated within the boiler more effectively

Our solution

Innovative online boiler cleaning solution for high efficiency ERFs

The explosive cleaning technology consists of a permanent, fully automated system that delivers pressure waves by means of a controlled explosion of combustible gases.

Pressure waves act upon a large area inside the boiler creating short vibrations which break off soot deposits ensuring that heat transfer for steam generation is maximised.

An environmental solution that turns waste into a resource even more efficiently

The implementation of the explosive cleaning system in our Energy Recovery Facilities increases significantly the efficiency of the boilers. As a result the energy generation from waste is maximised.

