



## RECOVERY FACILITY - PIPEWORK

### Client

Waste incineration plant, UK.

The waste incineration plant is situated close to the oldest marine base in Europe. The Royal Navy, being the region's largest energy consumer, saves up to 20 percent of energy costs, through direct procurement of energy from the plant. The incineration capacity of the plant amounts to 245,000 tonnes per year, consisting of household and industry waste. With an efficiency of 49%, the plant performs about twice as well as the average English waste incineration plant.

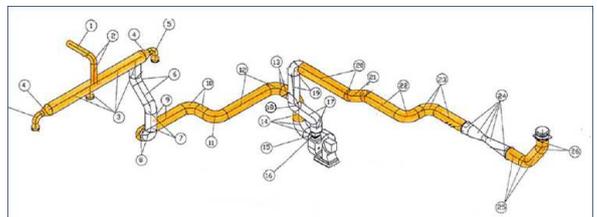
### Scope of work

The client requested a quotation for the application of a specialist coating system to protect the internals of venting de-slagger pipework at the Energy from Waste plant. The plant burns municipal solid waste and industrial and commercial waste, producing IBA (Incinerator Bottom Ash) as a waste product.

Corroserve had been advised that bottom ash vapour travels through the stainless-steel pipework at a maximum temperature of 120°C, the composition of the ash varies dependent on the waste burned, however, the ash can contain elements from municipal waste such as silica, calcium and iron. The client stated the stainless-steel pipes were suffering from pitting that may have been due to the iron sulphides present in vapour, which can settle on the base of the pipework.

### Solution

The quotation included the abrasive blasting and coating application on the inlet and outlet section of the highlighted pipe sections onsite. All non-highlighted pipework was disassembled, removed and transported to Corroserve's workshop, in Leeds, where the blasting and coating work was completed.



Scaffolding was provided for the remaining pipework, to provide access into the pieces and to ensure the pipes were sufficiently supported. This allowed personnel and equipment to enter the pipe, and carry out the blasting and coating works.

### Products

Corroglass 600 series.

### Coating Procedure

The Corroglass 600 series coating system was applied to the internal surface area of the highlighted sections of pipe onsite. Non highlighted sections were coated at the Corroserve workshop. Corroglass 600 Series is a durable coating system with excellent undercutting resistance and abrasion resistance. It is suitable for many chemical environments within the full pH range, making it ideally suited for flue ducting service.



### Coating Procedure Continued...

- Machines surfaces were masked up and protected prior to abrasive blasting and coating.
- Abrasive blasting specified with new abrasive in accordance with ISO 85011- to Sa2½ surface finish, a minimum surface profile of 50 microns.
- Completed a final and thorough blow down, sweep and vacuum clean, to remove dust.
- Applied Corroglass 600 series to achieve a minimum DFT of 1250 microns.
- Carried out thickness testing and spark tested, following adequate cure of the coating.
- Once cured, surface protection was removed, dress edges and completed 100% visual inspection.

### Coating Credentials

*Corrosolve's site coating teams are certified, trained and well experienced in many types of coating projects, including working in confined areas. Corrosolve mobilised two, six-man coating teams to carry out shift work, each time consisting of one Site Supervisor and five Coating Technicians, to carry out surface preparation and coating application on the inlet and outlet pipework. The mobilisation included all plant, equipment and materials required to complete the coating application on the pipework, as specified over a period of 5 days on site.*

**Corroglass 600 Series:** A glass flake vinyl ester acrylic co-polymer. Ideal for use in immersion environments where superior resistance to chemical attack is required. Corroglass 600 Series is also suitable for many chemical environments within the full pH range, it has excellent resistance to demineralised water and good resistance to many solvents. It is also used in aggressive atmospheric or spillage conditions (bund areas) and potable water applications.

