

Challenge

Issue

Severe corrosion of the Corten B steel chimney liner would require liner replacement if left unaddressed.

Goal

Eliminate corrosion in stack liner and avoid possible replacement costs.

Root Cause

Flue gasses enter the chimney at 130°C (266°F). As it cools going up stack, it drops below dew point and acids condense on walls leading to extreme corrosion rate.



The flue gas chimney at wood and peat burning power plant

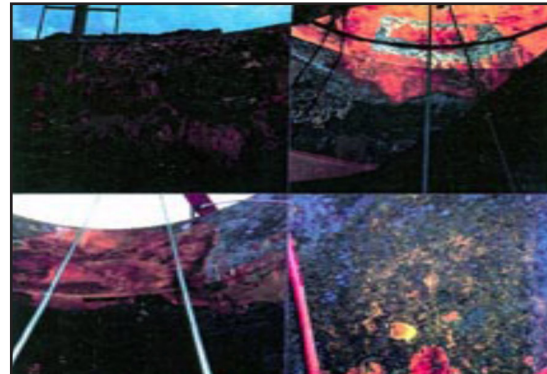
Solution

Preparation

- Decontaminate surfaces
- Grit blasted to near white metal with a 3 mil (75 µm) profile

Application

1. Stripe coat of **ARC S7** applied to all weld seams by brush
2. Apply two coats of **ARC S7** by heated airless plural component spray with a total dft of 40 mils (1 mm)



Severe corrosion in chimney due to condensing acid gases

Results

Client Reported

Inspections at 5 years and 10 years show the **ARC S7** lining in excellent condition.

- Further corrosion has been halted
- Achieved cost avoidance of stack liner replacement



ARC S7 lining still in excellent condition after 10 years of service