Introduction

These instructions cover repair of welding seams on SB615 boilers.

**WARNING:**
- Keep heat input from welding to a minimum. Take breaks from welding if necessary.

Procedure

1. Repair of heat exchanger tubes DIA 30.0 x 1.0 mm
   - If tubes are being closed off, drill holes on each end top and bottom.
   - Clean surfaces with Policlean or Polinox grinder disk.
   - For GMAW welded tubes, use round covers DIA 30 mm with beveled edges, with the beveled edge facing the tube.
   - For GTIW welded tubes use round covers DIA 34 mm.
   - To close off tubes with round covers always weld using GTIW with 1.4576 filler (X5CrNiMoNb19-12).
   - Remove all discoloration with Policlean or Polinox flex disk.

2. Repair of other pressurized stainless steel components
   - Tab all cracks at beginning and end with DIA 6mm drill.
   - Clean out complete length of crack using non-ferrous-oxide grinder.
   - Use GTIW for the root weld with 1.4576 filler (X5CrNiMoNb19-12).
   - Weld the finish seam in GTIW, or GMAW.
   - Remove all discoloration with Policlean or Polinox flex disk.

3. Fill boiler and perform a pressure test at max. 1.3 times overpressure. Hold for one hour with burner operation.

4. Inspecting SB615 for scaling
   - Welding seams typically break where the highest thermal stress occurs.
   - These areas are also prone to scaling.
   - Inspect areas indicated in below drawing by cutting a window in boiler jacket.

Cut a window in the boiler body to look inside.

Check for lime deposits
Lime deposits on this plate? Mud?