

## Technical Service Bulletin:

# Inspection and Repair of Welding Seams

Models: Buderus SB615 Condensing Boiler



# BOSCH

## 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

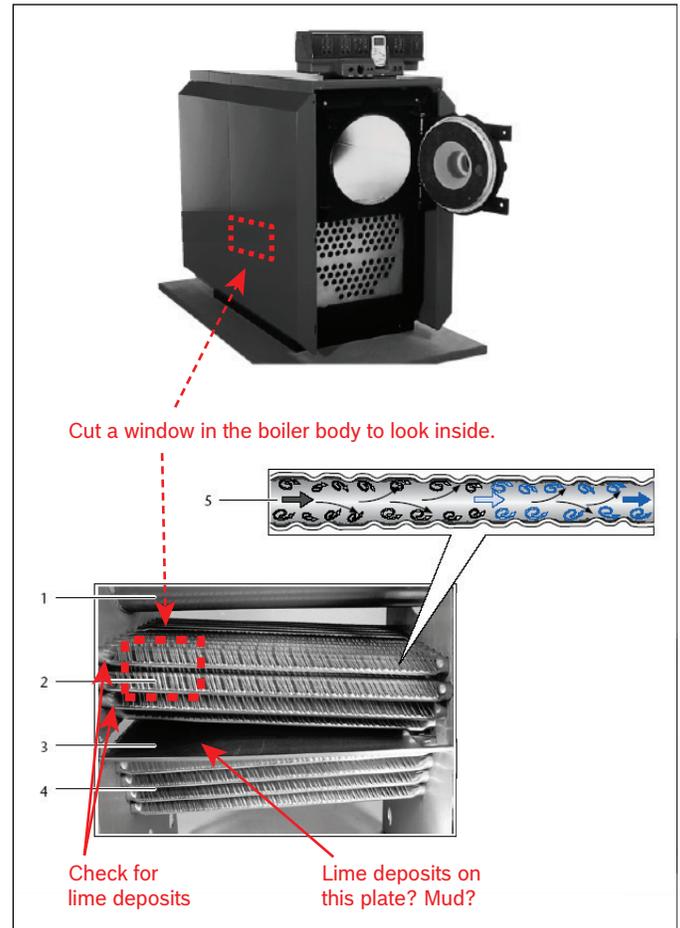
- ▶ Tab all cracks at beginning and end with DIA 6mm drill.
- ▶ Clean out complete length of crack using non-ferrous-oxide grinder.
- ▶ Use GTIW for the root weld with 1.4576 filler (X5CrNiMoNb19-12).
- ▶ Weld the finish seam in GTIW, or GMAW.
- ▶ Remove all discoloration with Policlean or Polinox flex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



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