

OSAKA BOILER

TECHNICAL INFORMATION

OSAKA BOILER MFG. CO., LTD.

Prevention of flashback accident

We supplement an explanation for the prevention of flashback accident reported by Australian Transport Safety Bureau (ATSB) in November, 2007.

* Please refer to the report of ATSB about the detail of accident

http://www.atsb.gov.au/publications/investigation_reports/2007/MAIR/pdf/mair238_001.pdf

We sincerely apologize to all our users for all the concern caused by this accident. During the maintenance of VJ-type burner installed to our OEVC2-type boiler, the flashback accident occurred and the ship's crew was burned by hot wind blasted out of the opened inspection cover.

As a result of the investigation by ATSB, following operating procedure is considered as a cause of this accident.

- 1) After the routine maintenance, the crew ignited the burner manually to check the ignition, but failed.
- 2) Then, re-ignition was tried manually several times, but failed. Therefore large quantities of unburned oil drained into the furnace.
- 3) For the re-adjustment of the burner, the crew performed a pre-purge of the furnace and opened the inspection cover under the condition that large quantities of unburned oil left inside the furnace.
- 4) At this time, flashback occurred by the vaporized unburned oil, and hot wind blasted out.
- 5) Then the crew performed a purge of the furnace for 1 hour. And 2nd flashback occurred when the crew removed the burner unit for the inspection.

Against this background, we are delivering the "WARNING PLATES" and "SAFETY PRECAUTIONS" to all users of VJ and VJP-burner installed to our boiler (auxiliary boiler and composite boiler) through the shipowners, ship management companies, parts suppliers and etc. If these documents have not yet been received by your ships or if additional copies are needed, please do not hesitate to contact us or VOLCANO CO., LTD.

* Please refer to the website of VOLCANO about "WARNING PLATES" and "SAFETY PRECAUTIONS"

<http://www.volcano.co.jp/english/service-news.html>

We emphasize that this flashback was not the boiler specific accident. Our OEVC2 type composite boiler, which was mentioned in the report of ATSB, has a general structure including the furnace and refractory, which is similar to other boiler makers.