



ABN 88 067 519 331 ACN 067 519 331
6 DOYLE AVENUE UNANDERRA NSW AUSTRALIA 2526

Postal Address:
PO Box 544
Unanderra 2526
NSW Australia



Phone: +61 2 4271 6469
Fax: +61 2 4271 4648
Web Page: www.refractech.com.au
e-mail: refractech@ozemail.com.au
e-mail: sales.refractech@ozemail.com.au

John A. Pulbrook
Manager, Sales & Marketing
www.refractech.com.au

Mobile: 0407 716469

sales.refractech@ozemail.com.au

THERMBOND REFRACTORY BULLETIN

OCTOBER 2008

Application Report

Industry Mineral Processing Industry- Plant Power Boiler

Description of Equipment: Coal Fired Power Boiler- Western US

Problem: Minimize downtime during plant outage. Refractory cure-out and dry-out are the bottleneck

Solution: Gun, ram, and cast appropriate Thermbond product in wet bottom ash hopper, wind box, and burner throats.

<p>One wall of wet bottom ash hopper gunned with Formula 6 AG</p>	<p>Wind box to be cast with Formula 8B an insulating Thermbond product</p>
<p>Placing Formula 15R by hand before Ramming into place with bench rammer</p>	<p>Burner throats near completion</p>

Product Being Replaced: Conventional castable refractories

Savings Using Thermbond: Approximately 3 days of downtime eliminated and over \$60,000 in gas costs for longer, more controlled, firing in required for conventional refractories.

Products Applied: Formula 6AG was gunned 9 inches thick in the entire bottom ash hopper. Formula 8B was installed in the burner wind boxes, and Formula 15R was rammed into the burner throats.

Method of Installation: Gunning, ramming, and casting.

Scope of Work: The minerals processing customer who owns the power plant previously used Thermbond for time saving and performance benefits on a much smaller scale and specified it for this outage. Nearly 30 pallets of Thermbond were installed during this outage. A large, well known, refractory contractor from California performed the tear-out, anchor placement, and refractory installation. Their knowledge of Thermbond products was instrumental in meeting the deadline set by the customer. The ash hopper was completely relined with 9" of Formula 6AG. Rebound rates averaged between 10-15% depending on the crew and location in the ash hopper being gunned. Formula 8B, an insulating castable, was chosen to line the wind boxes attached to the burners. The wind box mixes preheated air before it is fed into the burners. Finally Formula 15R was rammed into 8- 4' diameter burner throats.

The work was completed on time and the customer put the boiler back into operation without any problems. It was a very successful Thermbond installation and the customer intends to use Thermbond on future outages.

Installation Date: July 2008