

# ARC LINING SURFACE RELEASE PROPERTIES



## CASE HISTORY

1800 352 228    [WWW.IMATECH.COM.AU](http://WWW.IMATECH.COM.AU)

 **IMATECH**  
INNOVATIVE INDUSTRIAL SOLUTIONS

# SUMMARY

## ARC LINING SURFACE RELEASE PROPERTIES

**INDUSTRY** : Mines and Refineries

**PRODUCT** : ARC S2

**PLANT** : Refinery

**LOCATION** : QLD, Australia.

**DATE** : March, 2009.

**SUMMARY** : ARC composite surface release properties reduce maintenance.

**RESULTS** : Original lining is still performing well after two years as of November, 2010. As a result, this lining will now be utilized in the gypsum launders where build up is also problematic.

# PROBLEM DESCRIPTION

These mixer bowls receive intermittent, metered amounts of zinc dust which is then sprayed with water to both hydrate and flush the slurry mixture down through their outlet and along a system of launders.





# PROBLEM DESCRIPTION



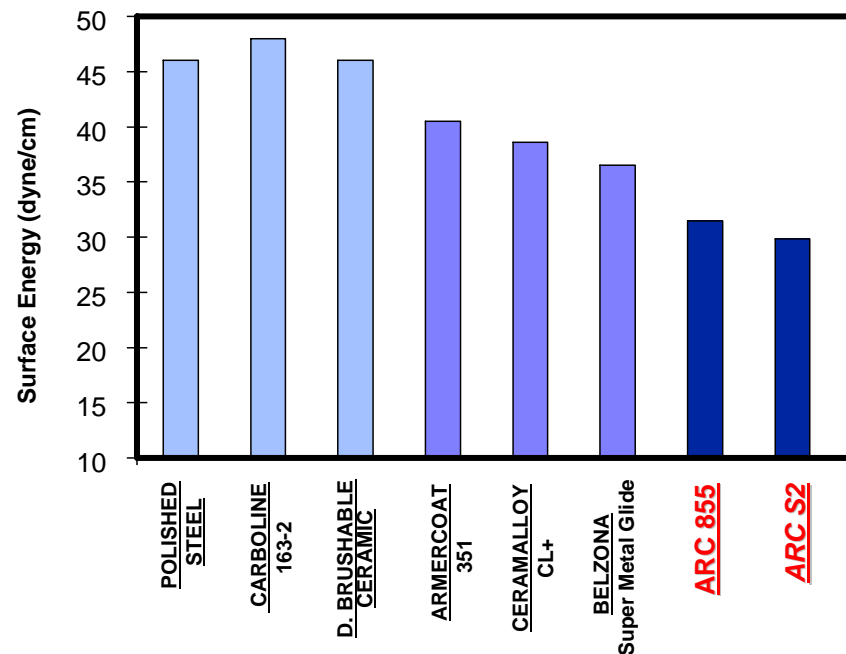
The nature of this slurry resulted in continual hang ups and plugging of the mixers and the launder system below it.

In an effort to improve the efficiency of this system and to reduce the level of maintenance, ARC S2 was selected as a lining due to it's release properties.

# SOLUTION

- ARC S2 was selected over a traditional PTFE lining. This was based on the results Imatech has had with paper rolls and with ID fans where the release properties have been proven.
- In this case, application of ARC S2 was more cost effective and required a much shorter lead time.

**SURFACE ENERGY FOR VARIOUS PRODUCTS**



# SOLUTION

All launder internals were also lined with ARC S2.





# RESULTS

- IMATECH was originally advised that any benefit would be observable after 1 week, as the unlined mixers typically plugged within a week if not continually maintained.
- Six months on and the original mixers and launders have not plugged.
- There is a little build up from airborne dust landing on the outer launder sections which are not in the slurry stream but this is easily wiped clean by hand once a week.
- The customer is looking at installing covers to eliminate this and achieve a maintenance free system.



# CONTACT US

Let us help you find out how our ARC composites can improve your operations and save you time and money.

Toll free : 1800 352 228  
International : +61 2 8853 3000  
Email : [imatech@imatech.com.au](mailto:imatech@imatech.com.au)  
Website : [www.imatech.com.au](http://www.imatech.com.au)