

Outotec (Australasia) Pty Ltd Supports Alcan's \$2.4b Gove Alumina Refinery Expansion



GLOBAL LEADERS OF ALUMINA CALCINING TECHNOLOGY STANDARDISES WITH INTERGRAPH SOLUTIONS

BACKGROUND:

As part of Alcan's \$2.4b AUD expansion of its Gove alumina refinery, Outotec was contracted to provide detailed design and engineering of three calciners producing alumina with the capacity of 3500 tones per day (TPD).

The 'G3 project', one of the largest investments ever undertaken in Australia's Northern Territory, will increase the existing plants' capacity from 2 to 3.8 million tonnes of alumina per annum, enabling Alcan to meet the ever increasing worldwide demand.

In addition to the design and delivery of proprietary equipment, Outotec provided advisory service for the fabrication, pre-assembly, erection and commissioning of the two calciners that will be installed in this phase of the Alcan project.

Calciners take a hydrate feed into the process plant to produce alumina. Using Intergraph software, Outotec's front end design for the calciners was completed in Europe, and the design team mobilised and moved operations to Brisbane, Australia to complete the detailed design. Two of the calciners have since been pre-assembled into modules by sub-contractors in Thailand and shipped to Gove.

OBJECTIVES:

Outotec needed to produce detailed design documentation and the key equipment for Alcan to construct the calciners. Given the increase in market demand, outside influences meant project design completion was required in six months – streamlined design operations needed to be swift and effective.

PROFILE:

Name - Outotec (Australasia) Pty Ltd

Web site - www.outotec.com

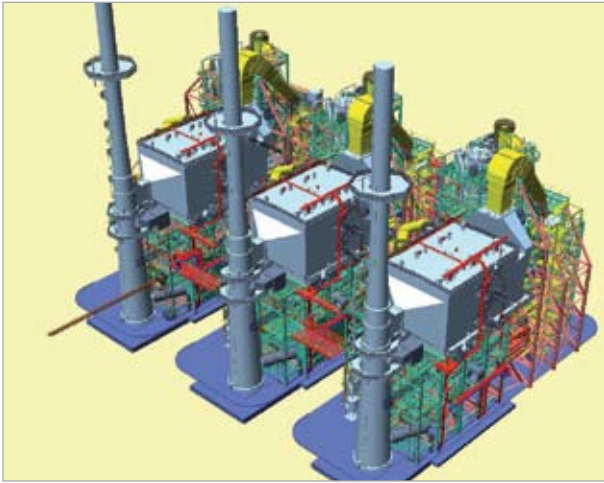
Outotec (Australasia) Pty Ltd, formerly known as Outokumpu Technology, is a global leader in designing, developing and supplying tailored plants, processes and equipment for the minerals and metals processing industries. Outotec, which employs 10,700 people in over 40 countries, is able to draw on unparalleled experience in metals production and processing and are global leaders with alumina calcining technology.. With a long history of operating throughout the entire mine-to-metal chain, their technology and equipment is relied upon around the world to deliver high quality and cost-effective production.

PRODUCTS USED:

- Plant Design System (PDS)
- SmartPlant Review (SPR)
- ISOGEN
- INtools

“ We used SmartPlant Review closely with the client as a tool to show them the product as it was being designed – the ability to keep them up-to-date under tight timeframes was a real advantage. ”

*David Cook
Chief Plant Designer, Outotec
(Australasia) Pty Ltd*



3D design: the three calciners



From a north west perspective

SOLUTION:

Outotec has adopted Intergraph software as standard – almost all plant design projects are executed using Intergraph software worldwide. For the Alcan Gove contract the Intergraph solutions included:

- Plant Design System (PDS): for equipment modeling, piping and structural
- SmartPlant Review (SPR): for previewing the design
- ISOGEN: for Isometric generation
- INtools: for instrumentation design

Piping, mechanical, structural and civil designers worked in unison with discipline engineering groups on the time critical project. “The beauty of using all the products together is that the different contributors could work to build up the model simultaneously,” said David Cook, Chief Plant Designer, Outotec. “The integration of the software was an essential factor in meeting project deadlines.”

“We also used SmartPlant Review closely with the client as a tool to show them the product as it was being designed – the ability to keep them up-to-date under tight timeframes was a real advantage,” he said.

For more information, visit www.intergraph.com

ABOUT INTERGRAPH

Intergraph Corporation is the leading global provider of spatial information management (SIM) software. Security organisations, businesses and governments in more than 60 countries rely on the company’s spatial technology and services to make better and faster operational decisions. Intergraph’s customers organise vast amounts of complex data into understandable visual representations, creating intelligent maps, managing assets, building and operating better plants and ships, and protecting critical infrastructure and millions of people around the world.



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