



WHITTLE CONSULTING

BUSINESS OPTIMISATION FOR THE MINING INDUSTRY

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Whittle firm targets big opening

Richard Roberts, 11 May 2009



GERALD Whittle, whose father Jeff had a paternal hand in development of popular modern mine optimisation techniques, has found a way into more of the world's mining boardrooms through an alliance with Australian engineering group Ausenco.

Whittle Consulting and ASX-listed Ausenco this week announced an alliance under which they will jointly offer and deliver a "new enterprise optimisation solution" based on the former's specialised software and methodology, and the bigger global footprint Ausenco has established through acquisitions and expansion since its stock exchange listing in June, 2006.

Semi-retired Jeff Whittle, who with wife Ruth created an international business around various well-known "Whittle" mine optimisation and planning software products between 1984 and 2001, has been technical director of Whittle Consulting since the original software business was sold to Canada's Gemcom Software International. Gerald Whittle is managing director.

Jeff Whittle started working on a blending scheduler for multi-pit bulk commodity operations in 1999 and the program, which expanded to cover other minerals as well as milling and downstream processing operations, spawned what became known as Whittle Consulting's "Global Optimiser". The small company promotes it as "the most powerful long-term mining/processing/production schedule optimiser in existence".

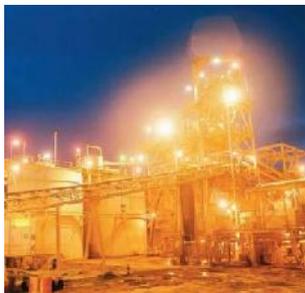


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"The Global Optimiser is based on a proprietary search algorithm, combined with powerful linear programming, thereby avoiding the use of more cumbersome mixed integer programming," the company says. "The result is a reliable and extremely powerful general schedule optimisation solution for mining business, which is capable of handling models of significant size and complexity."

Jeff Whittle is said to be still working on a new version of the software, scheduled for completion late this year but not for sale outside of Whittle Consulting's service offering.



Gerald Whittle said the Whittle/Ausenco "enterprise optimisation" offering built on the Global Optimiser and Ausenco's technical and operational expertise across the mineral processing value chain.

"Whittle Consulting's analysis is considerably enhanced with Ausenco's input on mining and mineral/metallurgical processing operating and design options, not to forget their capital and operating cost inputs," Whittle told **HighGrade**.

"This enables a wider range of possibilities to be considered while keeping the outcomes realistic, practical and implementable. In most cases optimisation studies indicate a change to the way the mine, plant and other downstream systems operate, and most importantly the liaison and flexibility between them. Bedding down such changes in practice involves a deep understanding of the operational issues involved together with the associated costs.

"Our proprietary optimisation software is now so advanced, it is no longer the limiting factor – our appetite for information on technical possibilities can quickly exhaust available data and imagination. Ausenco's breadth of experience over many operations globally helps fill out this detail.



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"Also, we don't need to fear taking on a project with too large scope: Ausenco's depth of experience and personnel means we can manage any challenge. We have demonstrated that the larger the scope and complexity, the greater the opportunities for improvement from this approach. We will optimise a whole mining enterprise, whether that is a single pit and plant, or a complex portfolio of mineral and technical plant assets. This is a major step forward and is going to change the way mining companies look at their businesses in the future."

Gerald Whittle said Ausenco was also now providing specialist program management expertise, "adding their experience and world-class techniques".

"One only has to look at the number of currently suspended projects to recognise there are enormous benefits clients can realise through this new offering," he said.

Whittle Consulting has worked in the past three years for companies such as BHP Billiton, Xstrata, Vale, Newcrest Mining, Kumba Resources and OM Holdings.

Gerald Whittle said Ausenco was well represented in North and South America, with more than 1000 personnel across the region.

"Whittle Consulting has not offered its services there to date so this is a new market for large scale optimisation," he said. "Project and mine owners and operators can benefit significantly from the partnership, which brings together a strong support structure in terms of contacts, logistics, skilled manpower and local knowledge of existing operations.

"Ausenco [also] has a significant energy group and Whittle Consulting is now gaining access into markets where previously the use of optimisation technology has been limited."

Whittle said Ausenco's mining clients would get exposure to "a new strategically important dimension to any project they are involved in".



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"It involves linking the geology, through mine plans to process plant operations and configuration, and logistics in the content of uncertain future metal prices. It means not being fazed by the complexity that involves," he said.

"The result is the identification of value that was previously hidden by the operational detail and the functional, departmental and divisional silos within mining companies. Together we can bridge these barriers and communicate at all organisational levels in the process.

"As I've spent more time with the Ausenco management, I've come to recognise that Ausenco has a corporate view that adding or bringing more value to their clients will always be a quality investment in the relationship with those clients over the longer term."