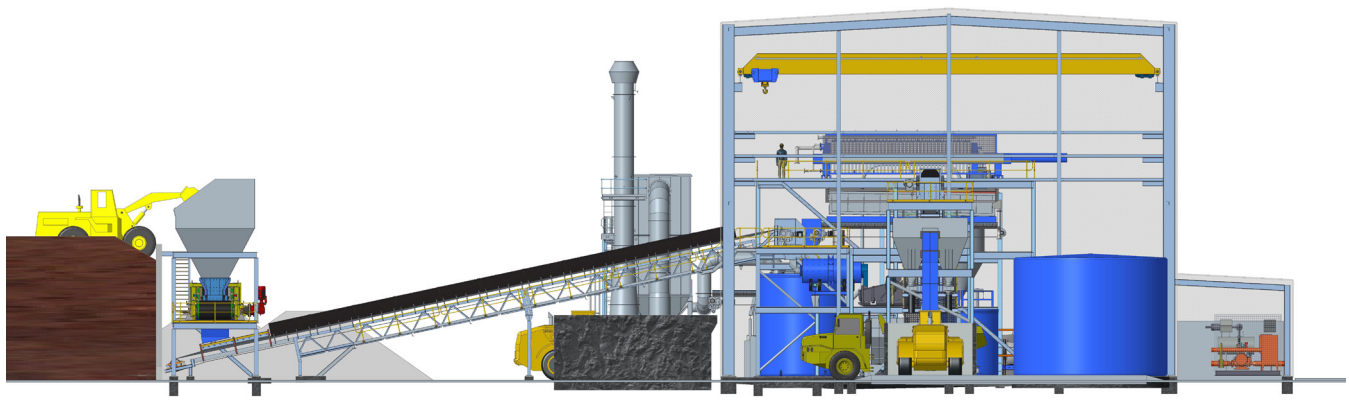


Altech's high purity alumina could be a 'company maker'



High purity alumina (HPA) (Al_2O_3): a high-value material required for the manufacture of LED lights, scratch-resistant (sapphire) glass and aluminium semi-conductor computer chips. There is no substitute for HPA in the manufacture of these products.



A SX-listed Altech Chemicals Limited (ASX: ATC) (Altech), headed by Managing Director Iggy Tan, a highly experienced chemical and mining industry executive, is positioned to cash in on the spectacular 28 per cent annual growth in global HPA demand – a demand that is primarily fuelled by a worldwide transition to LED lighting as the best cost-effective and energy-efficient replacement of traditional incandescent light bulbs, with additional demand increase stemming from the use of sapphire glass by smart phone manufacturers, and the continued steady increase in the manufacture of alumina semi-conductor computer chips.

HPA sells for approximately US\$23,000 per tonne, and Altech's recently completed bankable feasibility study (BFS) sets out the company's plans to construct a 4000-tonnes-per-annum HPA plant at the Tanjung Langsat Industrial Park, Johor, Malaysia. In Malaysia, with its attractive corporate tax rate of 25 per cent and lower overall operating costs, Altech expects to produce finished product HPA at an 'all-in cash cost' of approximately

US\$8140 per tonne (for a gross cash margin of US\$14,860 per tonne) using an aluminous clay feedstock that will be sourced from the company's 100-per-cent-owned kaolin deposit at Meckering, Western Australia.

The financial results from the BFS are compelling: total capital costs for the project are forecast at US\$76.9 million; project payback is 3.8 years, an internal rate of return of 30.3 per cent; annual EBITDA at full production of US\$59.4 million; and a net present value of US\$326 million applying a conservative 10 per cent discount rate.

The company has assumed a project construction period of approximately two years, commencing in the first quarter of 2016, which will see first product hitting the HPA market in the first quarter of 2018, by which time annual global HPA demand will have grown a staggering 2.5 times to approximately 48,000 tonnes per annum, from its current base of 19,040 tonnes per annum.

It is the unique properties of Altech's Meckering kaolin deposit, which is

low in impurities (especially iron and sodium), combined with the three-stage direct kaolin to HPA hydrogen chloride (HCl) leach and crystallisation process that recycles HCl, which will enable the company to recover alumina at high purity levels at such low cost. Conventional HPA producers reprocess refined aluminium metal to obtain finished product HPA, which is a more expensive process due to the requirement to purchase highly processed (and expensive) aluminium as feedstock.

With the BFS now complete, the company has commenced the process of securing project finance, finalising detailed design, and completing permitting and approvals prior to its anticipated commencement of construction early in 2016.

In the words of Altech Managing Director Iggy Tan: 'The results of the BFS have confirmed the company's belief that the unique qualities of its Meckering kaolin deposit, combined with HCl processing to produce high purity alumina, is a technically viable and commercially attractive business case – a potential "company maker"'. 