

Nalco to partner with IIDC to build a park



The central government owned National Aluminium Company (Nalco), which has a 460,000 tonne smelter at Angul in Odisha, was the country's first to propose building a park in equal partnership with the state Industrial Infrastructure Development Corporation (IIDC). More recently, Vedanta, which has built one of the world's largest single site smelters of 1.75 million tonne (mt) capacity, backed by a 3,600 MW power complex, in Odisha's Jharsuguda is in discussions with

the state government to build an aluminium park on an ambitious scale that will house a large number of cables, conductors, extrusion, casting, metal powder and foundry alloy units," said Pati.

Parks of this kind offer in industry lingo, plug and produce converters which get within hot metal, electricity, water and logistics support on the tap leading to major improvements in cost efficiency. It takes about five hours for liquid aluminium to solidify. Well ahead of that, the liquid

undergoes treatment of aluminium through crucible process and then immediately transferred to converting units in parks.

No wonder coinciding with government earmarking land for building the parks, both Vedanta and Nalco are receiving investment proposals from foreign and domestic converters. An aluminium park recommends itself for economy in energy it offers to downstream converters. Ballpark figure is when aluminium products are made directly from hot metal avoiding remelting of ingots, there is energy saving of 30 per cent.

Moreover, as ingots are moved from a smelter to value addition centres over distances, oxidation causes metal loss of up to five per cent. Vedanta says it will be ready to supply up to 15 per cent of its hot metal to the proposed parks at Jharsuguda and Korba in Chhattisgarh.

In China, almost 40 per cent of annual aluminium production of over 31 mt is received by value adding units as hot metal. Ideally, we should build parks on the lines of Aluminium Bahrain and Sohar Aluminium.

Global automotive market expected to grow until 2020

According to a recently published market report, the global aluminium market for the automotive industry is expected to grow at a CAGR of 4.5 per cent during 2016-2020. "With the developing transport and aircraft sector, aluminium's presence in the market is increasing due to its efficiency, cost effectiveness, sustainability, safety, durability and performance. The growing demand for energy-efficient lightweight vehicles will also augment the growth of the global aluminium market for the automotive industry over the next four years," says Chandrakumar Badala Jaganathan, a lead analyst at Technavio for research on metals and minerals.

Based on type, the report categorizes the global aluminium market for the automotive industry into three major segments: Castings and forgings, Extrusion, and Rolled plates and sheets.

Forging is a substitute for casting methodology as it provides high efficiency and reliability. Automotive manufacturers are using aluminium forged products due to high strength, reliability, and economic viability of the parts. In terms of geography, APAC is the largest market for aluminium forged parts. High outsourcing for the production of forged parts in developing countries have increased its demand in the region. The global aluminium casting market is likely to grow at a moderate rate during 2016-2020 period due to the increasing preference for cast aluminium products in the automotive industry.



The global aluminium extrusion market will grow rapidly driven by the demand for lightweight vehicles. In the past, aluminium extruded products were used only for engine mounts, brake components, radiator frames, seat frames, and other minor applications. Now, original equipment manufacturers are identifying new applications of aluminium bars and tubes for high-end equipment like safety components, crash management systems, body-in-white structures, cockpit carriers, and elaborate decorative parts.

The global aluminium rolled product market for the automotive industry is expected to grow at a significant rate driven by the demand from diverse industries such as food and beverage, building, construction, and transportation. The top vendors highlighted by the research analysts in this report include Alcoa, Aleris, Chalco, Constellium, Norsk Hydro, and Novelis.