



Yunnan Aluminum aims to become alumina self-sufficiency by 2020

China's Yunnan Aluminum Co. is all set to further strengthen its upstream business verticals. According to the industry sources, the company has set an ambitious target for itself- to become 100 per cent self-sufficient in alumina by 2020.

At present, Yunnan Aluminum's alumina capacity is 1 million tonnes per year, at 40 per cent self-sufficiency rate. With commissioning of its Phase II 600,000-tpy alumina project in Yunnan's Wenshan and 1 million-tpy alumina project in Laos, its alumina self-sufficiency rate will reach 65 per cent by 2017, and by 2020 it will further rise to 100 per cent. Then its alumina capacity will hit 2.6 million tonnes per annum.

Yunnan Aluminum with an annual aluminium capacity of 1.2 million tonnes operates in other segments of alumina value chain. Its main business includes bauxite mining, alumina refining, aluminium smelting, and aluminium processing.



Inner Mongolia to adopt new power tariff system



All upcoming aluminium projects in Inner Mongolia will now have to adopt a new price-base power tariff system. According to a recent Shanghai Metals Market report, the government has decided to implement a new pricing mechanism, which is based on aluminium prices in the Shanghai spot market.

Under the price-based tariff system, power plant sells power to power grid company at 0.15 yuan/kwh when aluminium prices in Shanghai spot market are 11,500 yuan/tonne. Power grid company charges aluminium smelter 0.1 yuan/kwh fees. That means, aluminium smelters need to pay 0.25 yuan/kwh power tariffs.

Since prices of power sold by the power plant, fees charged by power-grid company and tariffs paid by aluminium smelter owners are all linked in the new system, when aluminium prices in the Shanghai spot market will rise, value of these components will be hiked by a certain percentage accordingly.

AMAG places order with Hertwich to supply Melting and Casting Furnace

AMAG has placed an order with Hertwich Engineering to supply a melting and casting furnace with a capacity of 55,000 tons of aluminum per year including a charging machine. Commissioning of the new furnace is scheduled for mid 2017.

The aluminum industry assumes that worldwide consumption of rolled aluminum products will grow by 70 percent over the next ten years. With this dynamic growth in demand, AMAG started an ambitious enlargement program in 2012 with an initial volume of 220 million euros. In 2016, the company is additionally starting a new rolling plant project (strategy project "AMAG 2020"), with which the capacity should be boosted to more than 300,000 tons per year by 2017. The furnace ordered is part of this enlargement program. With the increase of rolling production, the quantity of production scrap also rises, which needs to be remelted. The furnace is designed for this task.

The tiltable melting and casting furnace is a joint development by AMAG and Hertwich. The first unit of this type has been taken into operation by AMAG in 2013. With a holding capacity of 70 tons this furnace was already of impressive size. The current furnace unit now ordered, with a liquid metal



volume of 110+ tons, once again greatly exceeds the size of the existing unit.

The single-chamber furnace used for melting is able to also take over the function of a casting furnace, if necessary. For heating, two pairs of regenerative burners are installed above the melting bath level. With a specific maximum gas consumption of 500 kWh for each ton of aluminum the plant satisfies the strictest requirements, both in economic terms and also in terms of environmental impact. To ensure clean combustion an oxygen regulation system and separate regulating systems for natural gas and combustion air are provided. An electromagnetic pump ensures thorough metal circulation, constantly high melting performance and homogeneous temperature distribution in the furnace. The scope of supply also includes a rail-guided, pusher-type charging machine capacity: 25 tons, with which the furnace can be charged efficiently in only a few charging cycles.