Chinese transportation sector, the broad prospective market for aluminium products application

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As the second-largest aluminium user after building and construction, the transportation sector accounts for around 16%-17% of the total aluminium consumption in recent years. High speed, heavy load, weight lighting, energy saving, safety, comfort, and pollution reduction are the trends of global transportation sector which provides a good opportunity for the improving aluminum application.

Aluminium demand from China’s transportation sector in 2012 totaled at 4.27 million tons. Three major aluminium users in the transportation sector include automobile, motorcycle and bike, while the percentage of automobile industry in the aluminium demand structure will exceed 70%.

China became the globally-largest automobile manufacturer in 2009, with its automobile output in 2012 surpassed the all-time-high record ever achieved by America. But China’s average aluminium content in passenger cars and commercial vehicles is still much lower than those levels both in North America and Japan. This means a great improvement potential for aluminium application in the automobile industry.

The aluminium demand from automobile industry has always been and will still be the key driving force behind the aluminium demand growth in transportation sector. The aluminium demand from China’s automobile industry was estimated to be 2.85 million tons in 2012.

As the second and third-largest aluminium users, the motorcycle and bike industries have remained relatively stable, whose aluminium consumption has become basically saturated. Although the unit aluminium content is relatively less, the huge production volume has separately made the motorcycle and bike industries become the second and third-largest aluminium users after the automobile industry.

In railway goods transportation, the biggest advantage to using aluminium alloy made train body is the reduction of the dead load of the train body and transfer it into effective load. Urban rail transit also develops very rapidly. Aluminium has been applied to above 80% of urban rail vehicles, 6-12 vehicles/km are needed for the urban rail transportation

There is also a great potential for aluminium products to be widely applied in container and ship building. The aluminium demand from aerospace sector, as a high-end aluminium products consumption sector, represents a rather small percentage of the total demand, but it is recognized as having potential for increased aluminium consumption in transportation sector.
It is far away from being accepted by all walks in regards of its application prospect, the economic benefit and energy saving and emission reduction effect. Its design, development and production for its application in transportation sector are just beginning; the preliminary production capacity has not been formed. It requires government’s related department to strengthen directive guidance and effective publicity and to give supporting policy with regards of the wide application of aluminium in transportation sector.

Biography of Presenter

Mr. Ren Baifeng  
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He is mainly responsible for the event business development and corporate strategic planning. He graduated from China Northeast University in 1989 with a bachelor degree of engineering in Mineral Processing Engineering and then Graduated from Wuhan University of Technology in 1992 with a master degree of engineering in Mineral Processing Engineering. After graduation from the university, he engaged in the nonferrous metals production, nonferrous metals minerals trade in different companies. After entering Antaike in 1998 he mainly involved in the information research and market analysis of lead, bismuth, silver and aluminium. He published over twenty market research reports and engaged in more than thirty large nonferrous metals market research consulting programs. He has worked as the person in charge of 50 nonferrous metals market conferences or international forums responsible for the event planning, sponsor inviting, conference promotion and conference organization.