

Questions from shareholders and investors about UACJ's business and operating environment are answered as follows.

Q How are aluminum sheets manufactured?

A First, an aluminum ingot is melted (melting process) and then impurities are removed and it is formed into a large cuboid of aluminum (slab).

For example, the length of a slab made at Fukui Works can be as wide as 2.3 meters and 10 meters long, and weigh as much as 32 tons.

Next, the slab surfaces are scraped and the slab is treated by heating to a maximum of 600°C to ensure a uniform slab temperature. The slab is then sent to a hot rolling line where a machine

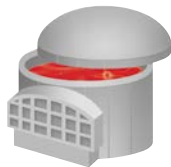
presses it into a sheet as thin as about 3mm, which is then rolled up into a coil (hot rolling).

Subsequently, sheets are further rolled by a cold-rolling machine (cold rolling) while constantly controlling the sheet thickness and flatness. The strength of the sheet is adjusted according to its application. Finally, finishing (e.g., surface treatment and coating) is applied, depending on which product it is used for, such as cans, before being delivered to the customer.

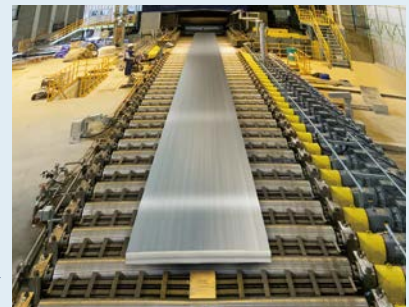
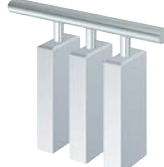
Aluminum manufacturing process



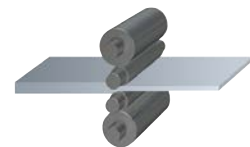
Melting



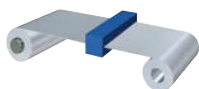
Casting



Hot mill rough rolling



Finishing inspection/packaging



Cold mill rolling



Hot mill finish rolling



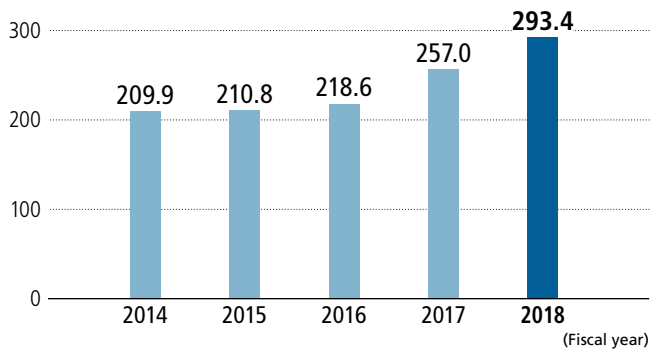
Q What is UACJ's position in the Japanese and global aluminum industries?

A With global sales volume amounting to 1,094 thousand tons in fiscal 2018, UACJ Group maintained its number-one position in Japan, and continued to operate on a scale similar to world-leading aluminum manufacturers such as Novelis Inc. and Arconic Inc.

Q What is the ratio of UACJ sales and sales volume for overseas markets?

A UACJ aimed to expand its global supply network under its previous mid-term management plan, Global Step I. By making steady progress towards that goal, the ratio of overseas sales to total sales increased from 36.7% in fiscal 2014 to 44.4% in fiscal 2018, and sales volume to overseas markets has increased every year.

Ratio of overseas sales to total sales (Billions of yen)



Q How is aluminum important for reducing the weight of automobiles, and which automobile parts are made of aluminum?

A Aluminum is lightweight—about one-third the weight of steel—as well as strong, easy to process, resistant to corrosion, thermally conductive, and recyclable. Due to those excellent properties, it has been adopted for major automobile components such as engines, transmissions, and wheels. In recent years, its applications have been growing to include automotive body sheet and frames as automakers prepare for stricter fuel efficiency

Q UACJ has substantial interest-bearing liabilities. How does the Group feel about the soundness of its financial standing?

A The Group is actively making advanced investments with an eye toward future growth based on the growth strategy stipulated in the mid-term management plan. Borrowing is therefore increasing at present, but we will soon enter the payout period. We will continue with Group management emphasizing a balance between financial soundness and investment.

Q Do fluctuations in the primary aluminum ingot price affect UACJ's business performance?

A The primary ingot prices of aluminum and copper, which are the main materials utilized throughout the Group, are always fluctuating according to the market environment. The selling prices of our products are basically "Primary ingot price + Processing fee (roll margin)," and this fluctuates in parallel with the ingot market price. As we have prior arrangements with our customers to adjust prices according to market fluctuations, business performance is not largely affected by such fluctuations.

* Please refer to the graphs on page 47 for data on ingot price trends.

Q Please explain about "inventory valuations," which are referred to in the explanatory note on profits.

A It is the profit or loss generated by the difference between the primary ingot price, the basis of UACJ's sales price and the actual price of the ingot when purchased, and the difference between UACJ's purchase price and the aggregate average shipping price of the inventory. If we purchased aluminum ingots when the price was high and the price later falls, the inventory valuation becomes negative. In contrast, if we purchased aluminum ingots when the price was low and the price rises thereafter, the inventory valuation becomes positive.

standards in various countries effective from 2020. Against that backdrop, the UACJ Group is aiming to provide solutions for reducing the weight of automobiles with aluminum, and working to supply a diverse range of automotive aluminum parts and components throughout the Group as a priority measure in its mid-term management plan that commenced in fiscal 2018.

