

# Garnering the trust of society by improving our cultivated assets

The UACJ Group utilizes technological prowess and manufacturing expertise cultivated in the past to create new value. This includes giving careful consideration to the environment and having a corporate management that works harmoniously with society.

Employee training and the effective use of human resources are also vital for taking business to the next stage and creating new value. Accordingly, we make every effort to create work environments where every employee can attain his/her full potential.



# Technological Prowess



## Research and Development

### Pursuing New Possibilities in Aluminum

Discovered 200 years ago and used in industrial manufacturing for just over 120 years, aluminum is a “young metal” with many unknown properties. The UACJ Group is fully committed to in-depth research and development as it works to unlock the secrets of aluminum and meet the diverse needs of its customers. Our approach covers everything from the development of foundational technologies related to materials design and manufacturing processes to the development of products and application technologies. We also cooperate with leading research organizations around the world to foster new innovation.

### Research and Development Division as the Hub of Group R&D

Research and development is essential to the UACJ Group, and the Research and Development Division focuses on activities geared towards solving not only issues faced by individual Group companies, but also issues shared throughout the Group. We have combined R&D locations post-merger for the purpose of quickly satisfying customers’ needs while staying one step ahead of the times, doing so through the accelerated development of revolutionary products and technologies. The R&D center also carries out analyses utilizing structural testing equipment such as the latest transmission electron microscopes.



Research & Development Division

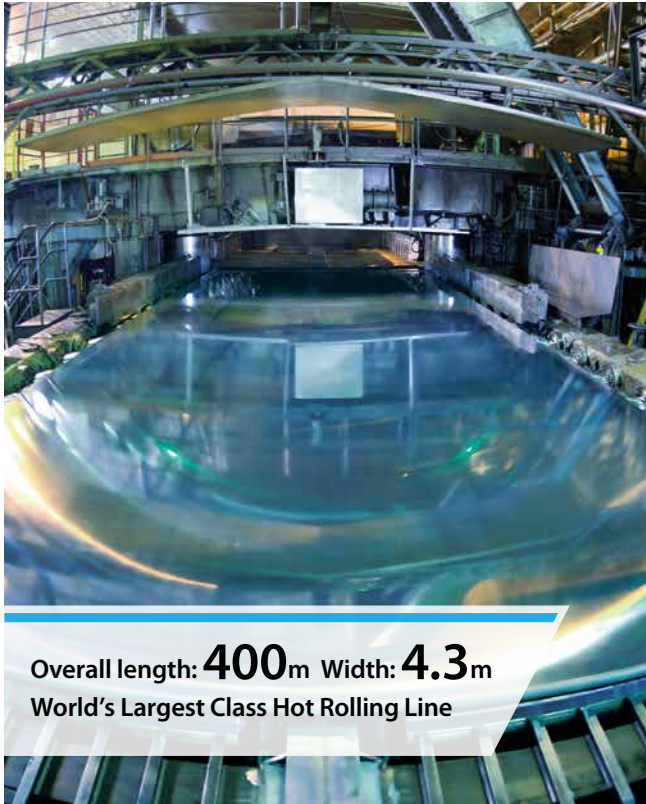
## Manufacturing

### World-class Manufacturing Facilities

The UACJ Group’s competitive strength lies in its manufacturing capability, which is supported by a global network of leading facilities. Covering processes ranging from hot and cold rolling to extrusion, casting and forging, and driven by industry-dominating large-scale operations, we are capable of manufacturing products in bulk and realizing highly efficient mass production unlike any other company.

For example, the hot-rolling line at the Fukui Works, one of our core rolling mills, is equipped with one of the world’s largest rolling presses, stretching 400m in length and 4.3m wide. The line utilizes an automatic gauge control (AGC) system that automatically regulates plate thickness and ensures high-quality rolling. The plate produced by the line is utilized in building LNG tankers and for applications in the aerospace industry, where uniform ultra-wide plates are necessary. The rolling mill also produces industry-leading, high-quality products using one of Japan’s largest top-charging melting furnaces, and is equipped with one of the country’s most powerful stretchers—used for straightening after rolling—with a capacity of 5,600t.

Additionally, all UACJ business sites are equipped with state-of-the-art equipment. Our casting and forging operations in Japan use a 15,000t forging press, the largest in the country. Furthermore, our beverage can lid materials line is equipped with the industry’s first integrated painting line, handling everything from straightening aluminum plate coils to surface treatment, painting, enameling, surface inspection and marking defects.



Overall length: **400m** Width: **4.3m**  
**World's Largest Class Hot Rolling Line**

## Optimizing Production and Creating Post-merger Synergies

UACJ was formed through the merger of Japan's two leading aluminum manufacturers, thereby further strengthening overall manufacturing capacity. To generate more effective synergies following the merger, we have introduced optimal Group-wide production distribution, relegating overlapping product categories to different sites based on the capacities and features of each production site.



**World-leading Thick Plates Control Technologies**

Production categories at the sites have been streamlined. The Fukui Works now focuses on can stock and thick plate for LNG tankers, the Nagoya Works on automotive, litho sheet and fin materials, the Fukaya Works mainly on thick plate—including that for LNG tankers—and the Nikko Works on finishing processes. This separation of roles has increased productivity and cost competitiveness, and will lead to enhancing overall profitability.

## Fulfilling Our Ongoing Responsibility for Stable Supply

In recent years, the worldwide demand for aluminum has been growing in parallel with economic development, especially in emerging nations. This rise in demand has been especially significant in Southeast Asia and nearby regions. With the exception of countries such as Japan, China and South Korea, however, the availability of aluminum is still limited.

In order to meet increasing demand and fulfill our responsibility for supplying aluminum as a manufacturer, the UACJ Group is reinforcing its global supply network, which has hubs in Japan, Thailand and the USA. In 2012, in Thailand, we began construction of the first integrated manufacturing facility established overseas by a Japanese rolled aluminum manufacturer. Fully-integrated manufacturing at the mill began during the summer of 2015. As our core manufacturing base in Asia, further improvements are also planned.

## Quality Control

### Ensuring the Reliable Quality that Customers Demand

At UACJ, a Quality Committee consisting of officers responsible for quality control oversees quality assurance for the entire Group. Business segment-specific quality control groups have also been setup, and the Committee and groups work together with the Engineering and Maintenance Department at the headquarters to promote quality assurance activities. Under this system, the Group promotes business unit-specific quality improvements that are in line with our basic and yearly quality control policies.

For instance, in the case of flat rolled products, we utilize cutting-edge control technologies for the casting, hot rolling, cold rolling and finishing processes, enabling us to produce some of the highest quality products in the industry. We also have a comprehensive quality control system in place that is supported by proprietary expertise unique to UACJ. Because thick plate used in manufacturing aircraft is a critical issue for safety, aircraft manufacturers, in particular, demand strict quality standards. We are one of the few manufacturers worldwide to have acquired AS9100 aerospace industry international quality management certification.

Quality management technologies and expertise cultivated at our Japanese bases are also disseminated to our bases overseas, thereby helping to raise trust in the global marketplace.

# Employee Development



## Training

### Training Competitive Global Human Resources

One of our objectives for management integration was to become “an aluminum industry leader in a competitive global market.” This requires skilled personnel capable of understanding and abiding by our management philosophy and company principles. Rather than simply maintaining the status quo, they must have the constant drive to pursue improvement and innovation.

This requires practical skills and qualities, including “the ability to understand different cultures and act globally;” “act based on the best perspective for UACJ,” and “act with a persistent commitment to improve onsite quality and technologies.”

Employees with such traits are the source of the Group’s competitiveness. In order to ensure the continual nurturing of human capital, our workplaces provide an environment where each employee can grow and feel a sense of personal accomplishment.

### Foundation Based on Employee-specific Training

The Human Resources Development Department of UACJ is dedicated to overseeing the development and training of personnel. This department supports Group companies, helping to ensure that their human resource development and training policies are effective.

The foundation of human resource development and training in the UACJ Group is “employee-specific training.” Utilizing three forms of education (i.e., on-the-job training, course-based education and self-study), our aim is to help each individual visualize their role and how she/he contributes to the company as they grow.

Employees must be aware of, and value their personal growth. But it is also vital for supervisors in the workplace to create opportunities that train and develop employees through their work, and that the managerial layer utilizes a framework that encourages growth. Always mindful of these responsibilities, we make every effort to provide opportunities for learning and growth, including both new employee and stratified training.

Number of Stratified Training Participants in Fiscal 2014

	UACJ headquarters	Affiliated companies	Total
Management	64	60	124
General staff	144	36	180
Engineers	192	205	397
Total	400	301	701

### Nurturing Human Capital with a Global Perspective

One of the guiding principles for employees of UACJ Group companies is to “consistently adopt a long-term global outlook and be flexible to changing environments such as globalization, while respecting the laws, cultures and customs of each country, and contributing to the development of their societies.” We are nurturing global human capital capable of fulfilling this responsibility.

As part of these efforts, we hold English-language business skills seminars focusing on global business approaches. We have also invited trainees from the UATH Rayong Works to Japan for technical and managerial training.

In the future, we will continue introducing tangible training initiatives for local staff employed by our overseas Group companies.

## Promoting Diversity

### Turning Employee Diversity into Group-wide Growth

From the perspective of supporting initiatives to advance into new fields and develop global business further, the UACJ Group actively promotes employee diversity, disregarding factors such as gender, age, nationality and disabilities. In fiscal 2014 new graduate hires included 18 general staff (16 male and 2 female), 21 planning and technologies staff (all male) and 21 engineering staff (all male). We

are proactively recruiting foreign nationals, and have employed a total of six foreign employees since fiscal 2011.

We are actively increasing employment opportunities for women and increasing the number of female managers. As of the end of fiscal 2014, there were 69\*1 female managers in the Group.

We also consider it a social responsibility to provide employment opportunities for people with disabilities. In April 2015, we opened a new Nagoya location for UACJ Green-Net, a special subsidiary dedicated to increasing employment opportunities for people with disabilities. As of June 1, 2015, the ratio of people with disabilities employed by UACJ was 2.33%,\*2 exceeding the legally required ratio of 2.0%.

We also actively reemploy aged retirees, promoting the transfer of technical skills, technologies and expertise from experienced professionals to the workforce. As of the end of April 2015, 215 such workers were employed.

\*1 Includes UACJ Group companies that are not consolidated subsidiaries.

\*2 Ratio calculated includes special subsidiaries system currently consisting of UACJ Green-NET (special subsidiary) and UACJ Foil Corporation (subsidiary) together with UACJ.



## Ensuring Occupational Safety and Health

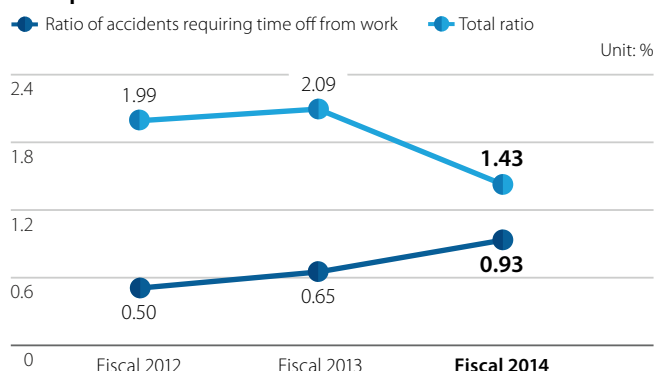
### Creating Anxiety-free Working Environments

Employee safety, hygiene and health are top priorities throughout the UACJ Group, and health and safety activities are promoted with the participation of all employees. In addition to adhering to labor-related laws and regulations, we also introduced a health and safety management system that is overseen by general safety and health managers at each business site. This includes the occupational safety and health management systems introduced and being used at the Nagoya, Fukui, Fukaya and Nikko works. These ongoing activities are geared toward achieving "zero risk of accident in the workplace."

Plans for tangible safety management activities are created by individual factories, doing so in accordance with Group policies on health and safety activities after deliberation by onsite general managers and health and safety officers.

For fiscal 2014, the ratio of accidents requiring time off from work was 0.93, while the total ratio was 1.43.

### Workplace Accidents Status



## Respecting Human Rights and Diverse Working Styles

### Creating Positive Working Environments Conducive to Enjoyable Lifestyles for All

It is the stance of the UACJ Group to ensure an anxiety-free corporate work culture where employees respect each other's individuality and human rights. We have set up consultation hotlines to help prevent and respond swiftly to sexual harassment, power harassment and other human rights issues. Such issues are covered in our stratified training and corporate code of conduct training programs as well.

We also respect our employees' lifestyles and provide a variety of systems, including a childcare leave system, to enrich both home- and work-life. The use of these systems by male employees is also promoted.

### To Be a Good Corporate Citizen

When it comes to CSR, one of the basic policies of the UACJ Group is to communicate with stakeholders to earn their confidence and trust. As a good corporate citizen, we hold annual events, such as the Inari Festival organized by the Nagoya Works and the Summer Festival held on the grounds of UACJ Copper Tube Corporation, to deepen communications with local communities. We have also created the Volunteer Leave System that allows employees to take time off from work to participate in volunteer activities of their own choosing.



Inari Festival (Nagoya Works)

# Environmental Initiatives

## Environmental Management

### Towards Realizing a Sustainable Society

The UACJ Group considers environmental conservation and realization of a recycling-oriented society important management issues. In addition to abiding by environmental laws and regulations and corporate statutes, we are working to reduce the environmental impact of all business activities.

To promote environmental management throughout the Group, we establish UACJ Group Environmental Policies every year, setting objectives for reducing environmental impact during business operations in that year. These policies are developed in accordance with basic environmental policies based on the UACJ corporate philosophy and guidelines. Under the policies, we carefully consider the environment in all stages of the product lifecycle, from development and manufacturing to sales, use and recycling.

### Maintaining Environmental Management Promotion Systems

We have established a Group-wide Environmental Committee, chaired by the Chief Environmental Officer, to promote environmental activities and raise environmental awareness among employees. As a general rule, the committee meets one time each year to discuss policies and goals related to environmental activities. At the same time, the Environmental Safety Division works to ensure the practical implementation of policies and goals.

Additionally, environmental management systems are in the process of being implemented at all Group sites, and nearly all production sites have acquired ISO 14001 certification. Some of our smaller facilities have also acquired Eco Action 21 certification in accordance with guidelines released by Japan's Ministry of the Environment. All sites carry out initiatives based on management systems and work to continuously upgrade certifications.

## Preventing Global Warming

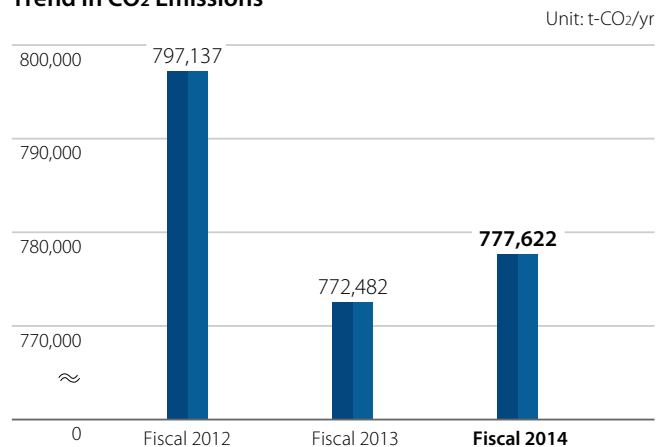
### Saving Energy at Every Stage Beginning from Manufacturing Processes

As a means of contributing to the prevention of global warming, the UACJ Group has introduced initiatives to reduce the use of energy throughout all business activities, including everything from manufacturing and distribution to the use of electricity in offices.

During manufacturing processes, in particular, where energy consumption is high, we are promoting initiatives to improve production efficiency at each site and are switching to substitute fuels, among other measures. As a result of the reallocation of product mixes, which we have been carrying out since the merger, productivity has risen. Additionally, both CO<sub>2</sub> emissions and energy consumption per unit of production have improved over the previous year.

Furthermore, Energy Conservation Subcommittee meetings—cross-departmental meetings centered around the Facilities Department—are held periodically. During these meetings, information is shared between sites and the utilization of effective energy-saving examples is promoted throughout the Group.

### Trend in CO<sub>2</sub> Emissions



\* Measurement Scope: UACJ (Nagoya, Fukui, Fukaya, Nikko), UACJ Color Aluminum, UACJ Extrusion Nagoya (Nagoya, Anjo), UACJ Extrusion Oyama, UACJ Extrusion Gunma, UACJ Extrusion Shiga, UACJ Foundry & Forging, UACJ Foil (Shiga, Nogi, Isezaki), UACJ Copper Tube

## Preventing Environmental Pollution

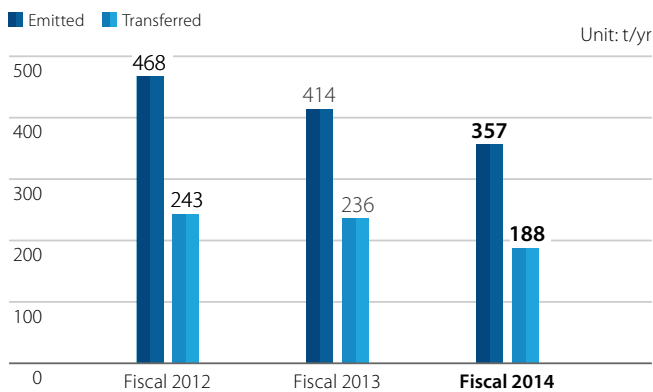
### Strict Voluntary Targets Set to Reduce the Emission of Environmental Pollutants

The UACJ Group has established its own voluntary emissions targets for air, water and soil pollutants, and is committed to maintaining them. These targets are stricter than those required by laws, regulations and agreements.

Regarding initiatives for chemical substances, all Group companies record the volumes of targeted substances handled, emitted and transferred in accordance with the Pollutant Release and Transfer Register (PRTR\*) law. In addition to reporting these values, the Group is working to further reduce the use of targeted substances. In fiscal 2014, despite an increase in production, due to successful reduction activities, the total amount of targeted substances decreased. Overall, Group-wide emissions were reduced 20.3% compared to the previous fiscal year.

\* Law that promotes recognizing the amount of specific chemical substances released into the environment and improving the management thereof.

#### Trend in PRTR Substance Emissions and Transfer (including manganese, chromium, nickel and lead alloy elements in products)



\* Measurement Scope: UACJ (Nagoya, Fukui, Fukaya, Nikko), UACJ Color Aluminum, UACJ Extrusion Nagoya (Nagoya, Anjo), UACJ Extrusion Oyama, UACJ Extrusion Gunma, UACJ Extrusion Shiga, UACJ Foundry & Forging, UACJ Foil (Shiga, Nogi, Isezaki), UACJ Copper Tube

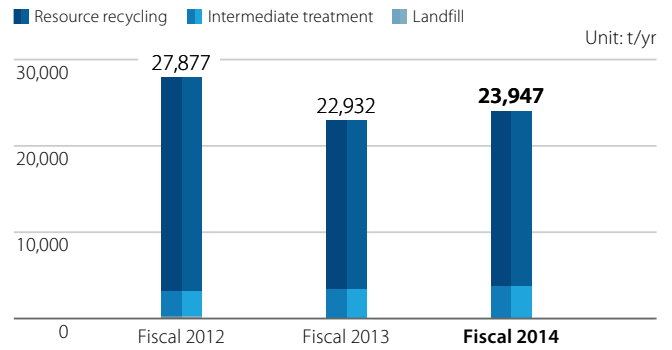
## Reducing Waste

### Aiming for Zero Emissions at Main Business Sites

In order to help realize a recycling-oriented society, the UACJ Group is working to reduce industrial waste. Member companies carry out waste sorting and recycling with the ultimate goal of achieving zero emissions.\* In fiscal 2014, the ratio of waste directly consigned to landfills was 0.39% at our main business sites, meeting the targeted objective. We will continue to work to maintain zero emissions in the future as well.

\* Zero emissions is defined as a ratio of less than 1% of total industrial waste being disposed of directly to landfills.

#### Trend in Industrial Waste Volume



\* Measurement Scope: UACJ (Nagoya, Fukui, Fukaya, Nikko), UACJ Color Aluminum, UACJ Extrusion Nagoya (Nagoya, Anjo), UACJ Extrusion Oyama, UACJ Extrusion Gunma, UACJ Extrusion Shiga, UACJ Foundry & Forging, UACJ Foil (Shiga, Nogi, Isezaki), UACJ Copper Tube

### Recycling Aluminum Cans

Aluminum can be recycled using approximately 3% of the energy required to produce new aluminum from bauxite ore. Capitalizing on this highly efficient characteristic, the recycling of aluminum cans has progressed considerably, reaching a current recycling rate of approximately 90%. As a leading aluminum products company, UACJ is taking the initiative in can recycling, and supporting activities on behalf of the Japan Aluminum Can Recycling Association.

## Developing Eco-conscious Products

### Focusing on the Development of Eco-conscious Products with Low Environmental Impact

The UACJ Group is highly conscious of harmonizing with the environment even at the product development stage.

In recent years, aluminum's characteristic lightweight and durability have attracted attention to the metal for application in the production of automobiles and other forms of transportation, where the lighter weight achieved contributes to better fuel efficiency and reduces energy consumption. In order to respond to the increasingly diversified demands of society, we are working to improve the characteristics of aluminum materials and developing products that are lighter yet maintain the same functionality as when manufactured with conventional materials.

Additionally, taking maximum advantage of the highly efficient recyclability of aluminum, we are developing practical can stock that is even easier to recycle.

Other activities include collaborating with customers to develop a variety of eco-conscious aluminum products that will reduce impact on the environment, including highly efficient heat exchanger tubes capable of contributing to saving energy, car air-conditioner materials compatible with non-Freon refrigerants, and materials for hybrid and fuel-cell vehicles.