



*Aluminum lightens the world*  
アルミでかなえる、軽やかな世界

# Toward Further Growth for the UACJ Group

## Overview of the Aerospace and Defense Materials Business Division

**Minami Takahashi**

**Managing Executive Officer**

**Chief Executive, Aerospace and Defense Materials  
Business Division**



# Agenda

- 01.** Establishment and Background
- 02.** Business: Domains Served
- 03.** Strengths and Challenges in This Segment
- 04.** Vision: Value-Added Materials

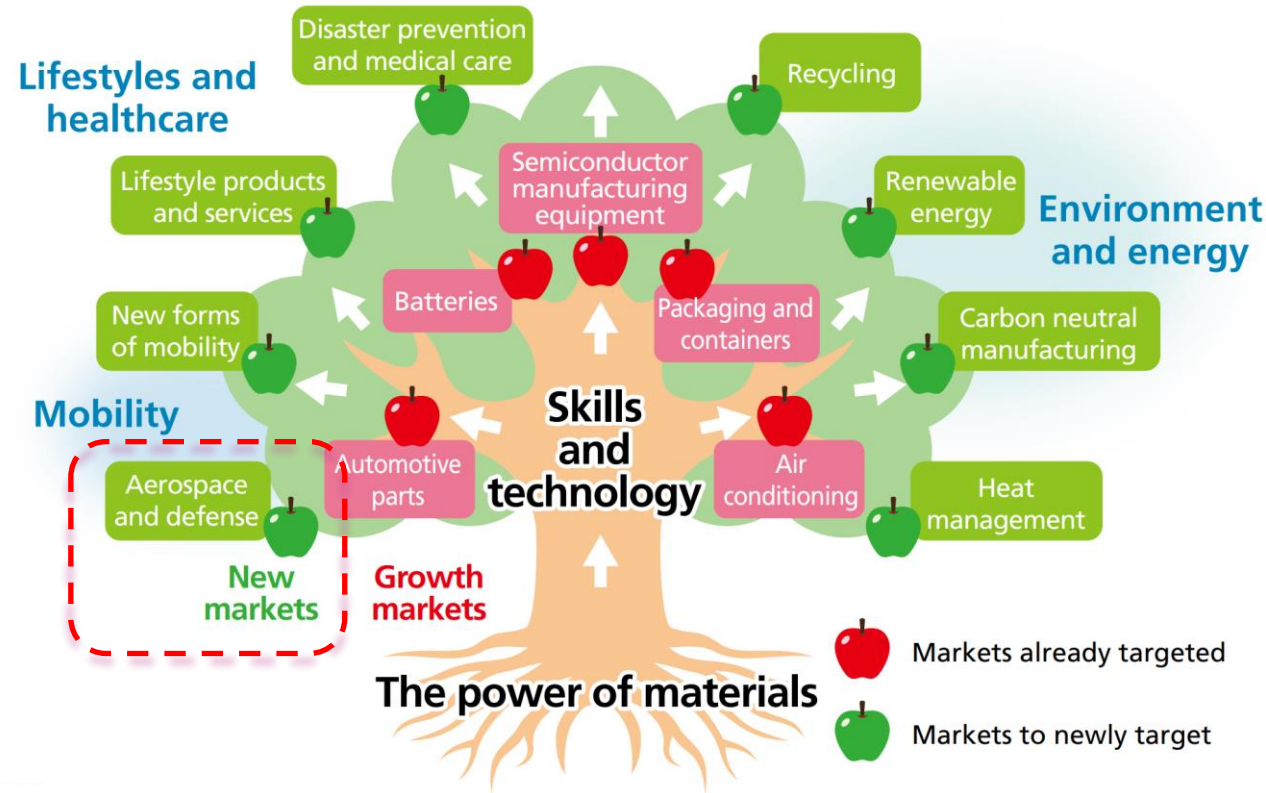
- 01.** Establishment and Background
02. Business: Domains Served
03. Strengths and Challenges in This Segment
04. Vision: Value-Added Materials

# Establishment and Background

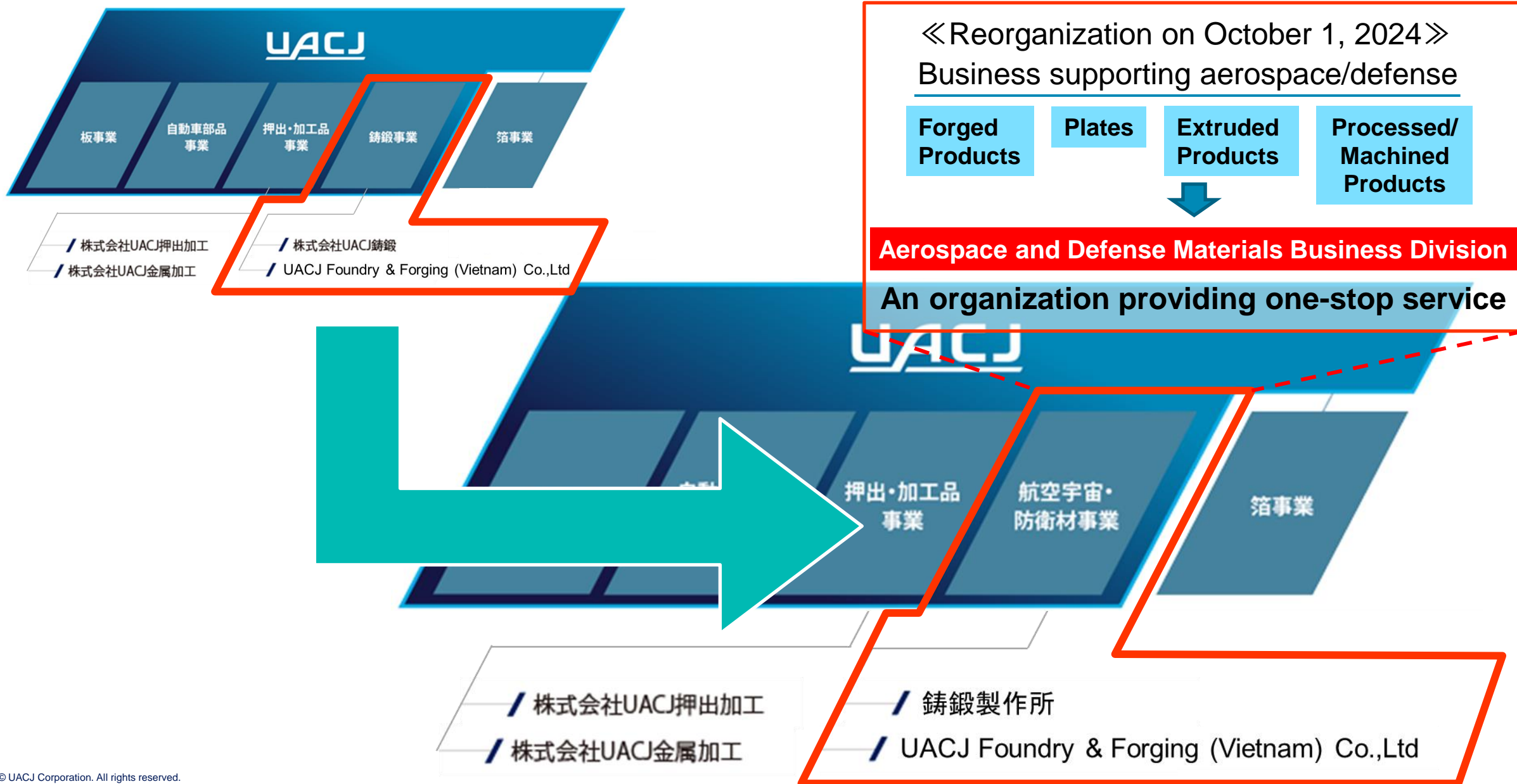
## UACJ VISION 2030

Venturing into aerospace and defense materials

➡ Expanding sales into new domains



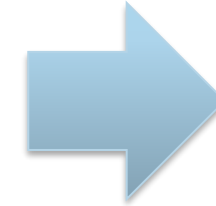
# Establishment and Background



# Aims of the New Business Division

Aerospace/  
defense  
materials

- Domain with solid growth potential
- Requests from customers – domestic primes  
⇒ Essential to resolve any delivery/quality issues



**An organization  
established in  
line with  
customer needs**

## Enhancing supply chain resilience

### Aviation

Airframe structures  
Engine parts, etc.

### Aerospace

Rocket structures  
Fuel tank parts, etc.

### Defense

Defense aircraft  
Special vehicles, etc.



Customer feedback after the division was established

- We appreciate the clear indication of applications and purposes.
- It's convenient to have a one-stop solution for all aluminum applications.

# Agenda

01. Establishment and Background
- 02. Business: Domains Served**
03. Strengths and Challenges in This Segment
04. Vision: Value-Added Materials



# Overview of Business: Domains Served

## Aviation



## Aerospace



## Defense



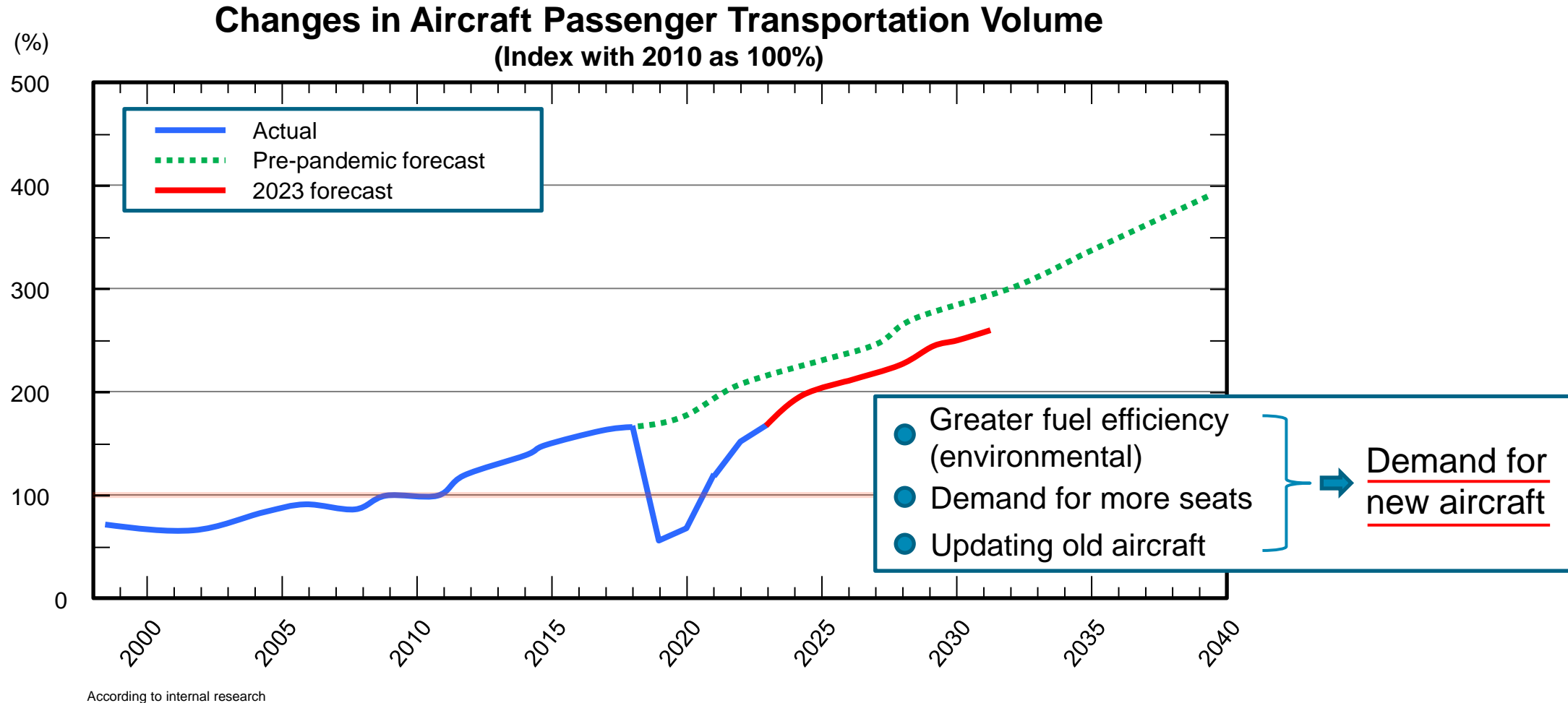


# Aviation Demand

Projected Global Air Passenger Demand

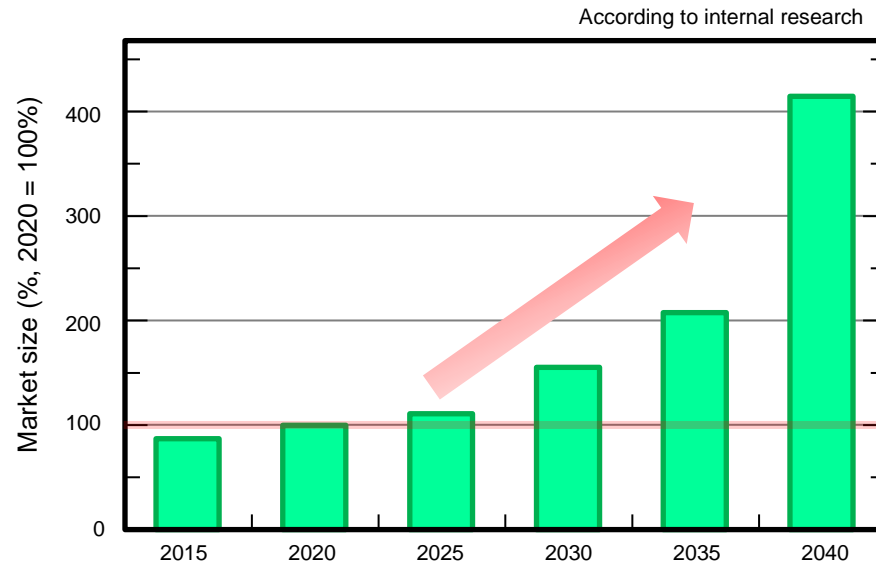


Continued growth is projected for the aviation industry

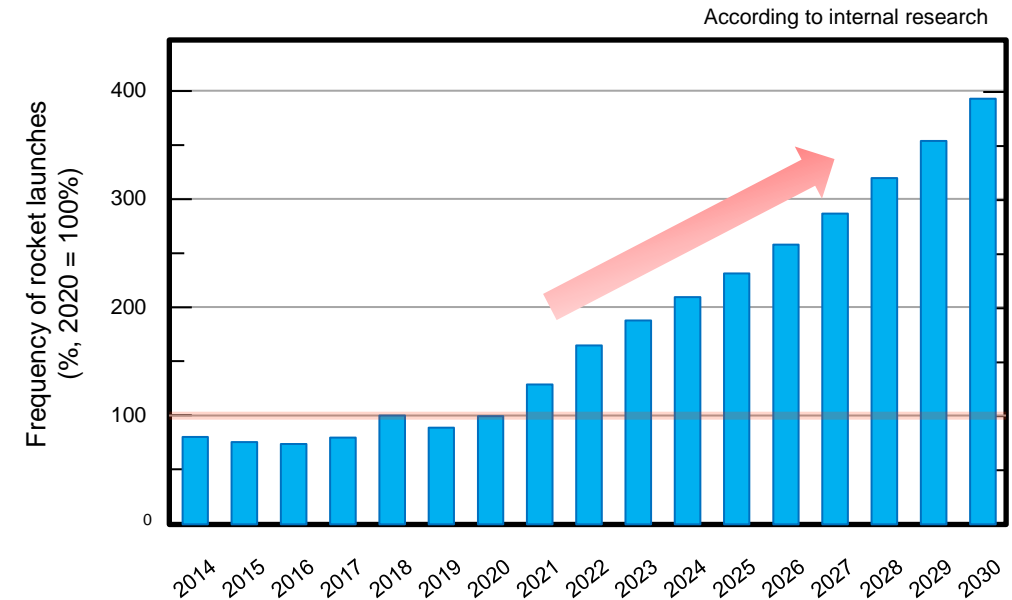


# Aerospace Demand

## Scale of the Global Aerospace Industry



## Frequency of rocket launches



Continued growth is projected for the aerospace industry

- Personal positioning: Autonomous driving/movement measurement
- Environmental measurement: Climate change measures, agricultural applications
- Satellite communication: Data communication, military applications

⇒ Satellites ⇒ Rockets

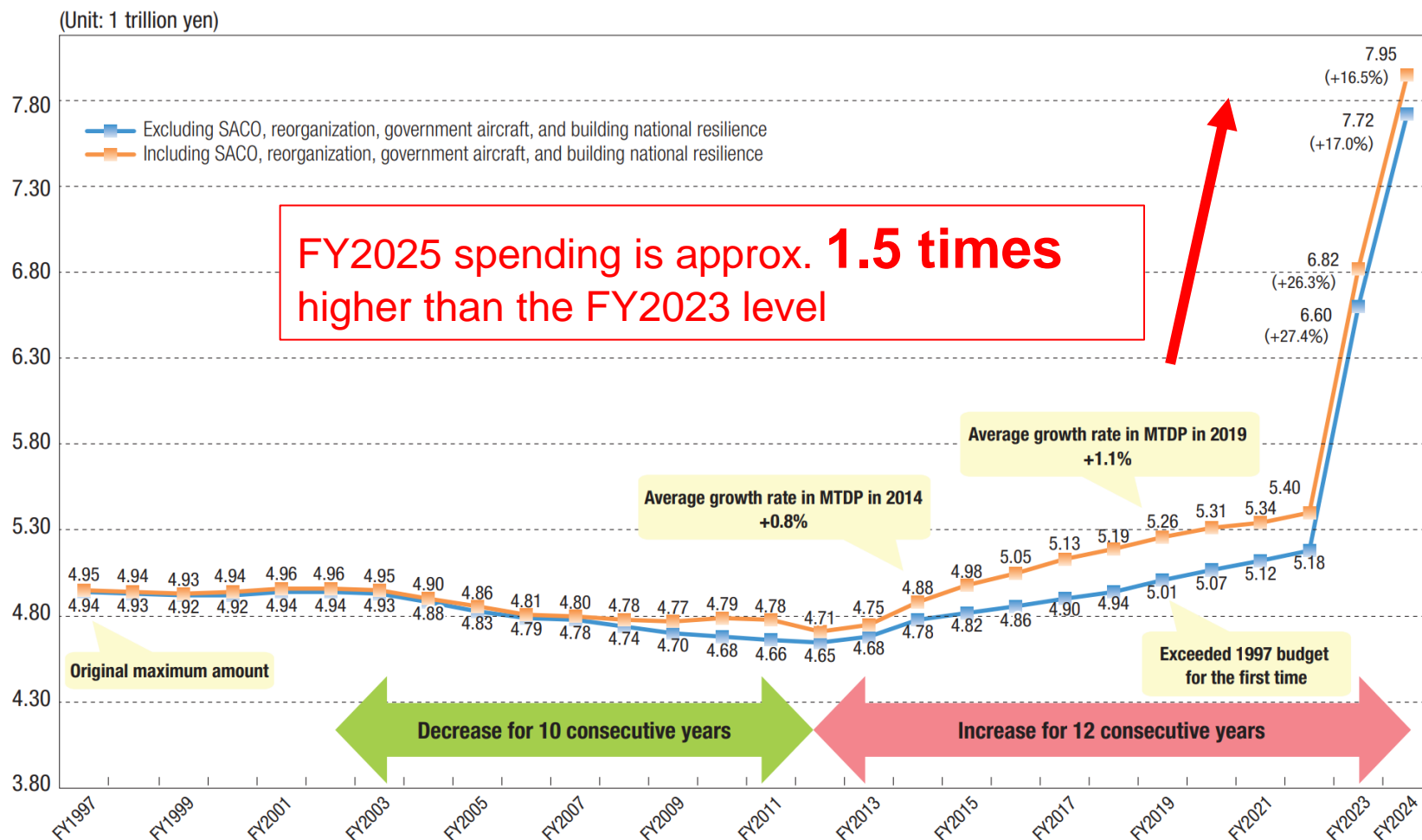
Demand is growing

# Defense Demand

## Defense Spending in Japan



Defense spending is increasing in response to changing conditions in society



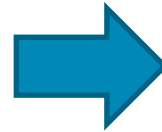
Source: 2024 Japan Defense White Paper

(Notes) 1. Expenses for the introduction of new government aircraft are included in the budget for FY2015 to FY2022.

2. Expenses for the three-year emergency measures for disaster prevention, mitigation, and national resilience are included in the budget for FY2019 and FY2020.

# Positioning of Aviation at UACJ

Aluminum Aircraft Products

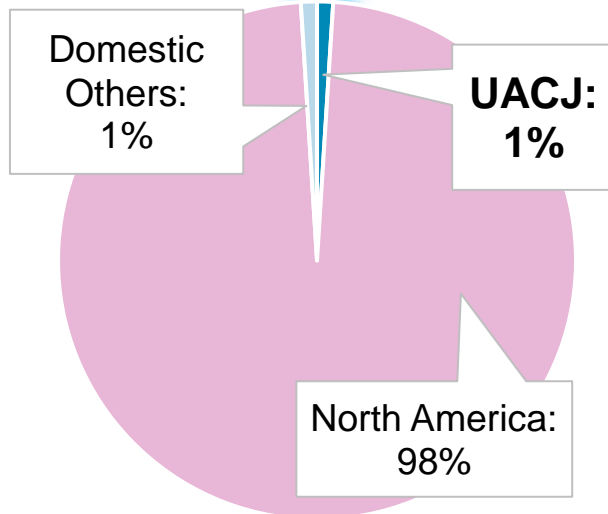


Expand market share for all products

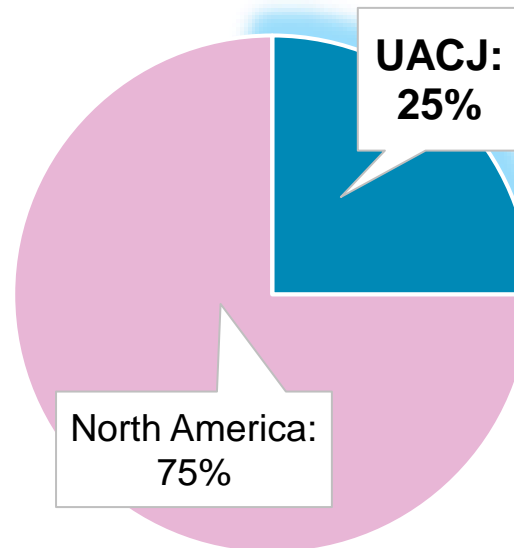
« Share among domestic prime manufacturers »

According to internal research

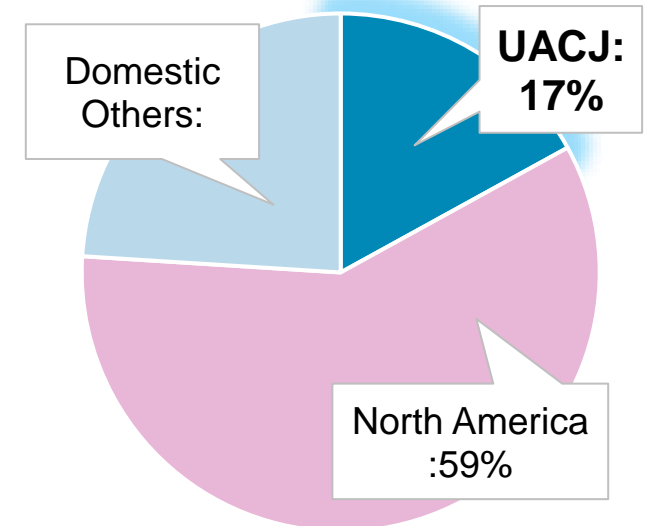
○ Plates



○ Extruded Products



○ Forged Products



- Switching from North American to UACJ materials

# Positioning of Aviation at UACJ

- Increase aluminum product market share among aircraft manufacturers in North America



Working with leading domestic prime manufacturers, we have started increasing the parts made with UACJ products

- Introduce an array of aluminum products in markets serving European aircraft manufacturers and others



Currently taking various approaches to reach customers

# Positioning of Aerospace at UACJ

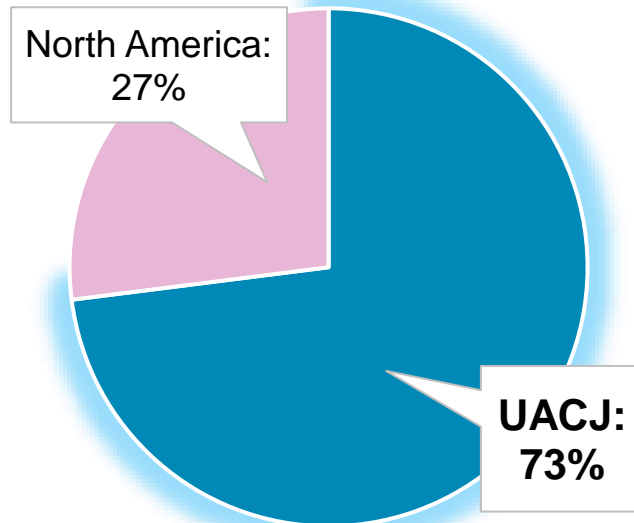
## Aluminum Rocket Products

Increase sales to meet growing demand

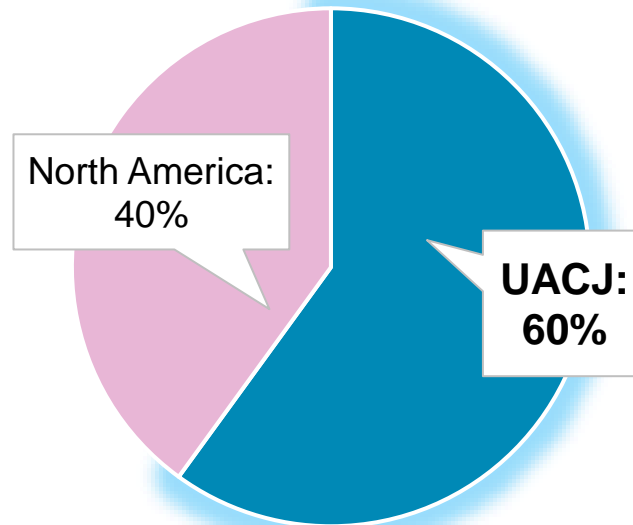
« Share among domestic prime manufacturers »

According to internal research

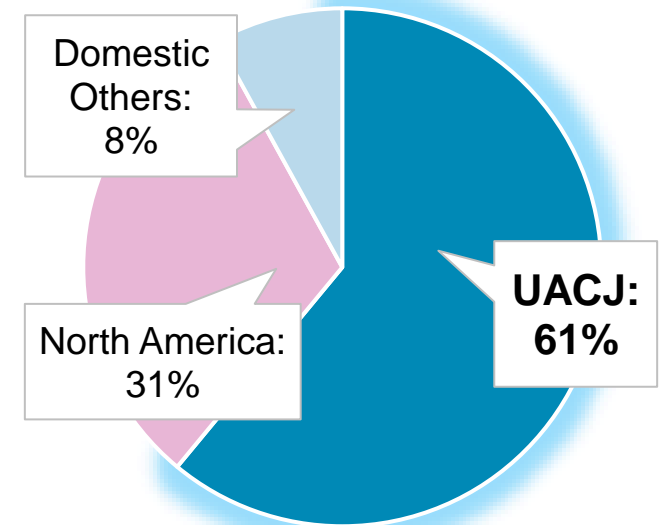
### Plates



### Extruded Products



### Forged Products



- Supply products such as structural components for domestic rockets



# Positioning of Aerospace at UACJ

## Rockets → Most structures are made of aluminum



UACJ materials make up 60–70% of Japan's mainstay rockets

- Fuel tank parts
- Airframe parts
- Outer panels
- and others



- Responding to the expansion of demand for production
- Meet needs for wholly domestic production of Japan's mainstay rockets
- Enter the domestic startup rocket market
- Enter the overseas rocket market

# Positioning of Defense at UACJ

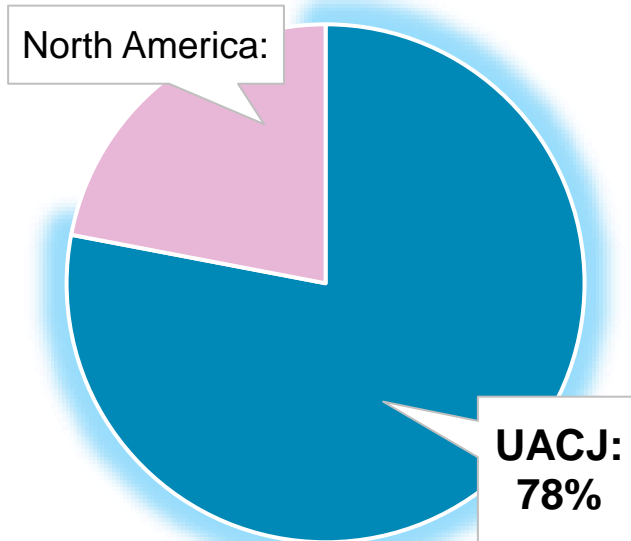
## Aluminum Defense Products

Expand production capacity to meet growing demand

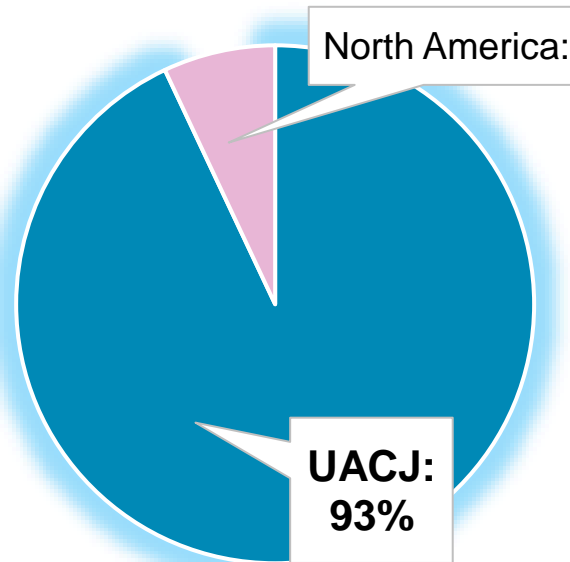
« Share among domestic prime manufacturers »

According to internal research

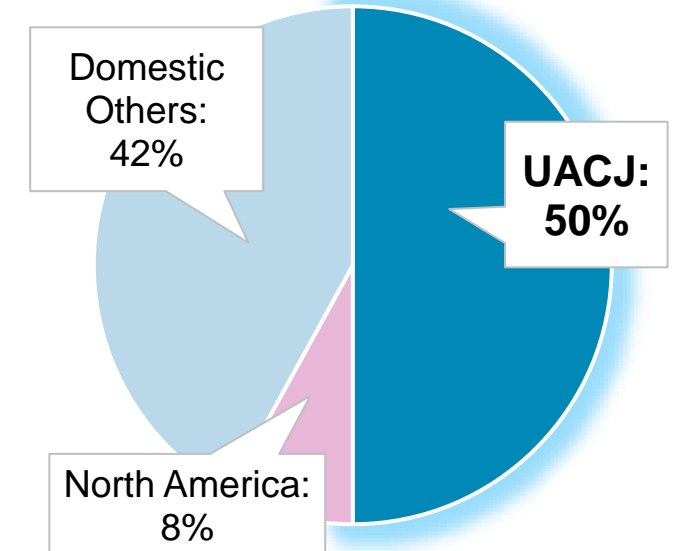
### Plates



### Extruded Products



### Forged Products



- Supply aluminum products for an array of defense equipment

# Positioning of Defense at UACJ

## Aluminum Defense Products

Reducing costs and improving performance with large/integrated forged aluminum products, thick plates, and other products



Expand capacity and diversify manufacturing to accommodate increased production and equipment with higher performance

# Agenda

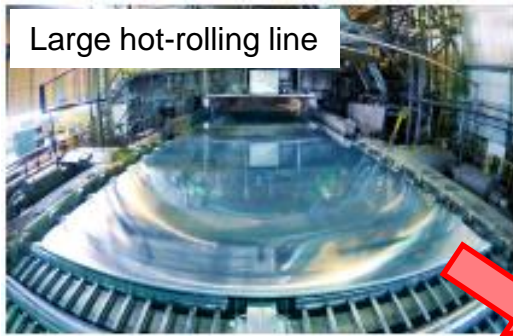
01. Establishment and Background
02. Business: Domains Served
- 03. Strengths and Challenges in This Segment**
04. Vision: Value-Added Materials



# Strengths and Challenges in This Segment

## «Strengths»

- Development and production of a variety of aluminum alloys
  - Manufacturing of large-scale materials at some of **the largest production facilities in the country**
- and others



Thick aluminum plate  
in wide shapes



Large forged products

## «Challenges»

- Increasing capacity of heat treatment facilities for plates and extruded products used in aerospace and defense
  - Further expanding capacity for large forged products **to gain a competitive edge over overseas suppliers**
- and others

# How UACJ Approaches the Challenges

## Plates

Increasing capacity of heat treatment facilities for aerospace and defense applications



Increase production capacity through capital investment in thick-plate quenching equipment

## Cast/Forged Products

Further expanding capacity for large forged products

- Currently installing machining, inspection, and assembly equipment

Expand supported product shapes to include more parts



Following capital investment, the equipment will be operational from the second half of FY2025

- Installation of equipment to offer more sizes is under consideration



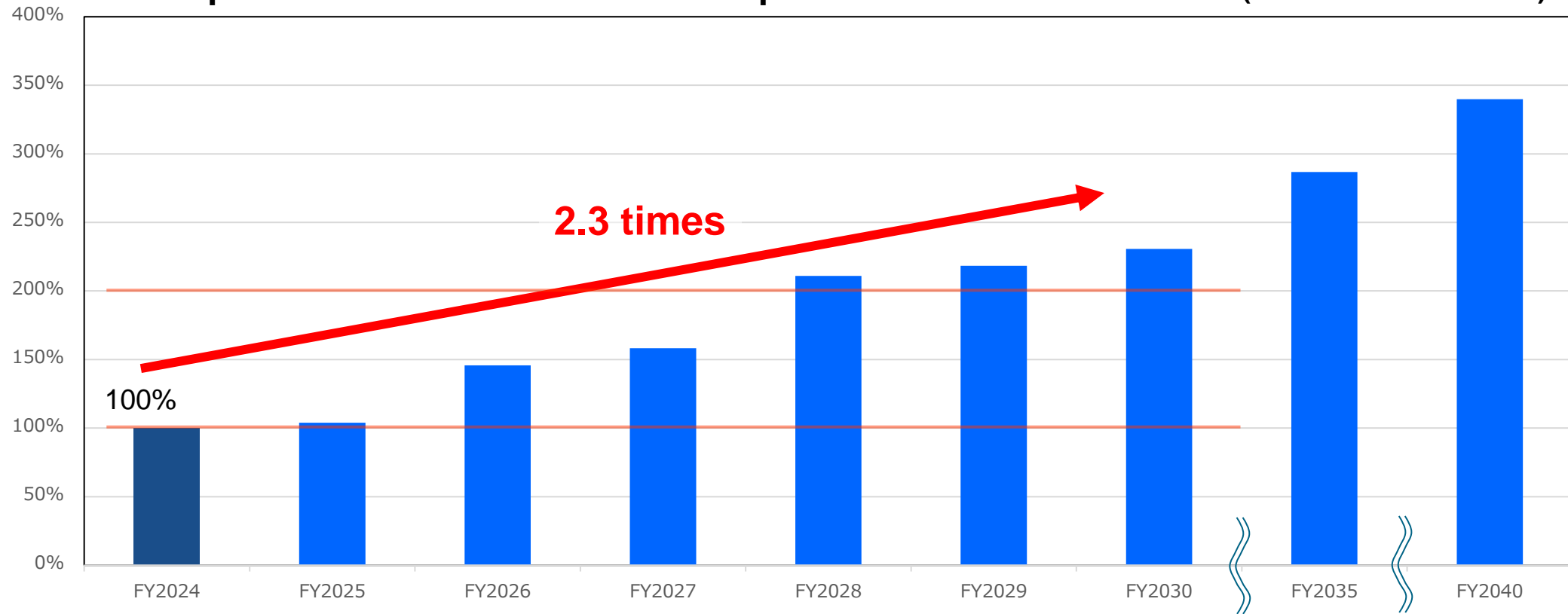
# Agenda

01. Establishment and Background
02. Business: Domains Served
03. Strengths and Challenges in This Segment
- 04. Vision: Value-Added Materials**

# Vision: Amount of Sales

## Fully entering these large markets with domains poised for growth

Sales plan for the three fields of aerospace and defense materials (with FY 2024 as 100%)



Existing business + new initiatives

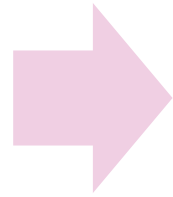


Value-added materials

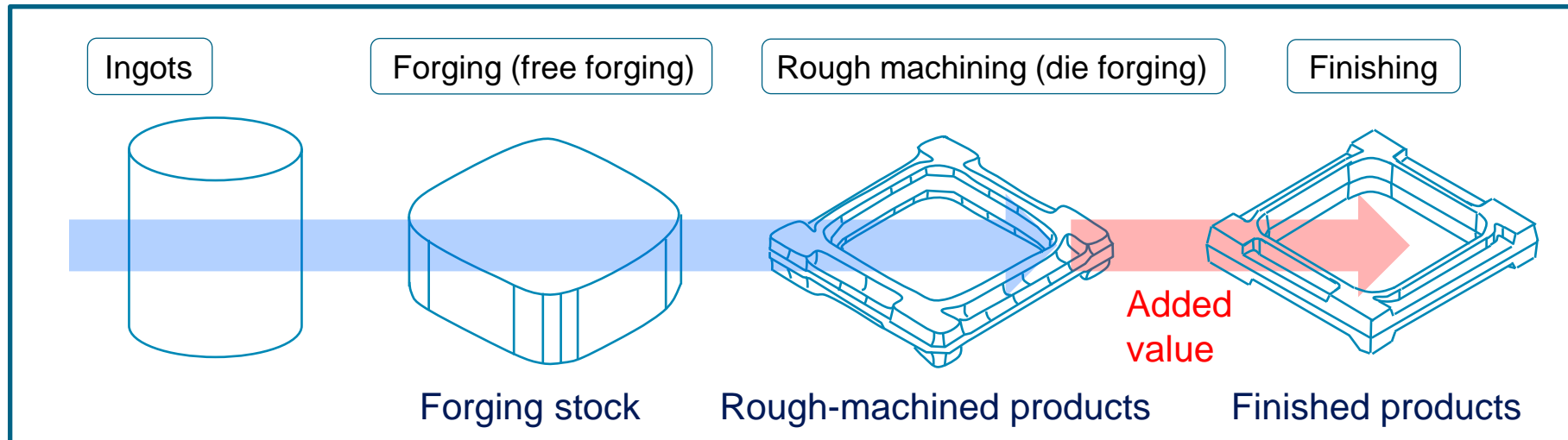
# Value-Added Materials: To performance a variety of processing technologies

Supply in various forms, culminating in the finished product

Machining centered on forged products, developed through aerospace and defense production

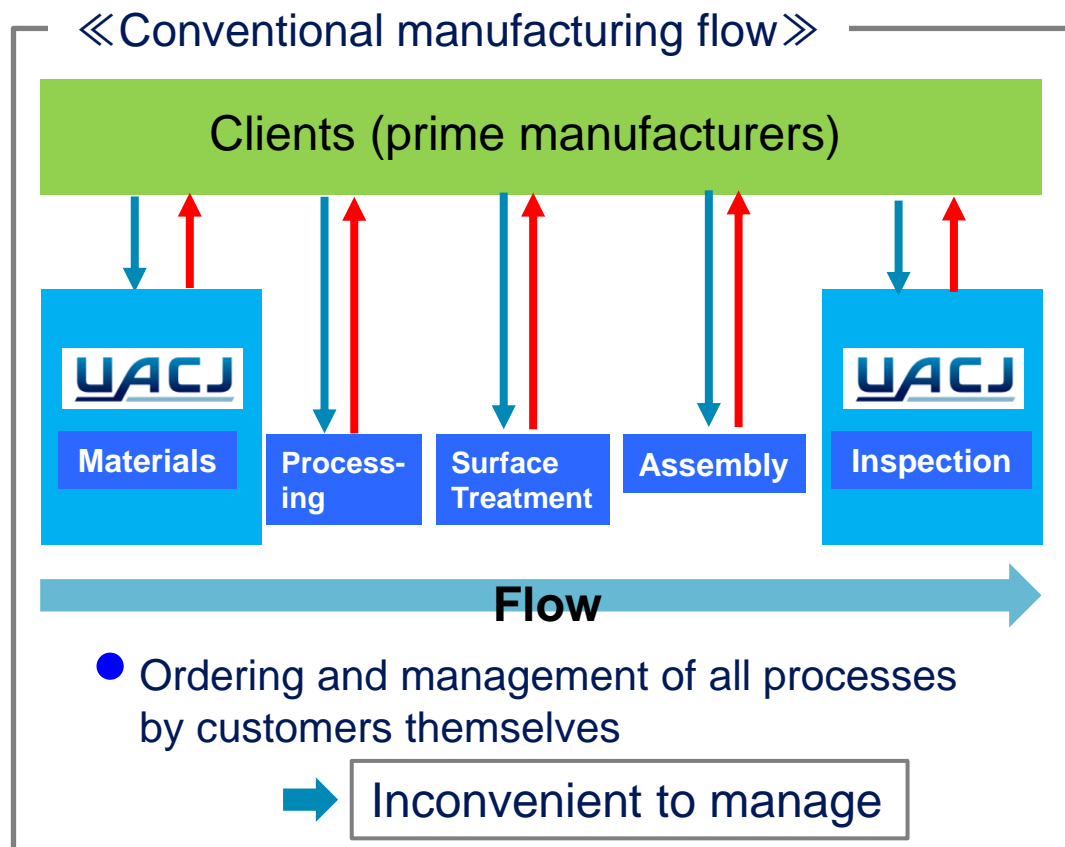


UACJ provides both materials and parts

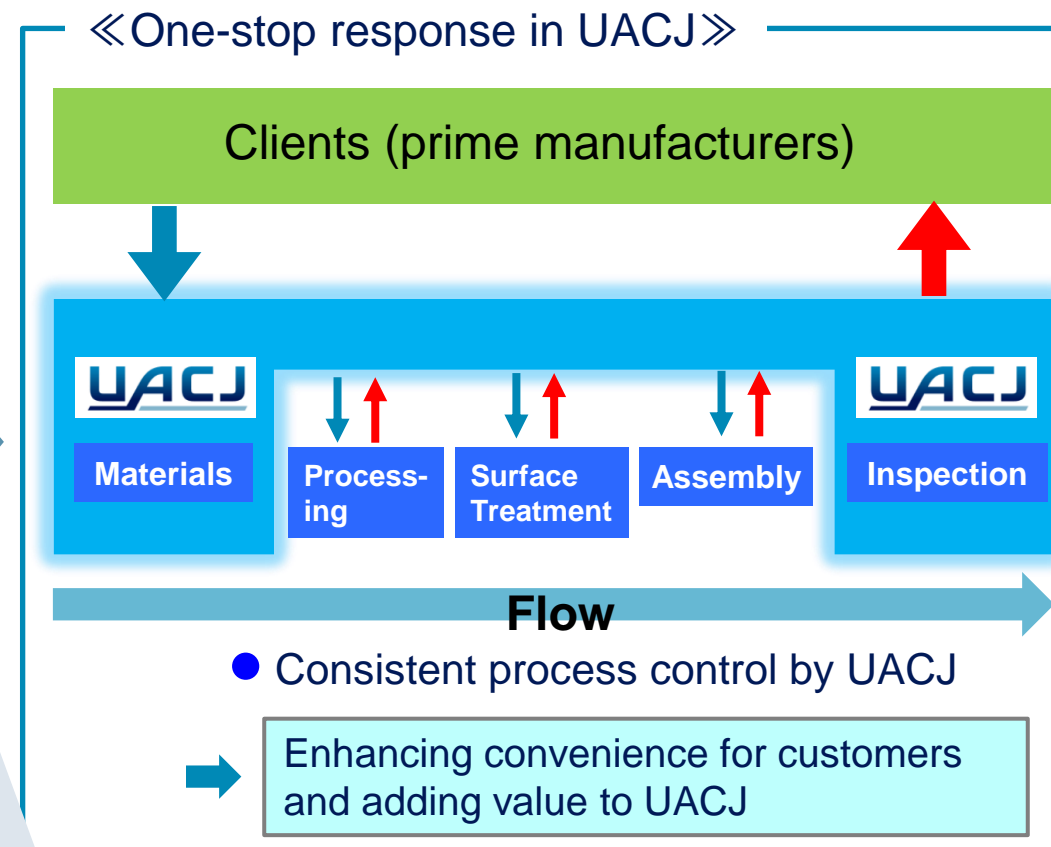


# Value-Added Materials: Expansion of the inspection business

Inspection business: One-stop service for all processes from materials to final inspection



## Integrated production at UACJ



Manufacturing technology for materials and parts



Quality assurance backed by proven technology and skills

- Expert manufacturing supported by certified inspectors
- Equipment certified for use in special processes

→ Order  
→ Delivery

# Summary

- A new business division has been established focusing on aerospace and defense
- Production facilities will be expanded to meet needs of these growing markets
- One-stop ordering will meet diverse customer needs

**Watch for progress by the  
Aerospace and Defense Materials Business Division**



*Aluminum lightens the world*

アルミでかなえる、軽やかな世界

