

Business Strategy of the Specialty Steel Company

Hitachi Metals IR Day 2017

May 31, 2017

Hitachi Metals, Ltd.

Koji Sato

Executive Officer

President of the Specialty Steel Company

Business Strategy of the Specialty Steel Company

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2. Business Overview
3. Action Plan
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OUR HERITAGE, YOUR ADVANTAGE YASUGI SPECIALTY STEEL

Hitachi Metals

“Transform changes into opportunities”

- Collaboration between steel and copper
— Achieve further growth by incorporating SH Copper Products —
- Strengthen *monozukuri* + business activities (sales capabilities)
- Large-scale capital expenditure

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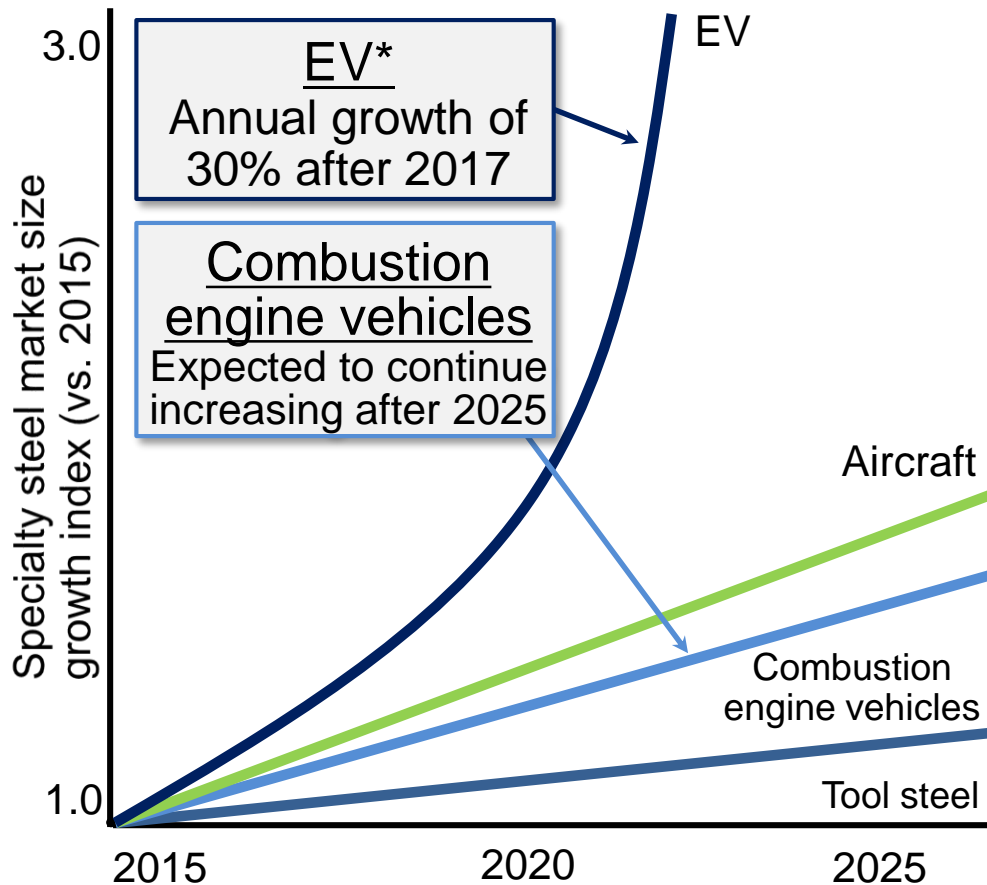
2-1. Business Composition

Top manufacturer in Japan with No. 1 share in numerous products



2-2. Market Environment

Increase in demand for energy-efficient products
 —due to introduction of stricter environmental regulations
 and demand for environmentally-friendly products



<p>EV</p>	<p>EV components</p> <ul style="list-style-type: none"> ▪ Battery components ▪ High frequency compliant materials
<p>Aircraft and energy</p>	<p>Large forged components</p> <ul style="list-style-type: none"> ▪ Aircraft engine components ▪ Turbine blades and others
<p>Combustion engine vehicles</p>	<p>CVT belt materials</p> <p>Piston ring materials</p> <p>Turbine wheels and others</p>
<p>Tool steel</p>	<p>Hot working tool steel</p> <p>Cold working tool steel</p> <p>New steel type (SLD-i™)</p>

Source: Hitachi Metals' estimate based on various research materials

*Including term for hybrid electric vehicles (HEV) and plug-in hybrid electric vehicles (PHEV)

2-3. FY2018 Medium-term Management Plan: Basic Policy and Growth Strategy

Basic policy and growth strategy of the Specialty Steel Company

**Achieve growth internationally
by focusing on “special steel”**

Monozukuri: Conduct “eye-opening” manufacturing
Sales abilities: Further enhance the strength

Reap the benefits of major investments

Strengthen international locations

FY2018 Medium-term Management Plan: Goals

	FY2016	FY2018 Goals* (¥110 = US\$1)	Change vs. FY2016
Revenues	¥234.7 bn	¥320.0 bn	136%
Adjusted operating income	¥23.5 bn	¥38.0 bn	+ ¥14.5 bn
Adjusted operating margin	10.0%	11.9%	+1.9%
A percentage of overseas revenues to total revenues	41%	42%	+1%

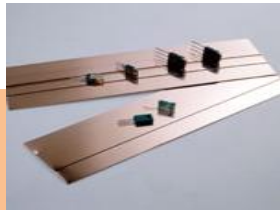
*Figures include the impact of the transfer of SH Copper Products Co., Ltd.

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Cable Materials Company



Location:
Ibaraki Prefecture
Capital: ¥1.0 billion
Established: 2013
No. of employees: Approx. 500
Business: Manufacture and sale of
copper products and
processed copper products
for copper strips and
electrical use

Specialty Steel Company

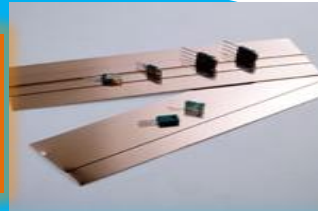
SH Copper Products

- Jul. 1, 2017
Reorganization:
the Cable Materials
Company to the Specialty
Steel Company
- Oct. 1, 2017
Sales integration
- Apr. 1, 2018
Company integration with
Hitachi Metals
Neomaterial, Ltd.

Contribute to customers' improvement
—in trust in products and adding value

Tsuchiura Works*

Copper product
manufacturing
technology



Hitachi Metals Neomaterial

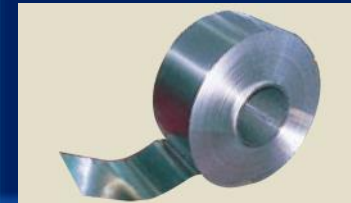


Clad band
technology

Synergies in the electronic and battery areas

- Unify contacts for customers
- Share technical know-how

Cooperation in developing
next-generation products



Wide-width rolling
technology

Hitachi Metals Yasugi Works

*SH Copper Products Co., Ltd. is scheduled to become Tsuchiura Works of Hitachi Metals Neomaterial, Ltd. in April 2018.

3-3. Initiatives for the Automotive Industry

—Medium-term—

Contribute to meeting fuel saving demand for combustion engines

—Long-term—

Become a core supplier of EV industry



Piston ring materials



CVT belt materials



Cladding materials for batteries



Turbine wheels



Soft magnetic coil and core materials

Infiltration of the battery components market

Expansion of EV market
(Expected annual growth of 30%)

Deployment of thin foil,
high strength cladding products

Usefulness of thin foil materials and cladding materials in storage batteries

Laminated type

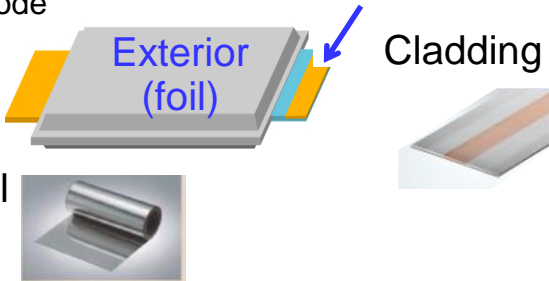
Negative electrode

Lead material for terminal connection

Exterior (foil)

Cladding material

Foil



Improved conductivity

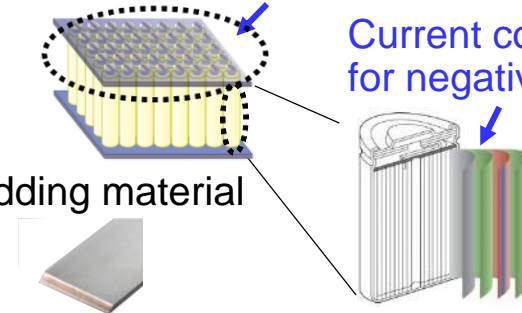
Weight reduction
(Fewer components)

Cylinder type

Negative electrode lead material

Current collector foil for negative electrode

Cladding material



Improved conductivity

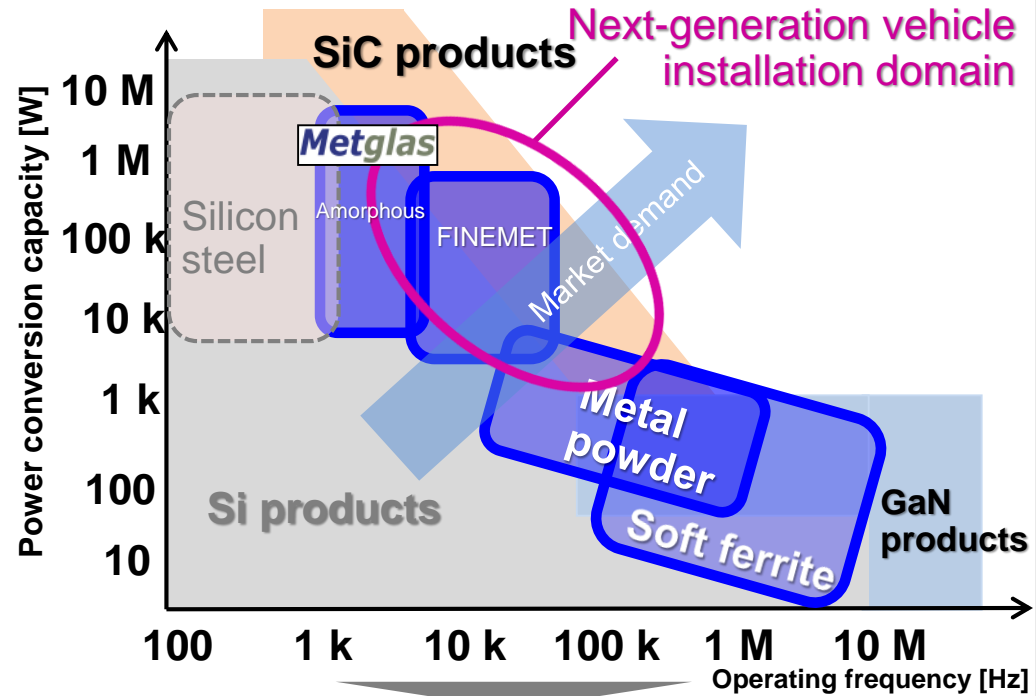
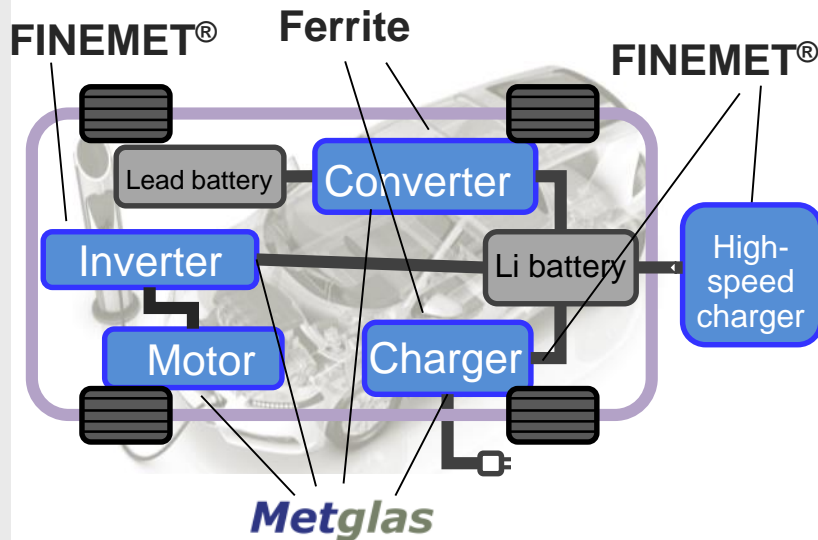
Greater strength
(Current collector foil)

FY2020 sales goal for the cladding material-related business:
Tripling the sales* (vs. FY2016)

Soft magnetic components and materials: New product launch

Consolidate the materials and components businesses (FY2016)
 ⇒ Accelerate the development of applications

EV drive module



Installed in EVs by changing forms
 (e.g. transformers, choke coils,
 and core materials)

Fits perfectly to next-generation demand

FY2018 sales goal for soft magnetic components and materials:
 +28% (vs. FY2016)

3-6. Contribute to Meeting Demand for Fuel Saving in Combustion Engines (1)

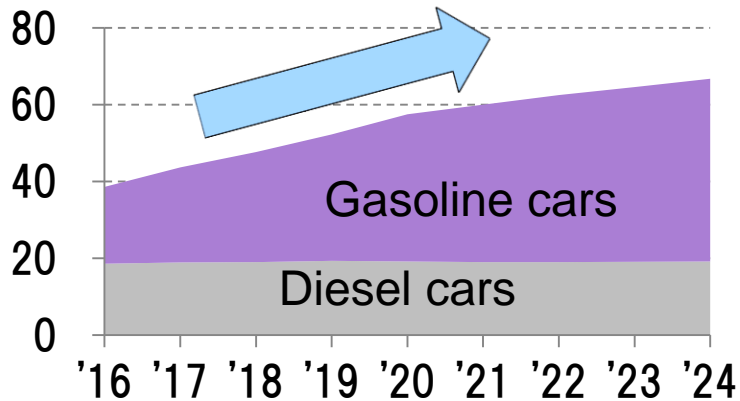


Turbine wheels

Investment for production increase at Hitachi Metals Precision

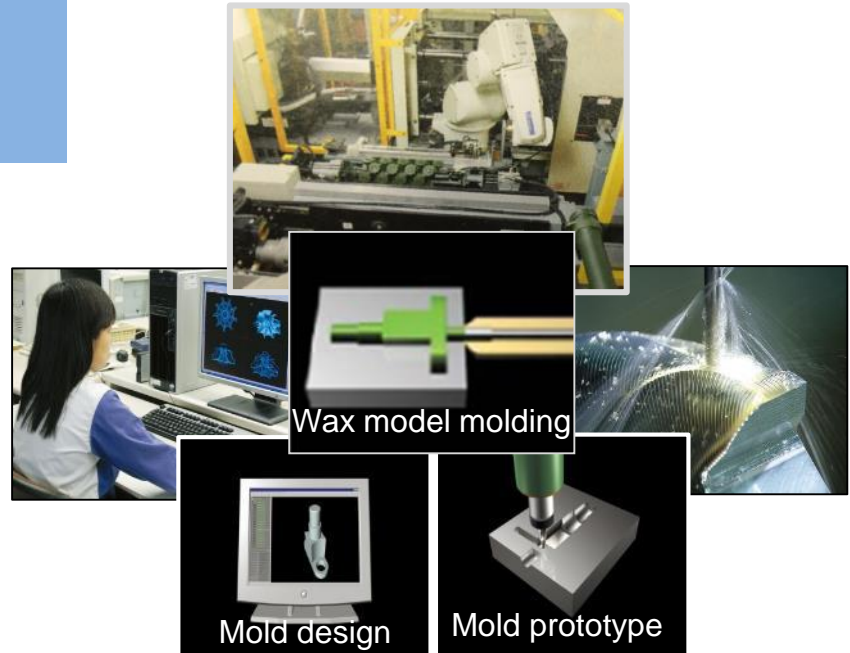
Turbo demand

No. of vehicles (million)



Source: Hitachi Metals' estimate based on various research materials

Expansion + facility expansion/
strengthening
Production capacity 1.5 times (2020)



Mold design technology + short delivery
prototype process
Improved customer satisfaction

Achieve further growth as
the industry's top supplier

3-7. Contribute to Meeting Demand for Fuel Saving in Combustion Engines (2)



Piston ring materials

High quality materials

- Atypia extraction technology
- Microstructure control
- Our original steel type



Production increase in Japan and China

- Suzhou plant, China (Operation in 2H FY2017)
- Specialty cable & wire plant, Yasugi Works (Operation in 2H FY2018)



CVT belt materials

High quality materials

- Inclusion control technology



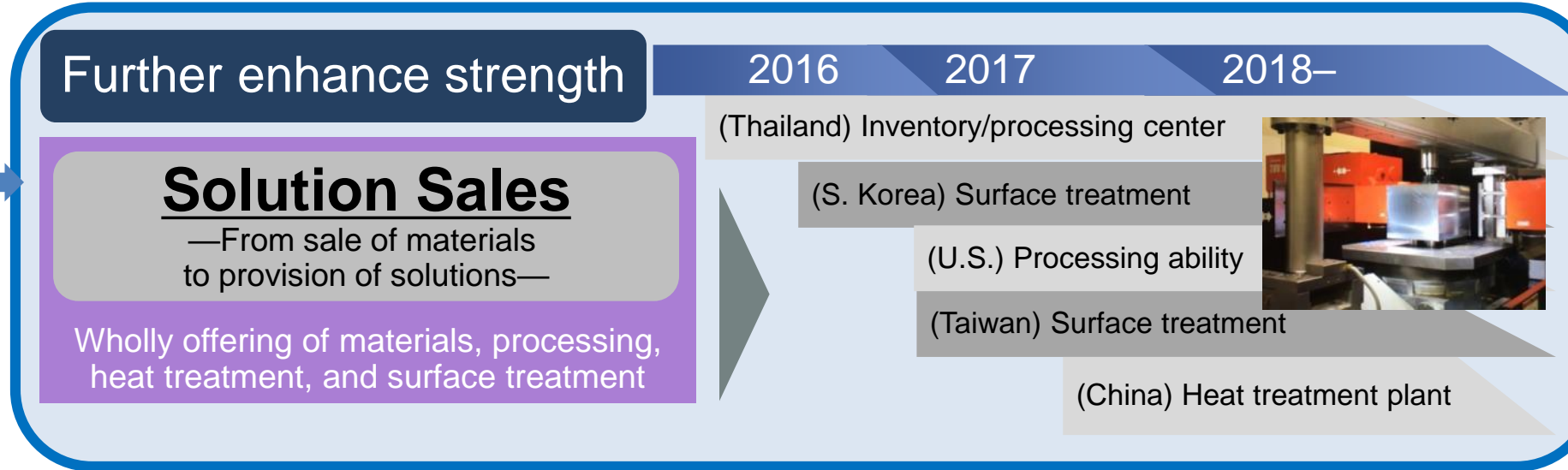
Sales expansion

- Yasugi Works 24-ton vacuum induction melting and casting furnace (VIM)
- Accelerate acquisition of certification
- Cultivate new customers

Won the "Patent Office Commissioner Prize" of the FY2016 Nat'l Invention Award

FY2018 sales goal for industrial equipment materials: +17% (vs. FY2016)

3-8. Tool Steel: Progress of Global Sales Expansion

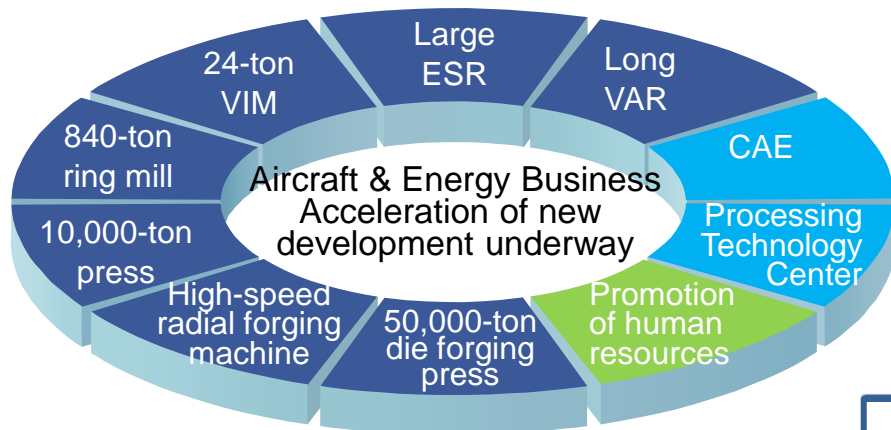


FY2018 sales goal: +25% (vs. FY2016)

3-9. Aircraft- and Energy-Related Materials: Challenge the World's Top Three

Challenge the world's top three aircraft forging materials manufacturers, and establish a position as the fourth core

		2010	2015	2020
Generate synergy between three firms	Hitachi Metals Yasugi Works		▼24-ton VIM ▼Large VAR	▼10,000-ton free forge press ▼High-speed radial forging machine
	Japan Aeroforge		▼50,000-ton die forging press	
	Hitachi Metals MMC Superalloy		▼Made a consolidated subsidiary ▼840-ton ring mill	



▼Initiatives in 2017

- Shifting from “acquisition of certification” to “mass production” stage: Aircraft engine large disk case
- R&D



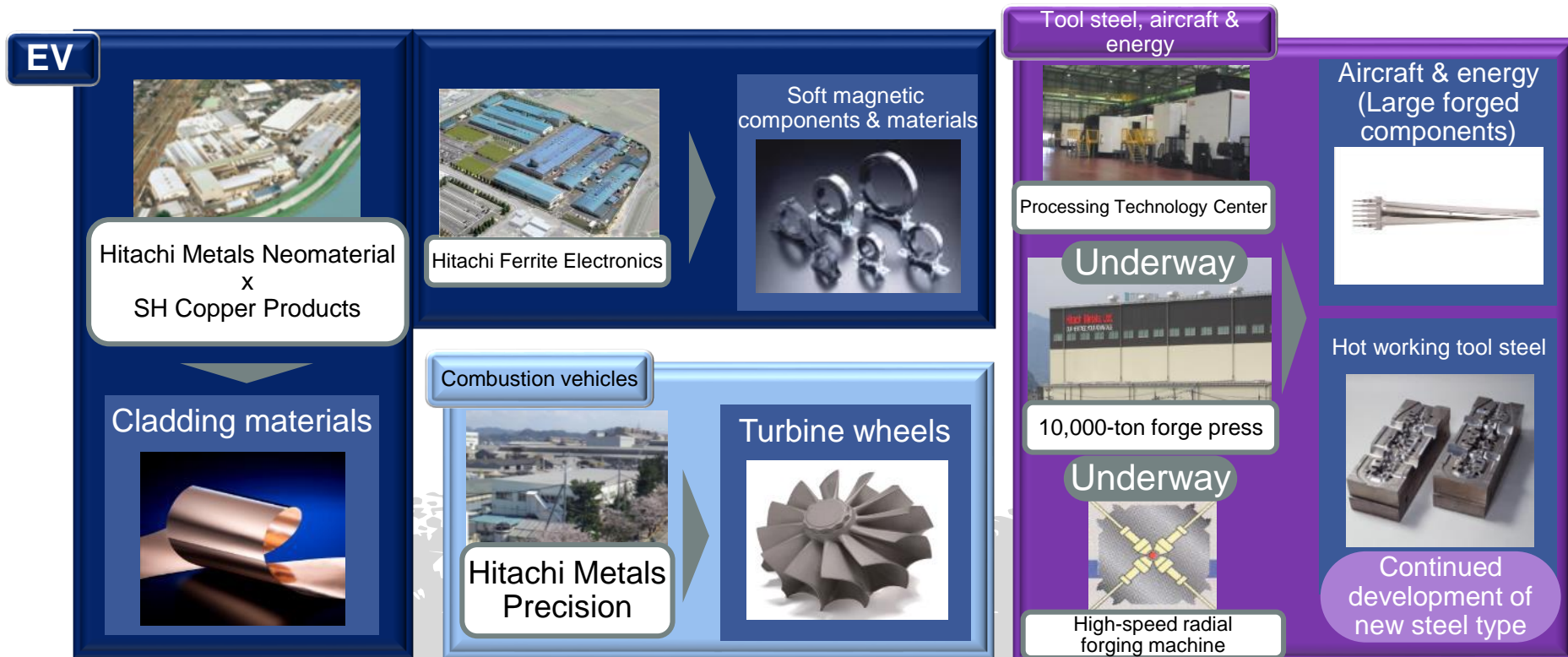
FY2025 sales goal: ¥60.0 billion

VIM: Vacuum Induction Melting & Casting, ESR: Electro-Slag Remelting
 VAR: Vacuum Arc Remelting, CAE: Computer Aided Engineering

3-10. Strategic Investment Plans

Investment amount: ¥60.0 billion (cumulative total for FY2016–FY2018)

[1] Key investments in sources of competitiveness



[2] Strengthen the network for expanding international sales

Secure distribution location in Europe



Expand and strengthen processing locations in the U.S. and Asia

3-11. Global Growth

Percentage of overseas total revenues: 41% (FY2016) ⇒ 42% (FY2018)

Europe

Tool Steel: Build distribution services
Aircraft & Energy: Mine target customers
Industrial Equipment Materials: Mine the automotive-related market

Americas

Tool Steel: Concentrate on Diehl Tool Steel to expand sales
Aircraft & Energy: Put direct business into place
Rolls: Concentrate resources in technology sales
Soft Magnetic Components/Materials: Enhance technical support for customers

+30%

+23%

+46%

China

Tool Steel: Strengthen the local sales structure

+58%

Japan
+33%

Asia

Tool Steel: Establish a plate and surface treatment location
Soft Magnetic Components/Materials: Step up lobbying activities

FY2016 FY2018

The graphs compare FY2018 sales to FY2016 sales, with FY2016 sales indexed to 1. Figures include the impact of the transfer of SH Copper Products Co., Ltd.

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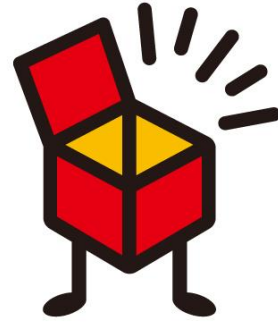
Specialty Steel Company
FY2018 Plan*

Revenues: ¥320.0 billion

Adjusted operating income: ¥38.0 billion (11.9%)

This document contains forward-looking statements—such as results forecasts and management plans—that are not historical facts. All such forward-looking statements are based upon all available information and upon assumptions and projections that were deemed reasonable at the time the Company prepared this document. Changes to the underlying assumptions or circumstances could cause the actual results to differ substantially. The factors causing such differences include, but are not limited to, the following:

- Changes in economic conditions and regulations in the main markets where the Company operates, particularly Japan, the United States, Asia and Europe
- Sudden changes in technological trends
- Changes in competitive advantage and the capabilities of the Company and its subsidiaries and affiliates to develop and commercialize new products and businesses
- Fluctuations in the status of product markets, exchange rates and international commodity markets
- Changes in financing environment
- The capability of the Company and its subsidiaries and affiliates to cope with fluctuations in product supply and demand, the status of product markets, exchange rates and international commodity markets
- Protection of the Company's intellectual property, and securing of licenses to use the intellectual property of other parties
- Changes in the status of alliances with other parties for product development, etc.
- Fluctuations in Japanese stock markets



Materials Mag!c
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