

Message from the General Manager of Advanced Metals Division



By integrating our specialty steel and functional components and equipment technologies, we will aim to become a “No. 1 high-performance business structure for advanced metals” through collaborative creation with customers.

Hiroshi Watanabe

Vice President and Executive Officer, General Manager of Advanced Metals Division

Fiscal Year 2021 Medium-Term Management Plan

	FY2018 Results	FY2021 Targets
Specialty Steel Products	Revenues	¥276.9 billion
	Adjusted operating income [Profit margin]	[8.1%] ¥22.4 billion
	ROIC	6.3%
Functional Components and Equipment	Revenues	¥367.6 billion
	Adjusted operating income [Profit margin]	[2.9%] ¥10.5 billion
	ROIC	-0.6%
Total*	Revenues	¥644.5 billion
	Adjusted operating income [Profit margin]	[5.1%] ¥32.9 billion
	ROIC	2.7%

Capital investment
(3-year cumulative)
¥107.0 billion

Process innovation

- Promote automation
Automate finishing at Waupaca, etc.

Investments to increase production

- Wide processing line for electronic materials at Yasugi Works
- Facility to increase the production capacity of turbine wheels

* Simple sum before eliminating intersegment revenues

Initiatives of Fiscal Year 2018 Medium-Term Management Plan

In the growing aircraft and energy materials businesses, we started operations at Hitachi Metals' Okegawa Works following the merger with Hitachi Metals MMC Superalloy, Ltd. We also invested in melting and forging facilities, mainly at the Yasugi Works. In electronic materials, we invested to increase production capacity at the Tsuchiura Works of Hitachi Metals Neomaterial, Ltd., with the aim of expanding our business in clad materials. In addition, we decided to invest in a wide processing line for organic EL components and materials, for which the Group's global market share is nearly 100%, and started investment.

Basic policy of Fiscal Year 2021 Medium-Term Management Plan

Two issues have remained unresolved at the completion of the Fiscal Year 2018 Medium-Term Management Plan: Increased inventories and a delay in reaping the benefits of the large-scale investments made at the production sites in Japan. Our new Fiscal Year 2021 Medium-Term Management Plan recognizes these issues. Under the plan, we will generate synergies between businesses and collaborate creation with

customers with the aim of becoming a “No. 1 high-performance business structure for advanced metals.”

Five-part action plan

The Advanced Metals Division will implement the following five-part action plan to resolve problems and achieve sustainable growth.

1 Reduce inventories

We will steadily execute our action plan by strictly monitoring the Cash Conversion Cycle (CCC) and other key performance indicators (KPIs) to reduce inventories at an early stage of fiscal 2019.

2 Create synergy between businesses

In addition to identifying needs in the overlapping markets of specialty steel products and functional components and equipment, we will propose materials and products that combine our technologies in these two areas. We will also strategically and functionally allocate management resources, including a workforce of more than 17,000, to growth fields.

3 Bring innovations to materials and processes

We will integrate and develop our technologies in the

specialty steel and functional components and equipment field—namely, structural control technology, alloy design technology, and production technology—and deepen collaboration with the Global Research & Innovative Technology center (GRIT), customers, and external research institutes to develop new alloys and processes, in addition to providing powder materials for 3D printers and metal injection molding (MIM) products.

4 Ongoing restructuring of business portfolio

We will overhaul the portfolios of our core businesses. In automotive castings, for example, we will expand our presence in heavy-duty areas—commercial vehicles, agricultural machinery, construction machinery, rolling stock, and industrial equipment—while promoting process innovation for higher added value, in order to generate reliable earnings. Through these efforts, we plan to increase the sales ratio for heavy-duty automotive castings at Waupaca Foundry, Inc. in the United States to 54% by fiscal 2021, from 42% in fiscal 2018.

In the growth businesses of industrial equipment, aircraft and energy materials, and electronic materials, we will expand medium-term sales and increase the sales ratio.

5 Take the best advantage of large-scale investments

In our core businesses, we have made significant capital investments under the Fiscal Year 2018 Medium-Term Management Plan. As a result, in automotive castings, we increased productivity at Waupaca Foundry and expanded sales of DAC-i™, a new molds and tool steel product. There have been delays in reaping the benefits

of these capital investments, but, going forward, we will engage engineers and other human resources to promptly take the best advantage of these investments.

In the growing business of aircraft and energy materials, we expect demand for passenger jet aircraft to increase in the future. To capture this demand, we will deepen three-way collaboration among the Okegawa Works, Yasugi Works, and Japan Aeroforge, Ltd. to build an integrated production system that covers melting, forging, and processing. We will also strengthen our business with engine manufacturers and deploy specialized technologies related to isothermal forging, MIM, and precision casting to introduce next-generation products. In the process, we will enter the market for engine core components, targeting ¥60 billion in annual sales of aircraft components and materials by fiscal 2025.

In electronic materials, another growing business, we look forward to high growth driven by electrification of automobiles and advances in smartphone performance. In organic EL components and materials, we will commission a wide processing line in fiscal 2020, thus taking the best advantage of our investments. The Group also boasts world-class technologies in clad materials, where multiple metals are combined to demonstrate unique properties. Bringing together the unique technologies of the Group's sites in Yasugi, Suita, Tsuchiura, Kitanihon, and Kagoshima will enable us to supply a wide variety of clad materials. In the electronic materials business, we are targeting a 14% increase in sales by fiscal 2021 compared with the fiscal 2018 figure.

Take the best advantage of large-scale investments

Business Category	Investment Details
Core businesses	Molds and tool steel Yasugi Works 10,000-ton forging press (started operation in May 2018) Respond to larger molds and expand the sales of new products such as DAC-i™
	Rolls Increase production efficiency and capacity (started operation in the 2H of FY2018 at Hitachi Metals Wakamatsu, Ltd.) Expand sales of rolls for steel mills and structural steel castings
	Industrial equipment Increase production capacity of piston ring materials (operation in the 1H of FY2018 in China; 2H at Yasugi Works) Responded to the needs for better fuel efficiency of internal-combustion engines
	Piping components Increased the system capacity of flexible piping at Kuwana Works (started operation in the 2H of FY2018) Expanded sales in the Chinese and European markets
Growing businesses	Aircraft/Energy materials Establish an integrated production system across the three sites (melting, forging, and processing) Increase production efficiency and accelerate acquisition of melting certification to enter world's Top 4 manufacturers
	Electronic materials Increase production capacity of clad materials (operation in the 2H of FY2018 at Tsuchiura Works of Hitachi Metals Neomaterial) Increase capacity and integrate technologies of 5 sites to expand sales in new fields

