

Machinery & Steel Infrastructure Systems



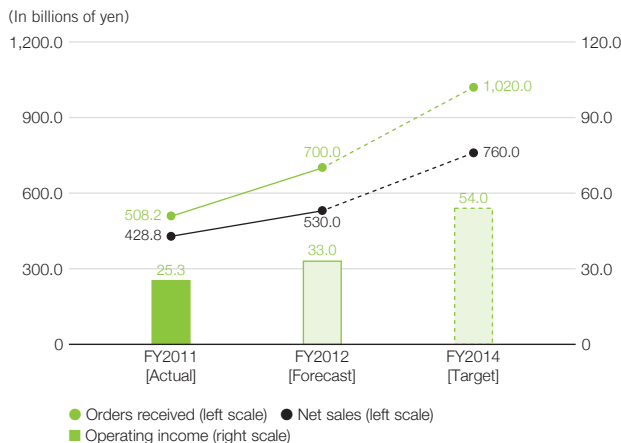
Akira Hishikawa

Head of Machinery & Steel Infrastructure Systems

Basic Strategy

- Expand business domains
- Develop operations globally
- Enhance product competitiveness

FY2014 targets



Fiscal 2011 Review

In addition to orders for steel machinery from India and China, MHI received an order for a fertilizer plant in Malaysia. In Japan, despite a challenging market climate in the aftermath of the Great East Japan Earthquake, MHI received orders for engineering work to restore machinery and equipment damaged by the disaster. The Company also reported growth in toll and fare collection machinery and in food and packing machinery. As a result, the total value of consolidated orders for Machinery & Steel Infrastructure Systems increased from the previous year to ¥508.2 billion.

Consolidated net sales decreased from the previous year to ¥428.8 billion, mainly as a result of sales declines in chemical plants and transportation systems. Operating income was largely unchanged year on year at ¥26.3 billion, with business restructuring largely offsetting the impact on earnings of lower sales and the yen's appreciation. Capital investments in this segment amounted to ¥8.4 billion, largely for the upgrade and expansion of steel machinery manufacturing equipment. The segment also recorded ¥8.1 billion in research and development expenses. R&D was chiefly focused on environmental protection technologies, including those to prevent global warming; transport technologies, specifically land-based

Relationship Between Machinery & Steel Infrastructure Systems and Business Domains

Business domain	Customers/ Markets	Segment					
		Shipbuilding & Ocean Development	Power Systems	Machinery & Steel Infrastructure Systems	Aerospace Systems	General Machinery & Special Vehicles	Others (Air-Conditioning/ Machine Tool)
Energy & Environment	<ul style="list-style-type: none"> • Power companies • Gas companies • Resource companies (oil, chemicals, steel) 		<ul style="list-style-type: none"> • GTCC • Large-sized thermal power plants • Nuclear energy 	<ul style="list-style-type: none"> • Environmental plants • Chemical plants 			
Machinery, Equipment & Systems	<ul style="list-style-type: none"> • Core industries (steel, etc.) • Automotive industry • Logistics, etc. 		<ul style="list-style-type: none"> • Stationary engines 	<ul style="list-style-type: none"> • Compressors • Iron and steel machinery • Material handling systems • Rubber tire machinery • Printing and packaging machinery, etc. 		<ul style="list-style-type: none"> • Turbochargers • Forklift trucks • Engines 	<ul style="list-style-type: none"> • Air-conditioning equipment • Machine tools
Transportation	<ul style="list-style-type: none"> • Airlines (air) • Shipping companies (sea) • Railways (land), etc. 	<ul style="list-style-type: none"> • Commercial ships 		<ul style="list-style-type: none"> • Transportation systems 	<ul style="list-style-type: none"> • Commercial aircraft 		
Defense & Aerospace	<ul style="list-style-type: none"> • Ministry of Defense (land, sea, air) • JAXA 	<ul style="list-style-type: none"> • Destroyers and submarines for the Ministry of Defense 			<ul style="list-style-type: none"> • Defense aircraft • Missiles • Space systems 	<ul style="list-style-type: none"> • Special vehicles 	



Ammonia/Urea Plant for Oman



Automated People Mover (Crystal Mover) for Hartsfield-Jackson Atlanta International Airport



Iron and Steel Manufacturing Machinery for South Korea

transportation and logistics; capital goods for steel, chemicals and other industry sectors; and the provision of high-value-added products and social infrastructure that contribute to energy supplies.

Future Initiatives

Fiscal 2011 was a successful one for the reform process pursued by MHI under the 2010 Business Plan. Steady progress was made in structural reforms targeting machinery, transportation systems, and environmental and chemical plants, with the printing and packaging machinery business also profitable for the year. From fiscal 2012, three imperatives will comprise the next step for this segment—expand business domains, enhance product competitiveness, and develop operations globally. By addressing these points, MHI will work to expand core businesses by developing and accelerating growth processes.

In transportation systems, a number of projects are slated for Asia and the Middle East, and will likely include urban transportation system projects in Southeast Asia. MHI will bolster its traffic signal and control system technologies, while moving in parallel to improve Automated People Mover (APM) production methods, making these vehicles lighter, more compact, and more competitive. MHI will also reinforce its operation and maintenance business base to expand its business domain and secure more stable earnings.

Turning to compressors, the development of new gas fields and increased shale gas production is spurring a strong willingness to invest among customers. As a result, demand for compressors is growing in the gas and petrochemicals sectors, particularly for products used in LNG and ethylene plants. MHI will expand its business domain by aggressively targeting gas sector needs. At the same time, MHI will examine the feasibility of establishing a local production base in Brazil, and will bolster sales and after-sales service bases in the Middle East and North America. Through these actions, MHI is aiming to expand business scale to ¥100.0 billion over the medium to long term, making it one of the top three companies in this market.

In iron and steel machinery, market scale is continuing to grow as raw steel production volume increases. Capital investment also remains vigorous in India, China and other emerging markets. MHI will develop new technologies in a bid to expand its business domain into upstream areas in the steel sector. In tandem, MHI will work to increase orders in emerging markets for cold rolling equipment and turnkey packages, two areas where it possesses strengths.

Based on these measures, MHI is targeting orders of ¥1,020.0 billion, net sales of ¥760.0 billion, and operating income of ¥54.0 billion for fiscal 2014.