Hagihara Industries Inc.
7856
Tokyo Stock Exchange First Section

13-Feb.-2019

FISCO Ltd. Analyst
Ken Segawa
Summary

Creating the common perceptions of the future through “Hamidase, Amidase”

Hagihara Industries <7856> (hereafter, also “the Company”), whose Head Office is in Kurashiki City, Okayama Prefecture, is a manufacturer of plastic processed products and machinery products. It is adopting a Blue Ocean strategy of pursuing profitability through top shares of niche markets rather than through scale, and it is a highly profitable company in which each of ROE, ROA, and the operating income margin were around 10% in FY10/18.

1. Won the Grand Prize in the Companies that are Most Treasured in Japan Awards

In the 8th Companies that are Most Treasured in Japan Awards held in 2018, the Company won the Ministry of Economy, Trade, and Industry (METI) Minister’s Prize, which is the Grand Prize. In a system that honors companies that conduct “management that makes people happy,” it is recognized as being a company of good standing, of a “company that is correct and that acts correctly.”

2. The FY10/18 results, the extents to which the numerical targets in the medium-term management plan were achieved, and the FY10/19 forecasts

In the FY10/18 consolidated results, net sales increased 13.9% year-on-year (YoY) to ¥26,457mn, operating income decreased 1.3% to ¥2,685mn, ordinary income rose 1.0% to ¥2,781mn, and net income attributable to the owners of the parent declined 4.1% to ¥1,884mn. Compared to the numerical targets for FY10/18, which was the final year of DH56, the three-year the medium-term management plan, net sales were 2.0% and ordinary income 0.7% below their respective targets, so the targets were practically achieved. During the period, the Company acquired EPC Holdings Pte. Ltd. (Singapore, hereafter, EPC), which is its sales agency, and Toyo Heisei Polymer Co., Ltd., which conducts a plastic films business, and made them wholly-owned subsidiaries. The factors keeping down profits were the time lag between the prices of raw materials increasing and these increases being passed onto prices, and also that transactions that were recorded in the net sales and profit items in the past became internal transactions following the consolidation of EPC, leading to the elimination of unrealized profit, which caused the profit items to decline.

The forecasts for FY10/19 are for net sales to increase 9.6% YoY to ¥29,000mn and operating income to rise 4.2% to ¥2,800mn from the full fiscal year contributions of the two companies acquired in the previous fiscal year. In FY10/18, the price per kiloliter of domestically produced naphtha continued to rise, up 30.6%, and in FY10/19 it is assumed it will increase by 11.9% to ¥53,500. The market price had fallen to ¥48,200 by December 2018. The Company's policy is to pass rises in the prices of raw materials onto its sales prices, so it is able to respond to moderate fluctuations. However, it is difficult to anticipate fluctuations in market conditions, so these forecasts are considered to be conservative.
3. A corporate slogan of “Hamidase, Amidase”.

The Company set the slogan in its previous three-year medium-term management plan of “Dynamic HAGIHARA 56 (DH56) Dynamic Brave Challenge and New Hagihara Dynamism” that inherited the pioneering spirit of its founder, of “That sounds interesting…let’s try it right away.” Currently, it has set “Hamidase, Amidase,” as its corporate slogan (where Hamidase has the meaning of going beyond the boundaries of common perceptions and existing value and frameworks, and Amidase has the meaning of creating new perceptions, value, and frameworks). From adopting this approach of “Hamidase to go beyond status quo, Amidase for new value.” it is communicating its corporate slogan of not being afraid to fail and of creating the common perceptions of the future. It is planning to develop new products not seen in the past and to construct a new production system.

Key Points

- Won the METI Minister's Prize, which is the Grand Prize, at the Companies that are Most Treasured in Japan Awards
- Practically achieved the numerical targets in DH56, the medium-term management plan
- Is viewing as severe the prices of raw materials in FY10/19 and has set firm forecasts

Source: Prepared by FISCO from the Company's financial results
Company profile

Creating the common perceptions of the future through “Hamidase, Amidase.”

1. Company profile

Hagihara Industries, whose Head Office is in Kurashiki City, Okayama Prefecture, is a manufacturer of plastic processed products and machinery products. It pursues profitability rather than scale, and it is a highly profitable company with each of ROE, ROA, and the operating income margin about 10% in FY10/18. It conducts businesses for industrial machinery that apply its core technologies of “cutting,” “stretching,” and “winding” that it has cultivated through the production of plastic processed products using flat yarn and flat yarn manufacturing. It is the only manufacturer within Japan that conducts operations from raw materials through to sheet manufacturing, and one of the Company’s features is that it has an Engineering Division that conducts the machinery products business.

The Company continued with the slogan in its previous three-year medium-term management plan (FY10/16 to FY10/18) of “Dynamic HAGIHARA 56 (DH56) Dynamic Brave Challenge and New Hagihara Dynamism” that inherited the pioneering spirit of its founder, of “That sounds interesting…let’s try it right away.” But from FY10/19, it has set “Hamidase, Amidase.” as its corporate slogan. From taking the approach of “Hamidase to go beyond status quo, Amidase for new value.” it is communicating its corporate slogan of not being afraid to fail and creating the common perceptions of the future.

Won the METI Minister’s Prize, the Grand Prize, at the Companies that are Most Treasured in Japan Awards

In the 8th Companies that are Most Treasured in Japan Awards held in February 2018, the Company won the METI Minister’s Prize, which is the Grand Prize. In a system that honors companies that conduct “management that makes people happy,” the author Koji Sakamoto, a former professor at Hosei University Graduate Schools, served as the chairman of the judges for this Prize, which is sponsored by METI and other organizations. For “Management that makes people happy,” “people” are considered to be five groups; employees and their families, subcontractors and suppliers, customers, local communities, and shareholders. The Company was recognized as being a company of good standing, of being a “company that is correct and that acts correctly.”

In response to the torrential rains in western Japan in July 2018, the Company donated sheets to Kurashiki City, which was affected by the disaster and is the location of the Company’s Head Office. As the waterproof performance of the low-priced, imported goods that had been stockpiled was insufficient, the Company suggested the city replace its stockpile of goods with goods produced by the Company. In addition, demand was generated from other local governments that also replaced their stockpiles with the Company’s products.

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2. History

The Company was established in 1962 in Mizushima, Kurashiki City, Okayama Prefecture, for the production
and sales of polyethylene monofilament for tatami-mat vertical yarn. Flat yarn is the name of the yarn made from
polyethylene and polypropylene being cut into strips, and it is strong from being stretchable. In the second half of
the 1960s, it exported industrial machinery that applied the manufacturing technologies of its in-house manufactured
products to the US, the Middle East, Latin America, and Southeast Asia. All of its production bases in Japan were
completed within Okayama Prefecture, of the Kasaoka Factory (Kasaoka City) in 1970, the Head Office Factory
(Kurashiki City) in 1973, the Satosho Factory (Satosho Town) in 1989, and the Kayo Factory (Kayo Town) in 1997.
Overseas, it established production and assembly bases in Indonesia in 1995, in Qingdao, China, in 2003, and
in Shanghai in 2005. The Shanghai subsidiary conducts the design, parts procurement, assembly and sale of
machinery products. In 2007, it newly established an engineering factory within its Head Office site.

In 2000, the Company was listed on the Osaka Stock Exchange (OSE) Second Section, and has been a listed
company for 18 years. In May 2014, its listing was upgraded from the Tokyo Stock Exchange (TSE) Second Section
to the TSE First Section.

As a new development in FY10/18, the Company conducted M&A domestically and overseas. In February 2018,
in Singapore it acquired EPC, which is its overseas sales agency for BarChip, a concrete reinforcing fiber. In June
of the same year, it acquired Toyo Heisei Polymer (Kasumigaura City, Ibaraki Prefecture), which manufactures and
sells high-quality and convenient packaging materials and processed goods made from plastics, and made it a
subsidiary. It acquired all the shares of both companies.

Business overview

Highly profitable from a Blue Ocean strategy of acquiring top shares of niche markets

1. Business overview

(1) Percentages of net sales
Sales are from two businesses: the plastic processed products business for the manufacture and sale of related
products using plastics, including flat yarn; and the machinery products (engineering) business for the manufacture
and sale of industry machinery. In FY10/18, the percentages of total consolidated net sales (¥26,457mn) by busi-
ness were that the plastic processed products business contributed 78.8% (within which, sheet and construction
materials-related: 23.4%, industrial materials-related: 35.5%, living materials-related: 16.2%, and other plastics:
3.7%), while the machinery products business contributed 21.2%. The operating income margin is high in both
businesses, 9.2% in the plastic processed products business and 13.7% in the machinery products business.
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http://www.hagihara.co.jp/en/

Business overview

(2) Product lineup
The markets covered by the Company’s plastic processed products business are “living and leisure,” “agriculture and fishery,” “packaging and distribution,” “industrial materials,” and “construction and civil engineering.” Sales are more dependent on B-to-B than on B-to-C.

Product lineup

<table>
<thead>
<tr>
<th>Living and leisure</th>
<th>Agriculture and fishery</th>
<th>Packaging and distribution</th>
<th>Construction and civil</th>
<th>Machinery</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leisure sheets</td>
<td>UV sheets</td>
<td>Adhesive tape cloth</td>
<td>Fireproof sheets</td>
<td>Slitters</td>
</tr>
<tr>
<td>Hibiken Zo Lite</td>
<td>Snowtex (for houses)</td>
<td>Container bags</td>
<td>Soft-mesh sheets</td>
<td>Inspection devices</td>
</tr>
<tr>
<td>Artificial grass</td>
<td>Snowtex (for reflection)</td>
<td>Black-out cloth for poultry sheds</td>
<td>Large sandbags</td>
<td>Winders</td>
</tr>
<tr>
<td>Wood-pattern mats</td>
<td></td>
<td></td>
<td>Design sheets</td>
<td>Recycled pellet manufacturing equipment</td>
</tr>
</tbody>
</table>

Products for living include leisure sheets, artificial grass, and wood-pattern mats. Products for agriculture and fishery include UV sheets, functional products, and black-out cloth for poultry sheds. Functional products are designed to have various functions depending on their intended use, such as light shielding and lighting functions, waterproofing and water permeability functions, wind-proofing and breathability functions, and a thermal insulation function. Products for the packaging and distribution market include adhesive tape cloth, container bags, and truck sheets. Industrial materials include UV clear sheets, flat yarn, and monofilament-derived yarn. Products for construction and civil engineering include fireproof sheets, soft-mesh sheets, large sandbags, and design sheets.

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The Company is constantly launching new products that enhance the functionality of the conventional product lineup.

2. Management strategy

(1) Management that prioritizes profitability
The Company achieves high profits by avoiding price competition in the commoditized products market and maintaining leading shares in niche markets in which there are no new entrants. It has the leading shares for products including pile yarn for artificial grass, multifunctional blue sheets, sandbags, and carpet base cloth. It also has the leading share globally of polypropylene reinforcing fiber for mortar and concrete, which will be described later. Rather than in large markets with fierce competition, it is taking a Blue Ocean strategy of targeting niche markets in which it can obtain the survivor advantage and demonstrate its strengths.

The Company’s business stance is not to sell the functions of products, but rather to provide their essential roles. For example, to a transportation company, what is important is not the cost of adhesive tape, but rather securing workers, increasing work efficiency, and reducing the time required for packaging. Adhesive tape cloth, for which the Company has the leading market share, is easy to cut and can be cut into sizes to suit the application, both vertically and horizontally, which increase work efficiency. For its sheets used at construction sites, it uses lightweight materials to contribute to increasing work efficiency and shortening construction periods. For its sandbags, to which it has added an ultraviolet deterioration inhibitor and which are weather resistant, the Company utilizes a technique of placing a black horizontal line on a white background so that anyone can fill the bags with an equal amount of soil or sand. Products that have been adapted according to what customers require as their essential roles can be priced 20% to 30% higher than general-purpose products. By being orientated to the essential value required by customers ahead of these product’s functions, the Company is building a highly profitable business model that does not begin and end with price competition.
(2) Overseas business development

In the fourth year after its establishment, the Company exported flat yarn manufacturing equipment. In 1976, it exported a complete bag manufacturing large plant to an Indonesian, state-owned fertilizer company. In 1995, it established the local subsidiary P.T. HAGIHARA WIHARTA INDONESIA (currently, P.T. HAGIHARA WESTJAVA INDUSTRIES), which is conducting a plastic processed products business. In China, in 2002 in Qingdao, it established Qingdao Hagihara Industries Co., Ltd., which conducts a plastic processed products business. Further, in 2005 in Shanghai, it established the subsidiary Hagihana Machinery (Shanghai) Co., Ltd., which designs machinery and procures and assembles parts. Currently, they are in actuality the Company's wholly-owned subsidiaries. In the machinery products business, it is strengthening overseas sales, including by newly establishing a sales department in the Shanghai subsidiary, and taking measures in the Philippines and Thailand that will lead to new orders.

In FY10/18, overseas net sales were ¥6,790mn, which was 25.7% of total net sales.

For its plastic processed products business, the Company is adopting an exporting strategy that pinpoints products that are highly competitive. A product representative of this that is being used in Australia is the inner sheets that are attached to the inside of steel water storage tanks to prevent rust and to delay the tank’s deterioration. The Company’s products use a polyolefin material, so they have the advantage of being light and strong compared to the competing products that are made of vinyl chloride. Moreover, in North America, it is positioning its grain cover laminated cloth as a strategic product in this market, due to the enormous area of arable land and harvest volume.

For overseas sales of BarChip, a concrete reinforcing fiber, EPC covered a wide area. After it was made a subsidiary in February 2018, the number of sales bases in the Company Group immediately increased by 9 bases. This subsidiary’s head office is located in Singapore, while it has bases in Australia, Ireland, Canada, USA, Mexico, Chile, Peru, and Brazil. It has adopted an integrated manufacturing and sales system, which makes it easier to feed-back customer needs into development. It also made it easier for the Company’s sales strategy to spread throughout its workplaces. In the summer of 2018, Group employees from bases throughout the world gathered together with the aim of sharing information.
As it has secured many sales bases, going forward the Company is considering sales promotions not only of BarChip, but also of other products it produces.

(3) Strategic products group
The Company selects strategic products from viewpoints such as leading share, high profitability, and growth potential and is focusing on expanding sales. Currently, this applies to “BarChip,” “adhesive tape original fabric,” “other advanced functional products,” and “film slitters.” The Company-wide gross profit margin is 29.1% (FY10/18), but it is over 30% for this strategic products group and it has become its cash cow. In terms of the percentage of total net sales in FY10/18, the strategic product group provided 46.6%, which was down 2.7 percentage points YoY due to a fall in the penetration of grain cover laminated cloth.

In FY10/19, Toyo Heisei Polymer, which has been made a subsidiary, will contribute for the full 12 months, rather than for 3 months as in the previous fiscal year. Therefore, while it is anticipated that net sales of the strategic product group will be basically unchanged YoY at ¥12,383mn, their percentage of total sales will decline to 42.7%. However, if within the lineup of products produced by Toyo Heisei Polymer, there are products corresponding to strategic products, it would seem likely that they will be added to in the future.

(4) Strategic product BarChip
BarChip is a strategic product for which there are major expectations. It is a polypropylene reinforced fiber for mortar and concrete developed from the plastic fiber stretching and manufacturing technologies that the Company has cultivated over many years. More than 20 years have passed since the Company launched BarChip and other market participants have appeared in this time. The increase in the number of suppliers has the merit of accelerating the market’s expansion. In the domestic reinforcing fiber market, the Company has an overwhelming large share of around 70% to 80%. Its strength includes its comprehensive power, such as a product lineup with cost advantage relative to performance and fibers of different thickness, and also applications development.
**Business overview**

For construction applications, more than 20 years have passed since BarChip was used in the soil-floor concrete of a distribution facility, and its durability has been demonstrated at this work site. It enables the installation of troublesome mesh wires to be omitted, and both cost reduction and shortening of work time can be achieved. The top priority at construction sites is securing manpower, and meshless concrete that incorporates BarChip has acquired an excellent reputation for labor saving.

In civil engineering applications, it is known from its use in mines, such as in Australia and South America, and in Tokyo’s outer ring road. In 2003, it became possible to use the reinforcing fiber BarChip JK, a reinforcing fiber used for tunnel-cover concrete, in the NEXCO (formerly Nippon Highway Public Corporation) Tunnel Construction Management Guidelines. It was confirmed that the crosslinking effect of the fiber added to concrete contributes to preventing concrete pieces from falling and third-party damage. In terms of its applications for railway tracks, it is used to reinforce the concrete used to adjust the height of sleepers and concrete roads, to prevent the fall of mortar and concrete from tunnel covers, and to suppress and reinforce cracks. It is highly probable that it will be used at the entrances of railroad tunnels where shock waves occur. Overseas, it is being used in Hungary for electric tram tracks and in Spain for sewer concrete segments. The Company’s highly durable product is being adopted because it is difficult to conduct repair work after the segments have been buried underground.

**Examples of BarChip use**

Concrete cement in the Tokyo outer ring road  
Building soil-floor  
Slope  
Spraying of tunnel inner walls  
Electric tram tracks (Hungary)  
Sewer concrete segments (Spain)  
Hybrid Prestressed and Concrete Roofs (Okinawa Prefecture, Japan)

**Source:** Prepared by FISCO from the Company’s materials and results briefing materials

Although the peak of the Tokyo outer ring road work has passed, the Company is progressing BarChip’s applications development and demand is expected to continue to remain at a high level within Japan. For large projects in the future, there are expectations for the Linear Chuo (Central) Shinkansen (Bullet Train) Line. The anticipated demand is that BarChip will be used as a reinforcing material for the track and for tunnel-cover concrete. With a total route of 438 kilometers, the Chou Shinkansen Line is scheduled to open in 2027 between Shinagawa and Nagoya and in 2037 between Nagoya and Osaka. As it is scheduled to connect Shinagawa to Nagoya in 40 minutes at top speed, the plan is to run a direct route with a top speed of 505 km/h. In the metropolitan areas of Tokyo, Nagoya and Osaka where it is difficult to secure land, it will utilize the “deep underground,” for which it not necessary to compensate landowners because it is highly public in nature. About 250 kilometers, or more than 80%, of the route from Shinagawa to Nagoya will be covered by tunnels. It will take a straight route, from the vicinity of Kofu City, Yamanashi Prefecture, via the Southern Japanese Alps (the Akaishi Mountain Range) to the vicinity of Nagoya City. It is expected that reinforcing materials will be used at places where construction and maintenance work will be difficult.

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BarChip's new applications development includes Hybrid Prestressed Concrete (HPC). In Okinawa, an overwhelming large number of houses are made of reinforced concrete due to the lack of wood in the post-war period and climatic reasons, such as typhoons. The steel rods used in reinforced concrete are susceptible to salt damage. Carbon fiber is used as a substitute without any concerns that it will rust, but while it is resistant to distortion, it is prone to cracking. The Company overcame this weak point by mixing carbon fiber with BarChip, expansion materials, and other materials, to create concrete that is “thin,” “light,” and “resistant to bending.” Concrete products that are highly durable and easy to process and transport can be used for the construction of homes that prioritize design. The latest products originating from Okinawa will change the common perception in the industry that concrete is “thick,” “heavy,” and “hard.”

For the building of the roof of the Makiminato Branch of the Bank of the Ryukyus, which was completed in March 2018, the Company constructed the world's first ultra-thin, sunshade concrete board (a fence).

### Performance trends

**In FY10/18, operating income declined slightly due to M&A accounting**

1. **Review of FY10/18 results**

   *(1) Results summary*

   In the FY10/18 consolidated results, net sales increased 13.9% YoY to ¥26,457mn, operating income decreased 1.3% to ¥2,685mn, ordinary income up 1.0% to ¥2,781mn, and net income attributable to the owners of the parent was down 4.1% to ¥1,884mn. Compared to the initial forecasts, net sales were 8.0% up on the forecast, operating income was fell short of 4.1%, or ¥115mn.

   During the fiscal year, the Company acquired and made subsidiaries of two companies related to plastic processed products, EPC and Toyo Heisei Polymer. Through the consolidation of the sales agency EPC, which was acquired in February 2018, the elimination of unrealized profit of ¥209mn was generated. From its past transactions with EPC, the Company had recorded net sales and profits, but the part that remained in the inventory assets of EPC from previously became internal transactions following its consolidation, and therefore this part was processed to return the net sales and profits. If there had not been this decrease in profits due to the consolidated-results accounting, the Company would have achieved the numerical target (¥2,800mn) for the final fiscal year of the three-year, medium-term management plan. The acquisition of EPC had been incorporated into the medium-term management plan in advance, but the elimination of unrealized profit increased to more than had been anticipated.

   In its stand-alone results, the Company achieved record high net sales and operating income, while all of its consolidated subsidiaries were profitable. EPC’s results were for an eight-month period, in which it recorded net sales of ¥2,081mn, operating income of ¥245mn, and an operating income margin of 11.8%. Toyo Heisei Polymer contributed for a three-month period, of net sales of ¥1,031mn, operating income of ¥46mn, and an operating income margin of 4.5%.

   The Company recorded ¥30mn (¥15mn each) for the costs to acquire the two companies (such as for advisory fees). Alongside the acquisition of EPC, goodwill of 7,103,000 Singapore dollars (5-year amortization) and intangible assets of 3,693,000 Singapore dollars (10-year amortization) were generated. In FY10/18, the eight months’ portion, of ¥108mn, was recorded as the amortization of both goodwill and intangible assets.
(2) Segment trends

a) Plastic processed products business

In the plastic processed products business, net sales were ¥20,854mn (up 17.5% YoY), but operating income was ¥1,917mn (down 10.4%). The operating income margin declined from 12.1% in the previous fiscal year to 9.2%. The factors in this segment causing operating income to change were that the effects of the higher sales (+¥1,076mn) could not cover for the deterioration of the gross profit margin (-¥302mn), the elimination of unrealized profit from EPC (-¥209mn), and the increase in SG&A expenses (-¥787mn). Following the additions of EPC and Toyo Heisei Polymer, net sales and SG&A expenses increased.

The deterioration of the gross profit margin was due to the soaring prices of raw materials. The Company's basic policy is to pass increases in the prices of raw materials onto sales prices. In FY10/18, a factor causing profits to decrease was the time lag from when the prices of raw materials increased to when these increases were passed onto sales prices. But in FY10/19, the effect of this passing of increases onto prices is expected to fully contribute. In the Company's budget, it has been assumed that the price per kiloliter of domestically produced naphtha, which is the main raw material, will rise by almost 20%, from ¥36,600 in October 2018 to ¥43,900. On a quarterly basis, its market price trended at ¥45,096 (up 29.1% YoY) in 1Q, ¥44,830 (up 12.6%), in 2Q, ¥49,199 (up 37.4%), in 3Q, and ¥52,355mn (up 45.8%) in 4Q. The full fiscal year price was ¥47,800, which was 8.9% higher than budgeted.

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b) Machinery products business

The machinery products business achieved strong results, of net sales of ¥5,602mn (up 2.0% YoY), operating income of ¥768mn (up 32.0%), and an operating income margin of 13.7%. The main factors behind the increase in operating income were the effects of the higher sales (+¥32mn) and the improvement to the gross profit margin (+¥159mn). In the mainstay slitter-related equipment, results were strong for each of soft packaging-related and optical-related products for the domestic market, and for overseas, for soft packaging-related products for Thailand and Southeast Asian countries, and battery-related products for China. In extruder-related machinery, screen changers for high performance films and pelletizer for special plastics and compounds all performed well. For film slitters for lithium-ion batteries in China, the Company is establishing a production system while carefully ascertaining demand in the future, so a backlog of orders has accumulated.

2. Financial position and management indicators

At the end of FY10/18, total assets were up ¥4,755mn on the end of the previous fiscal year to ¥31,870mn following the addition of the assets of the two acquired companies. Current assets increased ¥2,086mn to ¥19,848mn. The main increase and decrease items included cash and deposits (down ¥2,241mn), notes and accounts receivable - trade (up ¥2,138mn), and inventories (up ¥1,956mn). The decrease in cash and deposits was from the expenditure for the company acquisitions. Notes and accounts receivable – trade rose due to the higher sales. The increase in inventory assets was not an unintended one, as the sales destinations have been determined. In credit, interest bearing debt increased ¥1,890mn on the addition of the borrowing of the acquired subsidiaries. Net assets increased ¥1,270mn.

The current ratio, which shows the ability to make short-term payments, was 223.4%, while the equity ratio, which is a long-term indicator, was 66.2%, and both indicate an extremely high level of financial stability. For the indicators of profitability, ROE (Return on Equity) was 9.2%, ROA (Return on Assets) was 9.4%, and the operating income margin was 10.2%. For ROE, the two consolidated companies contributed net sales for eight months and three months respectively, so this had an adverse impact on the total assets turnover ratio.

Source: Prepared by FISCO from various market data
Performance trends

Consolidated balance sheet

<table>
<thead>
<tr>
<th></th>
<th>As of October 31, 2016</th>
<th>As of October 31, 2017</th>
<th>As of October 31, 2018</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current assets</td>
<td>15,785</td>
<td>17,761</td>
<td>19,848</td>
<td>2,086</td>
</tr>
<tr>
<td>Cash and deposits</td>
<td>6,235</td>
<td>7,648</td>
<td>5,407</td>
<td>-2,241</td>
</tr>
<tr>
<td>Notes and accounts receivable - trade</td>
<td>5,312</td>
<td>5,490</td>
<td>7,628</td>
<td>2,138</td>
</tr>
<tr>
<td>Inventories</td>
<td>3,645</td>
<td>3,955</td>
<td>5,911</td>
<td>2,956</td>
</tr>
<tr>
<td>Property, plant and equipment</td>
<td>7,027</td>
<td>7,245</td>
<td>8,793</td>
<td>1,548</td>
</tr>
<tr>
<td>Intangible assets</td>
<td>137</td>
<td>122</td>
<td>1,063</td>
<td>940</td>
</tr>
<tr>
<td>Investments and other assets</td>
<td>1,923</td>
<td>1,384</td>
<td>2,165</td>
<td>181</td>
</tr>
<tr>
<td>Total assets</td>
<td>24,874</td>
<td>27,114</td>
<td>31,870</td>
<td>4,755</td>
</tr>
<tr>
<td>Current liabilities</td>
<td>5,450</td>
<td>6,025</td>
<td>8,894</td>
<td>2,859</td>
</tr>
<tr>
<td>Non-current liabilities</td>
<td>1,474</td>
<td>1,244</td>
<td>1,870</td>
<td>625</td>
</tr>
<tr>
<td>Total liabilities</td>
<td>6,924</td>
<td>7,269</td>
<td>10,755</td>
<td>3,485</td>
</tr>
<tr>
<td>(Interest-bearing debt)</td>
<td>1,052</td>
<td>967</td>
<td>2,857</td>
<td>1,890</td>
</tr>
<tr>
<td>Net assets</td>
<td>17,949</td>
<td>19,844</td>
<td>21,114</td>
<td>1,270</td>
</tr>
</tbody>
</table>

[Stability]

- Current ratio: 289.6% 294.8% 223.4%
- Equity ratio: 72.2% 73.2% 66.2%

Source: Prepared by FISCO from the Company’s financial results and results briefing materials

At the end of FY10/18, the balance of cash and cash equivalents was down ¥2,149mn on the end of the previous fiscal year to ¥4,167mn. Net cash provided by operating activities was only ¥2,009mn, as although there were cash increases, of net income before income taxes of ¥2,779mn and depreciation and amortization expenses of ¥1,054mn, there were cash decreases, including from the increases in trade receivables (¥181mn) and inventory assets (¥567mn). Net cash used in investing activities was ¥3,341mn, including for expenditure of ¥2,304mn to acquire the consolidated subsidiaries and expenditure of ¥998mn to acquire property, plant and equipment in order to newly expand and strengthen production facilities, for renewals, and for the rationalization of investment. Net cash used in financing activities was ¥837mn, mainly due to the repayment of long-term borrowing.

Consolidated statement of cash flows

<table>
<thead>
<tr>
<th></th>
<th>FY10/16</th>
<th>FY10/17</th>
<th>FY10/18</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash flows from operating activities</td>
<td>3,904</td>
<td>2,535</td>
<td>2,009</td>
<td>-525</td>
</tr>
<tr>
<td>Cash flows from investing activities</td>
<td>-1,320</td>
<td>-848</td>
<td>-3,341</td>
<td>-2,493</td>
</tr>
<tr>
<td>Cash flows from financing activities</td>
<td>-739</td>
<td>-326</td>
<td>-837</td>
<td>-511</td>
</tr>
<tr>
<td>Cash and cash equivalents at end of period</td>
<td>4,923</td>
<td>6,317</td>
<td>4,167</td>
<td>-2,149</td>
</tr>
</tbody>
</table>

Source: Prepared by FISCO from the Company’s financial results
Outlook

Viewing as severe the prices of raw materials in FY10/19 and has set firm forecasts

● FY10/19 outlook

FY10/19, the Company projects a 9.6% YoY increase in consolidated net sales to ¥29,000mn, a 4.2% rise in operating income to ¥2,800mn, a 4.3% increase in ordinary income to ¥2,900mn, and a 6.1% increase in net income attributable to the owners of the parent to ¥2,000mn, and sales and profits are expected to increase.

<table>
<thead>
<tr>
<th>FY10/19 consolidated forecast</th>
<th>(¥mn)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>FY10/18</td>
</tr>
<tr>
<td></td>
<td>Amount</td>
</tr>
<tr>
<td>Net sales</td>
<td>26,457</td>
</tr>
<tr>
<td>Plastic processed products business</td>
<td>20,854</td>
</tr>
<tr>
<td>Machinery products business</td>
<td>5,602</td>
</tr>
<tr>
<td>Operating income</td>
<td>2,685</td>
</tr>
<tr>
<td>Plastic processed products business</td>
<td>1,917</td>
</tr>
<tr>
<td>Machinery products business</td>
<td>768</td>
</tr>
<tr>
<td>Ordinary income</td>
<td>2,781</td>
</tr>
<tr>
<td>Net income attributable to the owners of the parent</td>
<td>1,884</td>
</tr>
</tbody>
</table>

By business, the forecasts for the plastic processed products business are net sales of ¥22,700mn (up 8.9% YoY), operating income of ¥2,070mn (up 7.9%), and an operating income margin of 9.1%. The forecasts for the machinery products business are net sales of ¥6,300mn (up 12.4%), operating income of ¥730mn (down 5.0%), and an operating income margin of 11.6%. So the increases and decreases in these two businesses will supplement each other, and therefore as a whole, sales and profits are expected to increase.

(1) Plastic processed products business

The assumed price per kiloliter of domestically produced naphtha, which will affect earnings in the plastic processed products business, is ¥53,500, which will be an increase of ¥5,700 (11.9%) YoY. The degree of sensitivity for operating income is ¥50mn for a fluctuation of ¥1,000 per kiloliter. The assumed price will be a factor causing profits to decrease ¥285mn in the simple calculation, but as the Company passes price changes onto sales prices, the actual effect amount will be the part from the time lag. In FY10/18, there was the situation of it refraining from raising sales prices during times of disasters. The price per kiloliter of domestically produced naphtha was ¥54,200 in October 2018, but it had fallen to ¥48,200 by December of the same year. It is expected to fall to around ¥43,700 by March 2019.
Outlook

The two companies acquired during FY10/18 will contribute to the full year’s results in FY10/19. In FY10/18, operating income from EPC was ¥245mn (eight months) and from Toyo Heisei Polymer was ¥46mn (three months). The FY10/19 operating income forecasts calculated for 12 months are for ¥368mn from EPC, an increase of ¥123mn YoY, and ¥184mn from Toyo Heisei Polymer, a rise of ¥138mn. Therefore, the total for the two companies will be ¥552mn, an increase of ¥261mn, which will be a factor causing sales and profits to rise. Even though EPC’s unrealized profit will remain until 1Q, it will be eliminated in the full fiscal year, so the decrease factor of ¥209mn that was generated in the previous fiscal year will not be generated in this fiscal year. There will also be no M&A costs, and together these factors will cause profits to increase ¥500mn, which will exceed the profit decrease factor of ¥285mn from the rise in the price of domestically produced naphtha. As the forecasted operating income increase amount in the plastic processed products business is ¥153mn, these forecasts can be said to be firm.

(2) Machinery products business

In the machinery products business, the operating income margin rose from 10.6% in FY10/17 to 13.7% in FY10/18. It is forecast to fall to 11.6% in FY10/19, but even so, it will still be higher than the average for the FY10/14 to FY10/18 period, of 11.3%. Demand for lithium-ion battery related products in China is strong, but there are concerns about a bubble forming, so the Company is not planning to invest in expanding production in order to eliminate the backlog of orders. In Southeast Asia, it is opening up new markets, but it seems that the profit margin will be lower, including due to differences in the product mix.

Source: Prepared by FISCO from the Company’s results briefing materials
Longer-term growth strategies

Practically achieved the numerical targets in DH56, the medium-term management plan

1. Medium-term management plan DH56

The Company completed DH56, the three-year medium-term management plan, in FY10/18, and it is currently formulating the next medium-term management plan.

(1) The extents to which the targets in the medium-term management plan were achieved

The numerical targets in DH56, the three-year medium-term management plan, for the plan’s final year of FY10/18, were net sales of ¥27,000mn, ordinary income of ¥2,800mn, and an ordinary income margin of 10.4%. The actual results were net sales of ¥26,457mn, ordinary income of ¥2,781mn, and an ordinary income margin of 10.5%. So compared to the targets, net sales were 2.0% and ordinary income was 0.7% below their respective targets, which can be said to be within an acceptable error range.

(2) Basic policies

In the previous medium-term management plan, in order to realize new growth, the Company set the slogan of “Dynamic HAGIHARA 56 (DH56) Dynamic Brave Challenge and New Hagihara Dynamism.” The plan’s basic policies were 1) Strengthen sales of strategic products and open-up markets, 2) Expand overseas sales, 3) Rebuild the product manufacturing process, and 4) Create value for customers by integrating new technologies. There are ongoing projects within these policies, so it is highly likely that they will be continued in the next medium-term management plan. The pioneering spirit of the Company’s founder, of “That sounds interesting… let’s try it right away.” is being continued in the new “Hamidase, Amidase.” corporate slogan, of “Hamidase to go beyond status quo, Amidase for new value.”

2. Developments at subsidiaries

(1) BarChip Inc.

EPC’s position in the Group has changed. The concrete reinforcing fiber BarChip is used throughout the world for various infrastructure projects, such as for tunnels, roads, bridges, and buildings, and also for mining. The Company’s sales areas were Japan, South Korea, China (including Hong Kong), and Taiwan, while EPC covered all other countries. In order to further increase sales, from the viewpoints of developing new products based on user needs and strengthening the sales strategy, it decided it was necessary to have integrated management for worldwide sales. So in July 2018, it established BarChip Inc. (Kurashiki City, Okayama Prefecture) as a subsidiary to supervise the worldwide sales function, and it started operations in November 2018. Mr. Yoshiaki Hagihara was appointed as the CEO of this subsidiary. BarChip Inc., will serve as the control tower for global operations, including planning and implementing the proactive sales strategy and development investment from the viewpoint of the profits of the Group as a whole, rather than the profitability of each individual sales company.
Longer-term growth strategies

Objectives of the activities of BarChip Inc.

- Seamlessly ascertain customer needs in each country and immediately utilize this information to develop new products
- In developing-country markets, conduct activities to increase awareness of BarChip by appealing to its abundant track record of use in Japan, Europe, and the US.
- Provide support for its introduction into overseas ODA projects by Japanese general contracts, through sales engineers who are based in the region
- Realize a supply chain management without waste through ascertaining worldwide inventory conditions and sales trends
- Plan and implement the proactive sales strategy and development investment from the viewpoint of the profits of the Group as a whole, rather than the profitability of each individual sales company

Source: Prepared by FISCO from the Company website

(2) Toyo Heisei Polymer

Mr. Kuniaki Hagihara, the Chairman of the Company, has been appointed President and Representative Director of Toyo Heisei Polymer (Kasumigaura City, Ibaraki Prefecture). Together with spreading the corporate culture of the Company Group, the aim is to improve the management system, such as renovations for the information system. This subsidiary conducts businesses for functional yarn based on flat yarn and various types of industrial material laminated cloth, and it also handles plastic film products. Although the two companies have shared technologies for plastics processing, in terms of products, the subsidiary covers a wide range of packaging applications that the Company does not handle, such as clear files and other stationary items, tape for sealing beverage containers, and medical-use items like infusion bags. Going forward, both companies will develop new markets by refining and integrating their shared plastics processing technologies.

3. Rebuilding the production system

The Company currently has four domestic factories in Okayama Prefecture. It is considering reorganizing its factories to achieve one of its objectives, of improving flow lines between them. In January 2019, it acquired the 114,000m² Kasaoka Port Industrial Site (Kasaoka City) from Okayama Prefecture for ¥911mn. It was able to receive preferential treatment, such as subsidies, to acquire the land. The construction of a new factory was not included in the plan for FY10/19, but it seems likely that it will be one of the pillars of the next medium-term management plan. For new bases, the Company will renew manufacturing facilities with the aims of expanding and strengthening capacity and further reducing costs. In FY10/18, in addition to capital investment of ¥998mn, it spent ¥2,304mn on M&A (after the deduction of cash held by the acquired subsidiaries). In FY10/19, it is planning capital investment of around ¥2,000mn, while depreciation and amortization expenses will increase slightly, from ¥1,054mn in the previous fiscal year to ¥1,100mn.

4. Product development strategy

The Company is not only reducing costs and upgrading existing products through improving production technologies, it is also using its core technologies for “slitting, stretching, winding, and weaving” to develop new products that go beyond the common perceptions of the past.
Shareholder return policy

In FY10/18, plans to pay an annual dividend of ¥32

1. Dividend policy

Dividend policy is to return profits to shareholders and maintain stable dividends. The dividend payout ratio standard is around 20%.

In FY10/16, the Company recorded extraordinary income of ¥322mn as compensation for land acquisition, and therefore it returned profits to shareholders by increasing the annual dividend to ¥30 per share. In FY10/17, results were better than forecast, so it increased the annual dividend to ¥32.0. In FY10/18, even though net income attributable to the owners of the parent declined 4.1% YoY, it maintained the dividend at ¥32.0. The forecast for FY10/19 is again an annual dividend per share of ¥32.0, which will be comprised of a dividend at the end of 2Q of ¥16.0 and a period end-dividend of ¥16.0, for a dividend payout ratio of 23.1%.

![Dividend per share and dividend payout ratio after adjustment](chart)

Note: The Company made a 2-for-1 share split on November 1, 2017.
Source: Prepared by FISCO from the Company's financial results

2. Shareholder benefits program

In FY10/16, the Company introduced a benefits program for shareholders registered at the end of the fiscal year. Shareholders who satisfy certain requirements can select from among the products or donations listed by the Company. Shareholders who have held shares continuously for less than 3 years can choose a product with a value of ¥1,000 if they hold from 100 to less than 1,000 shares, and of ¥3,000 if they hold 1,000 or more shares. Shareholders who have held shares continuously for 3 years or more can choose a product with a value of ¥2,000 if they hold from 100 to less than 1,000 shares and of ¥6,000 if they hold 1,000 or more shares.

The number of shareholders temporarily decreased to around 2,000 people, but by the end of FY10/18, it had increased to 9,528 people, including due to the effects of the share split and the introduction of the shareholder benefits program.
## Information security

In addition to restricting the taking-out of information devices, including ordinary laptop computers, in preparation for the occurrence of a disaster or other emergency situation, the Company plans to move its systems to the Cloud as part of its business continuity plan (BCP).
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