

Q&A for IR Day

Date: Thursday, November 19, 2020, from 10:00 a.m. to 11:50 a.m.

No	Item	Q	A
1	CMP	Is there still room for improving productivity through automation and labor-saving? Please share with us the areas where you are thinking about improving productivity, and whether better productivity will be able to improve profitability.	We advanced automation at the Tsu Plant (precision reduction gears) and Tarui Plant (hydraulic equipment) 1.5 times more than in 2017. However, there are still many manual tasks, and considering that one robot can do the work that three people can do (24 hours divided by 8 hours), we think automation will lead to improving productivity. We have made a great number of improvements on each production process in addition to automation. Therefore, it is difficult to extract the profitability improvement realized by automation alone, but in the past five years, the output per person has increased about 1.2 times, and we think that automation has also contributed to improving profitability.
2	Precision Reduction Gears	Could you share with us how far you are ahead of competitors in terms of the competitive advantage of precision reduction gears?	Take product life, for instance; we think that products of emerging market manufactures have only a half or a third that of ours. In order to maintain our competitive edge in the future, it is necessary to continue developing products that are one or two steps ahead and winning the trust of our customers.
3	Precision Reduction Gears	How long do precision reduction gears last?	They last 7 to 10 years when mounted on industrial robots.
4	Precision Reduction Gears	You demonstrate the development process through close communication with customers as one of your competitive edges. Can you deploy that competitive edge even with Chinese local robot manufacturers?	At present, Chinese robot manufacturers follow the examples of Japanese and European robot manufacturers in many cases. Therefore, specific robot parts are frequently demanded as the same specification as Japanese and European robot manufacturers are required, and Chinese robot manufacturers are not yet at the stage of sharing the development process. But we consider them as important customers with an eye on future growth, as well.
5	Precision Reduction Gears	Do you have any plans to enter the field of collaborative robots or small precision reduction gears?	Regarding small precision reduction gears, we have made prototypes, which is using current technology but smaller size, and proceeded with joint development with external parties, such as a university research center. However, we have not reached the stage of their commercialization. Under the current circumstances, we do not intend to expand into that field. Small precision reduction gears that are employed in robots' wrist axis are made up of a small number of parts and have a different mechanism from ours. Therefore, we consider it is difficult to catch up with the competition from now on, including the know-how in gear teeth. The basic axis of collaborative robots also incorporates our precision reduction gears.
6	Precision Reduction Gears	Is there any synergy with Harmonic Drive Systems?	We have had several instances of dialogue until now, but partly due to significant differences in product technology, we have not been able to draw out any synergy at the moment.
7	Hydraulic Equipment	Could you share with us the percentage of sales to Chinese construction machinery manufacturers and whether there is any impact on Nabtesco of Chinese construction machinery manufacturers expanding to Southeast Asia?	The percentage of Chinese construction machinery manufacturers in the excavator market is about 35% globally. We have heard that Chinese construction machinery manufacturers are aiming to expand overseas, including in Southeast Asia, but their plants are mainly in China, and we provide products mainly in China.
8	Hydraulic Equipment	Could you share with us the move toward production of made-in-China hydraulic equipment and the trend of local manufacturers?	It is certain that local manufacturers are catching up with us in traveling units as well. But they are not actually taking the market share of either precision reduction gears or hydraulic equipment away from us because our products are superior in terms of durability and other aspects. Having said that, as it can be a potential threat, we are closely watching their moves.
9	Hydraulic Equipment	I have heard that local hydraulic equipment manufacturers in China are pushing aggressive pricing strategies. Has Nabtesco been affected by that?	There is always price pressure on both precision reduction gears and hydraulic equipment. We intend to compete by raising the level of production and products so as to prevent such products from becoming commoditized.
10	Hydraulic Equipment	Is there any risk that local construction machinery manufacturers in China will start in-house production of hydraulic equipment?	There has been a move toward in-house production for some time, but it varies from customer to customer not only overseas but also in Japan, whether they pursue in-house production or outsourcing. Therefore, we will respond case by case, depending on their policy.
11	Hydraulic Equipment	Will the need for hydraulic equipment change as excavators adopt electrification and ICT?	Even if excavators adopt electrification, the big change will be that their engines will be replaced by electric motors, but the hydraulic circuit will remain. Therefore, we do not think that hydraulic equipment will disappear. However, mainly with mini-sized excavators, there is a possibility that full electrification in the future will eliminate the need for pumps and valves and they will be able to directly move the crawler and arms. Therefore, we have been developing technologies to cope with that situation.
12	ACB	How much market share will you be able to increase in the domestic market for automatic doors in the future?	Our domestic market share is currently 50%, so it is difficult to raise it significantly. But we aim to increase our market share, even if it is little by little, by aggressively attempting to replace other companies' products with ours mainly in redevelopment projects.
13	ACB	Could you share with us the pricing strategy and whether there is any room for sales expansion via orders for maintenance, repair & overhaul (MRO) concerning automatic doors for buildings.	Our automatic doors for buildings are evaluated according to their product quality. Therefore, we have no intention to get involved in pricing competition. The service of MRO is currently limited to customers who have our company's automatic doors in their buildings. Therefore, we conduct maintenance service according to customer needs. We consider the current ratio to be appropriate.

14	ACB	Could you share with us how you envisage future growth in markets, such as China and North America?	<p>In China and North America, given the size of their land, it is not easy to acquire the same market share as in Japan and Switzerland. In North America, in particular, we will take the strategy of first deciding which cities we will focus on, and then building a value chain model there and gradually expanding sales in its surrounding areas. Our medium- to long-term target is a market share of 10% to 12%.</p> <p>In China, price is given priority over quality in many cases, so we will concentrate on the high-value-added door market in which we can demonstrate our value. Therefore, we assume that the market share will not change significantly from the current level.</p>
15	ACB	Could you share with us how you project the business of automatic doors for buildings from the next fiscal year onward?	<p>Regarding automatic doors for buildings in Japan, large-scale redevelopment projects will be completed in the Tokyo metropolitan area and other areas in and after 2023. Therefore, we will strive to steadily capture medium-scale projects and MRO for the time being. If the Olympic and Paralympic Games are held next year as scheduled, there will likely be impacts, such as suspension of construction during the Games.</p> <p>Regarding platform doors, it will be possible that capital investment in and after the next fiscal year may be delayed depending on the performance of railway operators. However, demand for platform doors as an investment in safety will not disappear, and we hear from customers that they want to install them as much as possible.</p>
16	ACB	Could you share with us if there is room for market growth due to the need for a contactless doors?	<p>In the contactless doors, there are increasing needs to change manual doors to automatic doors and to install automatic doors for zoning. We think that our strengths include the features of our products that they can be installed in a narrow space and the wide line-up of our products, such as automated swing doors. This need can be expanded by other factors, including support and subsidies from the Ministry of Health, Labour and Welfare and the Small and Medium Enterprise Agency. Over the medium to long term, there is an ongoing tendency for new buildings to have more automatic doors, so future growth can be expected.</p>
17	ACB	Could you tell us who your competitors are in the field of automatic doors?	<p>Overseas, there are Stanley, Dorma-Kaba, Assa Abloy, etc., and in Japan, we compete with Teraoka Autodoor Inc. and Fulltech Inc., in particular.</p>
18	ACB	What does Nabtesco need in order to develop its business overseas?	<p>While overseas competitors offer one-stop services, including security products, in many cases, we have the unique capability to accommodate customer needs as a specialized manufacturer of automatic doors. We should establish sales and service networks in strategic regions in order to be more competitive as well.</p>
19	ACB	Regarding winning MRO orders for platform doors, do you ever lose the MRO of your products to other companies?	<p>We also handle MRO in projects in which we are in charge of OEM. Regular inspections are supposed to be conducted every six months, with major parts (moving parts) to be replaced in 10 years, and all parts to be replaced 30 to 40 years after installation.</p>