Tour of the Fukuroi South Factory for Outboard Manufacturing Q&A Minutes

Production Capacity Expansion and Production Efficiency Improvements

You announced your plan to increase production capacity by 2026. Please tell us what methods you will use to increase capacity and what challenges you face.

We have production lines for each horsepower range, and by enabling smaller outboard lines to manufacture items for bigger models, i.e., the midrange line for large models and the small model line for midrange models, we achieved an overall increase in production volume. We plan to increase capacity by 15% from 2025 to 2026 (compared to 2024) but accomplishing this will require us to make it possible to manufacture large outboards on other lines, especially those in the 300 to 350 hp range. The biggest challenge will be preparing equipment that will match the size of the units, and since the number of parts will also increase, we also need to extend the length of the lines. If demand for small to midrange outboard motors goes up, we plan to boost production capacity at Yamaha Kumamoto Products Co., Ltd. (YKP).

<u>Please tell us about the bottlenecks that exist when developing and producing high-horsepower</u> <u>outboard motors. Do the issues lie with factory equipment, development expenses, personnel, etc.?</u>

Development costs are indeed an issue, but the biggest bottleneck is securing the personnel to conduct development in the first place. In addition, the demand for large outboards is higher than we expected 10 years ago, so we also have to change our manufacturing equipment accordingly.

Please tell us about your efforts for automation and other improvements to production efficiency.

While we have achieved nearly 100% automation on our machining and painting lines, there are still many technical hurdles to clear in automating assembly processes. However, we view this as an issue the entire industry is facing and do not believe that Yamaha Motor is falling behind with automation. In terms of improving production efficiency, we are working with a goal of improving it by 5% each year. For some time now, we have treated time lost during production changeovers as a standout issue, but we are now always keeping production efficiency improvements in mind as we work, such as making it possible to finish changeovers in just a few minutes.

Will producing more large outboard motors make the business more profitable as well?

The Fukuroi South Factory produces high volumes of large outboard motors. We have made investments for automation and other measures here to improve production efficiency, so the manufacturing costs vs. net sales ratio is good.

Please explain the reason for subdividing the engine models for outboards.

We subdivide models according to the differences that exist in the various destination markets. In addition, we have various specifications for outboard motor heights, emissions certifications, handle shapes, and so on. When all these factors are accounted for, even a single model can actually have many different variations. However, if comparing to the past, we have considerably fewer variations dependent on complying with emissions and other regulations. Before, we used to have different specifications by destination market, like one for the United States and one for Europe, but now they are uniform for "developed markets."

Growth Potential

Regarding your approach for market expansion, I would like to know if there are any other market growth trends besides boats mounting multiple outboards.

One market growth trend is the shift from inboards to outboard motors. Today, around 90% of the market is for outboards and just 10% for inboards, but we believe there's still more room left for this shift to outboards. Plus, besides the outboard itself, it will be more important going forward to include added value that will make the marine recreation lifestyle more comfortable and enjoyable. We are also directing efforts to accessories and peripheral equipment like the Helm Master EX for more comfort and more fun right alongside our outboards.

I'd like to know the progress made so far with growing the business for outboard motor peripheral equipment.

Since the launch of the Helm Master EX, sales of peripheral equipment have been steadily rising and have actually doubled during the current Medium-Term Management Plan. We are also working on introducing a Docking Assist System and we exhibited a prototype demo boat with the technology, which is being developed in the U.S., last year at the Miami International Boat Show. We are also considering greater synchronization with bow thrusters and also launching the system to emerging markets.

What are Yamaha Motor's strengths and weaknesses in the industry?

With large outboard motors, the F350B, which went on sale this season, boasts the lightest weight of models in its class. Weight is an important item boatbuilders consider and one that we have been fixed on for a long time. At the same time, our product lineup has been insufficient and we will be working to expand it. In building up our large outboard model offerings toward 2030, we will develop products that put us ahead of the competition by focusing not only on lightweight and compactness but also quiet operation and onboard power generation, two aspects drawing greater focus in the market.

What was it that enabled the light weight of the F350B?

We developed it based on our current 300 hp model and we were able to reach 350 hp while retaining the weight of a 300 hp model.

<u>Please tell us your efforts to strengthen competitiveness and maintain high profitability, as well as what risks the company is wary of.</u>

Going forward, we will work to strengthen development and launch new products to expand our lineup of large outboards with offerings that meet market needs by 2030 while at the same time upping production capacity in order to meet demand. Further, with the increase in demand for large outboards, we can expect to see even greater demand for rigging products. And if we see chances to expand our business through M&As, we will do so. For risks we must be aware of, besides those common to other companies, such as economic recessions and high raw material prices, we need to carefully control inventory levels and successfully raise our production capacity as quickly as possible.

Market Trends

<u>Please tell us the demand outlook for the North American outboard motor market and how the market itself is changing.</u>

During the pandemic, the rise in demand for outdoor recreation in general drove up demand for outboard motors, especially small to midrange models, as well as personal watercraft, sport boats, and other products. Since the pandemic subsided, rising interest rates, higher prices, and more have negatively impacted the economic environment and demand has settled down, particularly with small to midrange outboard motors. Despite that, demand for large outboard motors of 300 hp or more has remained high and we expect it to remain that way due to an increase in the number of large multiengine boats and more customers stepping up from mid-sized boats.

You mentioned that the base of users grew during the COVID-19 pandemic, but with the uncertainty surrounding the economy, are users still hesitant?

The situation differs by horsepower range. Customers purchasing outboard motors are basically well-off, but purchasers of small and midrange models in the lower horsepower range are relatively more susceptible to changes in the economy. Plus, when outdoor recreation demand went up during the pandemic, it was especially apparent in that price range, so demand is slightly declining on both fronts. On the other hand, for outboards of 300 hp and above, they are bought by the ultra-wealthy and property owners, who are less affected by the economy. We feel they are more affected by stock prices than the economy, and since those have been strong for the past few years, we believe that demand has remained unaffected. We expect demand to increase over the medium to long term from the increase in large multi-engine boats, customers stepping up from mid-sized boats, and other factors.

What has led to the growth in demand for outboard motors of 300 hp or more?

The advantages of outboard motors lie with how easy maintenance is and the greater freedom for use of space on the boat, and demand is shifting from boats with inboard motors to ones with outboards. Boats equipped with outboard motors are gradually becoming larger; the bigger boats that used to be in the upper 30 ft. range are now in the 50–70 ft. range. As boats get bigger, the number of outboards they use and their horsepower range goes up too. In Europe, there are still many inboard-powered craft like over 50 ft. boats, premium yachts, and cruisers, but like the U.S., demand for outboards is on the rise due to the shift.

Please tell us about the demand for midrange outboard motors.

In Southeast Asia and China, demand in the commercial fishing and tourism industries is growing and customers are gradually shifting to bigger outboard motors.

Electrification

Along what kind of timeline do you believe the electric outboard market will develop and to what scale? Please share your outlook if you have one.

The electric outboard market's main issue is the cruising range afforded by current battery capacities, so we basically expect it to grow in scale from smaller outboard models. We predict that the small model market will remain where it is, but that gasoline-powered outboards will gradually be replaced by electric ones. We believe the degree of this transition will heavily depend on how gasoline engine regulations move forward. We have recently acquired Torqueedo, a leading brand in electric marine propulsion, and are looking to grow in this field even further.

Please explain the kind of use scenarios there are for electric models.

In Europe, there are restrictions in place for gasoline-powered engines in urban canals, lakes, and the like, so electric models are used in such areas. Also, electrics are finding the most use with small models fitted to small boats, so they see use with pleasure craft for cruising and fishing on inland waterways, such as lakes and rivers instead of offshore waters. They are also often installed on small inflatables stored aboard large cruisers. Sightseeing boats plying canals and other waterways are also increasingly using high-output electric propulsion.

END