

Yamaha Motor Monthly Newsletter

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Yamaha's first scooter, the SC-1, displayed at the 1959 Tokyo Motor Show (above) and the globally marketed 2015 NMAX powered by a "BLUE CORE" engine (left)

Yamaha Motor Technology Traditions

From the SC-1 to the NMAX

Small and Mid-size Scooters Offering New Lifestyles
and Creating New Markets

With our vision of "a growing world of personal mobility," Yamaha Motor is constantly striving to bring new *Kando** to people everywhere with *Monozukuri* that puts our expertise in a variety of technologies to work across all kinds of fields and product categories. The start of this quest can be traced back to 1960 when Yamaha introduced the first of what would be a long line of scooters and mopeds (underbone frame models) with the aim of expanding the customer pool to include more women and young students alongside existing motorcycle fans.

In this issue, we look back to the roots of Yamaha *Monozukuri* in the field of small and mid-size scooters, a major core category in our global product strategy today.

**Kando* is a Japanese word for the simultaneous feelings of deep satisfaction and intense excitement that we experience when we encounter something of exceptional value.

SC-1: Light and Fun, Comfortable and Fashionable

In just five years after Yamaha Motor got its start in the motorcycle industry in 1955, the company had experienced rapid growth. Yamaha had a lineup of three models in production—125cc and 250cc general-use models and a 250cc sport bike—and the lines were churning out 7,000 units a month. The sales network was expanding to include exports to overseas markets, starting primarily with the United States and Mexico and then steadily extending to include Taiwan, Southeast Asia, Australia and Europe. To further build on this momentum, two new commuter models were launched in 1960: the SC-1 175cc scooter and the MF-1 50cc moped. In 1959, the Japanese motorcycle industry's production scale was around 880,000 units per year, of which some 14% (approx. 125,000 units) were scooters and mopeds. With the launch of the SC-1 and MF-1, Yamaha aimed to fill up this gap in its lineup and develop new demand, both in Japan and abroad.

Yamaha Motor president Genichi Kawakami wrote the following in a company newsletter distributed to dealerships at the time: "For customers looking for speed, we have our 250cc sport bike. For people who want speed plus the utility to carry loads, we offer 125cc and 250cc general-use models. For those who want a model that's easy-to-ride, has modern styling and is also great for touring, especially women and companies needing a model for business use, we offer our 175cc scooter. And, for people who want an affordable, convenient model for commuting, we have our 50cc moped. We hope you will sell the models of this lineup with an eye on the specific needs of each customer group."

What is notable in this is that women were already envisioned as a target user for the SC-1. The model was developed to be easy to operate, comfortable and roomy for the rider, to have high stability when underway and light handling. The model employed many of the latest and innovative technologies of the time, including a pressed-steel monocoque frame, a 2-speed automatic transmission, single-sided suspensions for the front and rear, cast aluminium wheels, shaft drive and an electric starter. The smart-looking and refined exterior design and styling that were of the kind that was becoming a trademark unique to the Yamaha brand were also some of its defining features. Shortly after its release, the SC-1 was put in the show windows of leading department stores in displays surrounding it with flowers and flanking it with fashionably dressed mannequins to catch the eyes of passers-by on the city streets. The MF-1 on the other hand adopted a lightweight, underbone monocoque frame designed to make the model easy to get on or off of, a high-output and fuel-efficient engine, an electric starter and more. It had a fresh, lighter-looking and more youthful appearance among the Japanese motorcycle offerings of the time.

The SC-1 and MF-1 were bristling with new technologies, but not long after they were released, they were both plagued by mechanical trouble. Yamaha struggled to cope with the increasing number of claims, and as demand for scooters dropped sharply amid the boom in lightweight automobiles in Japan, Yamaha was forced to temporarily withdraw from the scooter market.



Packed full of advanced technology, the SC-1 (1960) created a sensation with its outstanding performance and modern styling. At the time, Yamaha president Kawakami was already envisioning sales targeting female customers.

*Cover photo from the June 1960 issue of the *Yamaha News* newsletter for Japanese dealerships.

Passol: A Rider-friendly Step-through Design Changes the Industry



After releasing a number of moped models after the MF-1 and Mate, Yamaha introduced the Passol in 1977, a model ridden with the legs together that any user quickly found easy to ride. *Cover photo from the Sept. 1977 issue of *Yamaha News*.

Yamaha then concentrated its commuter model offerings on mopeds—they had a stronger customer base in the market—and launched the first-generation Mate (U5) that greatly improved upon the MF-1's practicality and durability. Furthermore, as nuclear families became more common in Japanese society during the 1970s, many easy-to-ride 50cc and 80cc "family bike" models were developed, bringing with them a growing store of technology for easier operation, lighter weight and greater compactness.

Then in 1977, a new epoch-making model made its appearance and opened up a bright new road to recovery for Yamaha in the scooter category – the Passol. It was developed to specifically target the rapidly growing number of working women, female students and housewives taking a more active role in society. The model's biggest feature was its "step-through" design with a flat footboard that enabled a woman wearing a skirt to sit comfortably and ride with the legs together. Furthermore, the Passol was packed with women-friendly mechanisms and

ideas, like easy leg reach to the ground when stopped, a compact, easy-to-handle body, a sleek exterior design that completely covered the engine and drivetrain components for a clean and friendly look, suspensions specially tuned for comfort, and simple, hand-operated controls with the throttle and hand levers for the front and rear brakes. As a stylish and convenient personal vehicle ideal for shopping, leisure and commuting to work, the Passol greatly expanded the realm of mobility for many women and quickly became a big hit.

The Passol scooter can be considered a revolutionary model that realized the dream President Kawakami had envisioned in the SC-1 many years earlier: a model that offered new lifestyles while creating new demand and developing new markets in one fell swoop. The Passol's simplicity, lightness, fashionable look and step-through design proved popular among women and men alike, and prompted Yamaha to focus greater development efforts on scooters. This resulted in features like an exclusively developed torque cam type CVT (V-belt-driven continuously variable transmission) unit for smoother, more powerful transmission of power to the road. As a trend leader in the market, Yamaha would go on to introduce revolutionary new models one after another and greatly influenced the offerings of other manufacturers in the process.

Answering Diversifying Market Needs with a Platform Strategy

The Passol's success had opened up big new market potential for Yamaha scooters in Japan. At the same time, Yamaha began expanding into markets overseas like the United States, Oceania, Europe and Taiwan. Eventually, Yamaha introduced the 250cc Majesty and 500cc TMAX models that boasted a combination of functionality and performance for both short-distance commuting and long-distance touring. Today, these models are a part of a rich and diverse lineup of Yamaha scooters that answer a full range of customer needs, with standard, classic and sport models offered at each displacement class from 50cc up.

Meanwhile, the motorcycle markets of the ASEAN countries are enormous enough to outstrip developed markets in scale and demand. Small-displacement 100cc–150cc models are the norm in these countries and the mainstream models were 4-stroke underbone (moped) models designed with top priority on utility and day-to-day use. Aiming to develop new potential demand, Yamaha introduced the Nouvo scooter model

in 2002 into markets that included Indonesia, Malaysia, Thailand and Vietnam. The Nouvo combined the simple operation and ease of use of an automatic transmission with the slim body and sleek styling of an underbone model. Following the Nouvo, Yamaha developed the new Mio model and the series of Cygnus and Nozza step-through style scooters one after another, winning popularity among young and fashion-conscious people in the ASEAN markets. Furthermore, amid the growing popularity of scooters in India, Yamaha introduced the Cygnus Ray model in 2012, featuring a fashionable design and a host of user-friendly functions. Much as the Passol had changed the Japanese market decades earlier, the Cygnus Ray proved to be on-target as a model to help give young Indian women the mobility they wanted to get out and about in their increasingly active roles in society.

However, the globalization of the scooter market has brought with it the need for models designed down to the finest details to answer the specific needs that emerge in each country and region based on societal and cultural differences. In response to these diverse needs, Yamaha is implementing a product platform strategy. Base components like the engine and frame are developed to serve as a shared platform from which numerous product variations can be developed to fit local market preferences, from the exterior styling and design to featured equipment and detail specifications.



Yamaha's next-generation **"BLUE CORE"** engines achieve new levels of riding enjoyment, fuel efficiency and environmental performance. By 2020, Yamaha aims to be producing a total of 5 million units a year of **"BLUE CORE"** engine models in three types.



The 2015 NMAX model for markets worldwide is offered in 125cc and 155cc variations with the latest engines that feature a variable valve system that further improves combustion efficiency.

The core component of these product platforms are the small-displacement engines designed and engineered in line with Yamaha's **"BLUE CORE"** development ideal that seeks new levels of riding enjoyment, fuel efficiency and environmental performance. This is done through a meticulous pursuit of high levels of combustion efficiency and cooling efficiency while minimizing horsepower loss. The first model to mount a **"BLUE CORE"** engine was the Nozza Grande released in Vietnam in 2014. With the winning combination of riding enjoyment and fuel economy a **"BLUE CORE"** engine provides, Yamaha scooters will continue to evolve through models closely tailored to the needs of each market in order to bring new *Kando* to the daily lives of customers everywhere.

From the SC-1 to the NMAX

1960s	1970s	1980s	1990s	2000s	2010s
 <p>SC-1 (1960) Yamaha's first scooter</p>	 <p>Passol (1977) The 50cc commuter model that first established the "step-through" body design</p>	 <p>Cygnus (1982) This 180cc scooter had a body size designed for a relaxed seating position but also had a sporty feel to the ride.</p>	 <p>Mio (2003) This just-right-sized light commuter model became synonymous with "automatic transmission."</p>	 <p>Nozza Grande (2014) The first model with a "BLUE CORE" engine for new levels of riding enjoyment, fuel efficiency and environmental performance</p>	
 <p>Mate (1965) The first-generation model of Yamaha's bestselling business-use series</p>			 <p>NOUVO (2002) Introduced as a new category of commuter model that combined the lightness and fun of a scooter with the performance of a moped</p>	 <p>NMAX (2015) This globally marketed model mounting a "BLUE CORE" engine was released first in Indonesia and other ASEAN countries before being launched in markets like Europe, Central and South America and Japan.</p>	
 <p>MF-1 (1960) Yamaha's first moped (underbone)</p>					

Message from the Editor



The first Yamaha product I ever owned was a scooter.

I originally bought it because I needed something to commute on, but on my days off work, I began riding to places I couldn't get to before. At some point, I was enjoying the act of riding itself and always wanted to try going somewhere "a little farther" each time. My first scooter was a cherished partner of mine that helped expand my own world of mobility and the possibilities of destinations for a day.

With this month's issue about the evolution of Yamaha's scooters, I was reminded anew of our hopes to have people around the world experience the easy-to-ride character, freedom and fun scooters bring to personal mobility.

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