

## Bike-riding robot turns heads at Tokyo motor event

October 29 2015, by Nancy Owano



Reports coming in from the Tokyo Motor Show 2015 indicated that one of the scene-stealers at this year's event has been a motorcycle-riding



robot from Yamaha fittingly called Motobot.

A promotional video was also published showing the <u>robot</u>-cycle in action ("I am Yamaha Motobot," the machine in the video said with a boy-like robot voice.) This is the Yamaha Motobot Concept Ver#1. On Wednesday, Patrick George wrote in Lanesplitter-*Jalopnik*: "At the Tokyo Motor Show today, Yamaha dropped a bombshell on both the bike world and <u>humanity</u> in general with Motobot: the motorcycle-riding robot that's not as fast as a human being yet. Yet. One day it aims to be."

Various descriptions can be summed up as Yamaha's autonomous motorcycle-riding humanoid robot. Yamaha's team have in turn created a fusion of Yamaha's motorcycle and robotics technologies.

Those involved in its research and development team are on a mission to develop a robot that can ride an unmodified motorcycle on a racetrack at more than 200 km/h. Those catching the robot debut saw it on Yamaha's YZF-R1M machine, said *autoevolution*.

At the top of their agenda at Yamaha has been the call to deliver <u>control systems</u> for it which can function with a high degree of accuracy. "As it is built to ride an unmodified motorcycle, Motobot will need to have full control over the <u>throttle</u>, brake lever and pedal, clutch and transmission, not to mention steering (Motobot's "legs" appear to be firmly fixed in position,)" said Dennis Chung in *Motorcycle.com*.

Jamie Wisniewski, associate editor of *ECN*, also explained the significance of focusing on accurate control systems. "Controlling complex motions at high speeds requires a <u>variety</u> of control systems that must function with a high degree of accuracy. Meaning, one wrong move and this robot's a goner."

While the robot concept is being explored, there is an underlying



question begging to be discussed: Why explore this in the first place? A number of bloggers when first hearing about a robot riding a motorcycle in the works said they were puzzled. It's easy to understand potential interest in self-driving cars; self-driving buses; self-driving tourism trolleys; but what is the <u>point</u> of a self-driving bike?

"Could <u>throngs</u> of these RoboCop-like machines patrol the interstates of the future? That seems a long way off," said Jay Bennett in *Popular Mechanics*.

Yamaha said they want to apply the fundamental technology and knowhow gained in the process of this challenge toward creating advanced rider safety and rider-support systems and to put them to use in their current businesses, as well as using them to pioneer new lines of business.

**More information:** <u>global.yamaha-motor.com/news/2 ...</u> /1028/tms-03.html#01

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