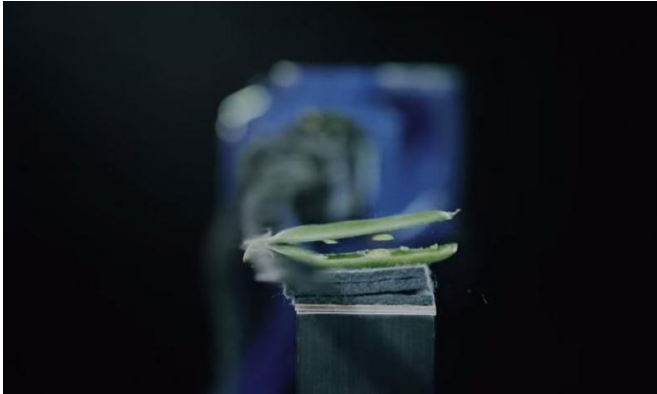


Yaskawa robot makes the cuts like human master in sword demo (w/ Video)

6 June 2015, by Nancy Owano



Awareness, focus, precision, speed—highly desirable qualities not only for human workers but for robots. Yaskawa Electric Corporation recently issued a video that is turning heads as to just what present-day robotics engineers can accomplish.

They have presented a video showing what happens when their [industrial robot](#)—Motoman MH24—is placed in competition with a world-famous sword master. Welcome to a Yaskawa challenge, featuring a robot and human expert engaging in a display of skills around bamboo poles. Essentially, this is a challenge where viewers can witness the performance reach of a modern-day industrial robot. Qualities such as "agility," "accuracy" and "flexibility" were on trial—could the robot stand up to the real sword master?

The video shows a team member readying the Motoman-MH24 industrial robot. ("Motoman" is actually the company's [line](#) of Motoman industrial robots and robotic systems.)

In comes Isao Machii, iaijutsu (a sword technique cultivated from ancient times) Master, and five-time

world record holder. As a sword technique, iaijutsu teaches how to draw quickly. Machii's fans worldwide know him for his feats, and supporters say he can take the level of eye/hand coordination higher than anyone else. Case in point: his having cut a speeding bullet in mid-air with his sword. At a firing range outside the hills of Los Angeles, he was shown a BB gun pellet which he was to slice with his sword. He did.

The *Malay Mail Online* said the robot and Machii were surrounded by a manmade [bamboo](#) grove "and to make it even more authentic, the MH24 was equipped with a real katana, made in the Edo period." (The Japanese sword, katana, is a martial art discipline in the education of the classical warrior. The katana is a work of high craftsmanship.)

"We analyzed Machii's sword technique in 3D," said the company team. They reproduced the movements in their industrial robot. Test sequences carried out to test the skills of Machii against the robot's were to cut in four directions; a diagonal cut; rising cut; horizontal cut; and the show-stopper, a thousand cuts.

"While Machii looks visibly tired towards the end of the final '1000 cuts' scene, his mechanical counterpart could probably [go](#) on for at least an extra 2000," commented Emiko Jozuka in *Motherboard*.

The video is entertaining, and it serves a strategic purpose too, to remind the company's customers and potential customers about their engineering talent. The *Malay Mail Online* noted that the video appears as the company celebrates its centennial. "What better way to commemorate it than by a video that highlights its top-end Motoman-MH24 [robot](#)?"

Yaskawa competes in the international automation market. Today, according to *Japanista*, Yaskawa

produces machines for handling complex tasks, which [range](#) from assembly to welding, and from painting to surgery.

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