

Robot performance moves NASA. Cape Canaveral tour guide will have same motors as the Mars Rover

A versatile robot actor, created in the UK, has beaten off international competition to become the public face of NASA's world-famous Kennedy Space Center.

First developed in 2006 by Cornish company Engineered Arts, "Robothespian" stands five feet nine inches tall, with a full range of upper-body movement and startlingly human eyes.

Now space agency NASA has decided to employ the robot's third generation as a figurehead – meeting and greeting visitors to its futuristic Cape Canaveral base.

Robothespian 3's unusually lifelike, humanoid movements are powered by a clever combination of compressed air "muscles" and maxon motors.

A mixture of maxon's high performance A-max and neodymium magnet-powered RE-max motors are used to give the robot's hands, arms and torso a performance that is both reliable and realistic – perfect for life at the home of the three space shuttles.

Engineered Arts director Will Jackson says: "Robothespian 3 is at the cutting edge of bringing technology into the arts. For him to appear natural and engage the audience, his movements need to be as quiet and precisely controlled as possible – but he also has to cope with long hours, greeting over 1.5 million visitors per year.

"maxon motors are ideal for that challenging combination of demands, delivering absolute precision with the reliability we need."

Although Robothespian will be new to NASA, its maxon motors will not. Indeed, no less than 78 brushed RE motors are currently in active duty on the surface of Mars, powering key functions on the *Spirit* and *Opportunity* Mars rovers that have so far exceeded their anticipated lifespan by almost seven years.

Following its high-profile success, Engineered Arts has already started work on a further 20 Robothespians, which will be completed in mid 2011. The company has now given the latest robot powers of object



Maxon offers a complete line of DC motors that are compact, powerful and low inertia drives.

tracking and speech recognition, enhancing its ability to interact with NASA's guests, and has recently started producing robots for research purposes.

maxon motor senior sales engineer Ian Bell says: "Robothespian will be a great addition to the Space Center, and Engineered Arts deserves every credit, as a growing UK company, for winning such a



Robothespian

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high-profile order against strong, worldwide competition.

"It's great to see maxon motors being used at NASA once again. You might even say, for reliability, power and performance, they're out of this world!"

You can see Robothespian in action at www.robothespian.com. For more information on maxon's cutting edge products, go to www.maxonmotorusa.com.