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Media release, 19. February 2021

maxon congratulates on the successful Mars landing of the Perseverance Rover

Great success for NASA's Jet Propulsion Laboratory (JPL): The rover Perseverance landed in the Jezero Crater on Mars on February 18. Several electric drives from maxon are used in the ambitious mission - among other things, when the helicopter brought along takes off for its first flight.

"We are incredibly relieved and happy about the successful landing," says Eugen Elmiger, CEO maxon Group. He and many employees involved in the Mars project followed the landing of the Mars2020 mission live in a virtual chat and cheered when the safe touchdown of the rover in the Jezero crater was confirmed. After all, ten BLDC motors and a special gearhead from maxon are used in the rover named Perseverance. Six brushed maxon DCX motors are in the small helicopter drone that is attached to the underside of the rover and will soon make its first ever flight on Mars. Eugen Elmiger says, "Many years of hard work have gone into these Mars drives. Our engineers, together with the specialists at JPL, have repeatedly improved the components and subjected them to all kinds of tests to ensure that they reliably do their job on Mars."

First step for the retrieval of Mars samples

One of the most important tasks of Perseverance is to collect up to 30 soil samples, fill them individually into containers, seal them and finally place them on the surface so that a later mission can collect the samples and bring them back to Earth. Among other things, JPL uses maxon's electric drives to move the robotic arm that navigates the soil samples inside the rover from station to station. In addition, maxon motors are used for sealing the containers and placing them, and the mechanism that sets the helicopter down is also moved by a maxon BLDC motor. Mars2020 is the start to a whole series of missions with the goal of bringing Mars samples back to Earth. maxon components will continue to play an important role.

The maxon Group, with global sales of CHF 568 million, is mainly active in medical technology and industrial automation. Space applications only constitute a small portion of maxon's orders, but the high requirements push maxon to the next level. This is evident in the increased quality standards, as well as new testing methods and processes. And of course they exert a special fascination on the employees involved. Or as Kathrin Tschersich, Head of Assembly Project Samples at maxon, puts it: "It makes me very proud to know that products that have passed through my hands are being used on Mars."

Please contact the maxon Media Office for more information:

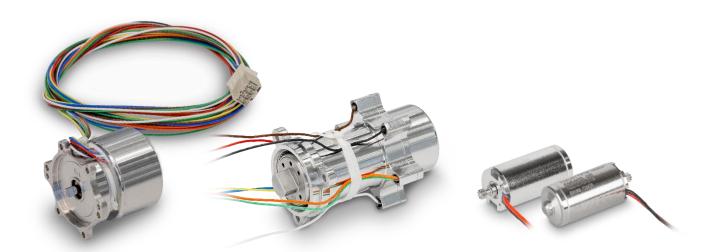
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The Perseverance rover and the Mars helicopter Ingenuity. Image credit: NASA/JPL-Caltech



Left: The modified EC 32 flat drive. Nine of these drives are used in the Perseverance rover. Center: The EC 20 flat with GP 22 UP gearhead. Right: DCX 10 motors move the swashplate, which in turn controls the tilt of the rotor blades of the Mars helicopter.

Image credits: maxon





First live images: NASA's Mars Perseverance Rover captured this image with its Onboard Front Left Hazard Avoidance Camera A.

Image credit: NASA/JPL-Caltech



Happy faces at maxon after NASA confirmed the successful landing. Image credit: maxon



The specialist for quality drives

maxon is a developer and manufacturer of brushed and brushless DC motors, as well as gearheads, encoders, controllers, and entire mechatronic systems. maxon drives are used wherever the requirements are particularly high: in laboratory automation systems, in surgical power tools, in humanoid robots, and in precision industrial applications, for example. To maintain its leadership in this demanding market, the company invests a considerable share of its annual revenue in research and development. Worldwide, maxon has more than 3000 employees at nine production sites and is represented by sales companies in more than 30 countries.