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## German Bionic launches 5th generation Cray X, smart AI-powered exoskeleton with active walking assistance, outdoor capabilities, and other pioneering technologies



Augsburg (ots) -

**German Bionic, the world's technology leader for connected robotic exoskeletons, today announced the fifth generation of the award-winning Cray X. The smart German Bionic power suit will ship worldwide from early 2022 and be available for demonstration in Las Vegas during CES, January 5-8, 2022.**

The new model incorporates major enhancements including active walking assistance, IP54 waterproofing as well as a more powerful 40 V battery and completely revamped energy management system. In addition, the unique onboarding assistant makes getting started straightforward, and the Smart Safety Companion – German Bionic's AI-based early warning system for ergonomics – maximizes workplace safety and helps businesses achieve their ESG and sustainability goals more easily. Providing up to 66 lb (30 kg) of support per lifting movement, the fully connected German Bionic Cray X already enjoys a strong track record of protecting the lower backs of workers involved in heavy lifting at companies such as BMW and Ikea as well as at France-based international parcel delivery service specialist DPD, which employs 48,000 people and handles close to 2 billion parcels annually. The newest Cray X model now expands the fields of application further and opens up new dimensions in human augmentation.

### **Key enhancements in the fifth generation Cray X:**

#### **Walking assistance**

The fifth generation Cray X is the first exoskeleton of its kind to support two regions of the body. It works by gently pushing the legs forward when loads need to be moved from a to b. It thereby helps reduce premature exhaustion and preserve the energy levels of workers conducting tasks involving both lifting and walking.

#### **IP54 waterproofing**

The Cray X is equipped to handle extremely wet and dusty working environments with ease. Fully tested in accordance with the IP54 standard to be completely dust and waterproof, it is now fit for a whole range of additional use cases such as construction sites, outdoor warehouses, or automotive workshops.

#### **More powerful 40 V platform**

A 40 V battery and an entirely revamped energy management system are incorporated to deliver more power to the exoskeleton and enhance the overall user experience. The new 40 V system also eliminates unnecessary downtimes resulting from battery changes thanks to its clever hot-swapping capability. The uninterrupted power supply means wearers benefit from effectively unlimited usage times.

The Smart Safety Companion unlocks further potentials for worker safety in manual handling environments and helps boost business performance. The integrated AI-based early warning system for ergonomics alerts against signs of poor posture and incorrect lifting practices. It thereby actively assists in preventing fatigue and resulting errors as well as injuries. Extensive reporting functions are also available to managers on the intuitive dashboard, providing a practical method for monitoring and documenting the achievement of increasingly important ESG and sustainability goals.

As with its predecessor, the lightweight, carbon fiber structure Cray X easily connects to industrial IoT platforms and all smart factory ecosystems, facilitating true integration in business processes. This means manual handling can be effectively incorporated in the digital workflow allowing for automated benchmarking against a company's KPIs.

"AI is the basis for the ongoing development of exoskeleton technology and the future of human augmentation," said Norma Steller, Head of IoT at German Bionic. "The German Bionic cloud-based platform for exoskeletons is unique in the industry, providing us with the data necessary to advance machine learning, cultivate AI applications and continue driving our R&D efforts to new levels. With the fifth generation Cray X, we have taken further significant steps in this direction."

Even those without previous experience with operating exoskeletons will swiftly reap rewards from the Cray X. A new onboarding assistant gives helpful hints and instructions on the integrated display to make the process of getting started and working safer and more efficiently for better health and wellbeing in the long-term a decidedly short-term affair.

"The fifth generation Cray X underscores our technology leadership in the massively growing international exoskeleton market," said Armin G. Schmidt, CEO of German Bionic. "The innovations we are announcing today pave the way for more people and businesses throughout the world to benefit across a wider range of use cases and industries."

### First demos of the new Cray X in Las Vegas during CES 2022

The new Cray X will become available worldwide in early 2022. The first opportunity to test the new device in person will be at in Las Vegas during the Consumer Electronics Show CES, January 5-8, 2022.

For more information about the fifth generation German Bionic Cray X and to schedule a demo in Las Vegas, please go to <https://www.germanbionic.com/en/home/>

### About German Bionic

German Bionic is a leading developer and manufacturer of smart power suits. Exoskeletons are human-machine systems that combine human intelligence with machine power by supporting or amplifying the wearer's movements. The Cray X from German Bionic is the world's first connected exoskeleton. Linked to the Smart Factory, it self-learns to reinforce lifting movements and prevent incorrect posture, thus becoming an intelligent link between humans and machines. In doing so, it delivers data that underscores its ability to protect the health of workers, measurably reduce the risk of accidents, and thereby make quantifiable improvements to work processes. In recognition of this innovative technology, which puts people back in the focus of Industry 4.0, German Bionic and the Cray X have received numerous awards, including the Bavarian and German Entrepreneur Awards, the Land of Ideas and Automatica Award, as well as a nomination for the prestigious Hermes Award at the Hannover Messe. German Bionic offices are located in Augsburg, Berlin, and Tokyo.

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