

02.01.2023 – 14:30 Uhr

## CES 2023 “Best of Innovation” Award winner German Bionic presents new generation of smart power suits and wearables for safe workplaces



Las Vegas (ots) -

Robotic exoskeleton technology leader showcases fully-connected, AI-based wearable tools to protect and empower today's physical labor forces

German Bionic is announcing at the Consumer Electronics Show (CES) 2023, new, AI-powered smart wearable tools that revolutionize workplace safety in physically demanding jobs; making work safer, less strenuous, and more attractive. The new smart wearable tools include:

- **Apogee(TM):** the lightest and most versatile AI-supported power suit from German Bionic
- **Smart SafetyVes(TM):** the smart vest to bring ergonomic monitoring and protection to every worker
- **German Bionic IO(TM):** the cloud-based software platform that intelligently manages and analyzes workplace ergonomics and safety practices

Also on show and available for demos will be the CES 2023 “Best of Innovation” (Wearable Technologies) Award-winning Cray X exoskeleton, already widely trusted by companies like L’Oreal, JBS, Ecolab, and Lanxess plus many global logistics firms including DPD, as well as airports and retailers such as the leading British consumer electronics chain, Currys. CES visitors will find German Bionic at booth 7141 (Tech East, West Hall), January 5-8, 2023.

### Apogee: Smart robotic exoskeleton for the workplace

The strikingly designed, AI-supported Apogee is German Bionic's next-generation smart robotic wearable tool. It is even lighter and more comfortable than its predecessors and broadens the areas of application. The dust and water-resistant device maximizes workplace safety by providing up to 66 lbs (30 kg) of support for the lower back per lifting movement and helps minimize fatigue thanks to active walking assistance. Apogee integrates easily in workplaces and has an immediate impact wherever heavy lifting and carrying regularly takes place, such as in logistics, construction, and the care sector.

### Smart SafetyVest: Ergonomic protection made simple – for everyone

German Bionic's Smart SafetyVest incorporates advanced sensory capabilities and AI power to deliver data-based, personalized ergonomic insights, as well as assessments and recommended actions at the press of a button. In addition to custom workplace insights, it can pinpoint ergonomic risks and improvement opportunities to reduce fatigue and injuries that can otherwise lead to high levels of illness and absenteeism – regardless of the type of work being performed.

### German Bionic IO: The foremost ergonomic data platform for the workplace

At the heart of both innovations being announced at CES 2023 is the groundbreaking cloud-based German Bionic IO platform. It not only makes occupational health and safety measurable, but also visible. The system intelligently analyzes data collected from Apogee, Cray X and Smart SafetyVest, applying machine learning and AI to continuously learn and enhance safety effectiveness with the wearer's every movement. Discover risks, trends and process optimizations custom to your environment and devices. With the Smart Safety Companion early warning system for ergonomics – which alerts, for example, of instances of poor posture, incorrect lifting, and excessive strain – the German Bionic IO platform provides comprehensive monitoring and reporting functions as well as individualized recommendations for action based on real, relevant data.

“With our new wearables, we are empowering hard-working people with the tools they need to do their jobs more safely and sustainably. Both our new ergonomic wearables – Apogee and Smart SafetyVest – as well as our award-winning Cray X exoskeleton enable us to provide the right support for just about any company or work environment where manual work is performed. And with the German Bionic IO data platform, we also deliver a powerful analytics tool for workplace ergonomics and processes,” says Norma Steller, CPO of German Bionic.

### **Win the battle against labor shortages and musculoskeletal disorders with smart wearables**

Businesses in industries and critical infrastructures that rely on manual handling are facing severe labor shortages, made even more challenging as workers age or fall out of the labor force on a temporary or permanent basis due to injury. According to the World Health Organization (WHO), musculoskeletal disorders (MSDs), in particular, affect around 1.71 billion people globally and are the leading contributor to disability worldwide, with low back pain being the single biggest cause. Repeated heavy lifting is an activity that places considerable strain on the musculoskeletal system, which can lead to the development of MSDs.

The US Institute of Medicine estimates the economic burden of workplace MSDs as measured by absenteeism, compensation costs, lost wages, and lost productivity being US\$ 45 – 54 billion annually in the US alone. And as populations continue to age, these figures will rise.

Exoskeletons and smart wearables such as the German Bionic Apogee and Smart SafetyVest are key technologies to make a significant, quantifiable contribution towards preventing this. They represent a genuine revolution for workplace safety in physically demanding jobs, making work safer, less strenuous, and consequently more attractive for existing employees and applicants alike – while simultaneously raising productivity.

“Our smart power suits and wearables protect people performing tough physical work on a daily basis in system-critical jobs against over-exertion and injury. They provide mechanical support for lifting and carrying, and use a smart assistance system to alert users, for example, of instances of incorrect lifting or when they should take a break. This leads to less time off work as a result of illness caused by excessive strain or accidents, which not only makes for happier employees but also more productive employees,” says Armin G. Schmidt, CEO and co-founder of German Bionic. “We see this as a benefit for society as a whole, and hope to build on this even further with our technology.”

The new generation of German Bionic smart wearables including the Apogee power suit, the Smart SafetyVest, and the German Bionic IO platform can be seen and experienced for the first time along with the CES 2023 “Best of Innovation” Award-winning German Bionic Cray X industrial exoskeleton, January 5-8, 2023 at CES in Las Vegas, booth 7141 (Tech East, West Hall).

### **About German Bionic**

German Bionic is a European robotics firm that develops and manufactures smart power suits and other wearable technologies. It was the world's first company to deliver connected exoskeletons for the workplace, applying self-learning and artificial intelligence to support lifting movements and prevent poor posture, and thereby becoming an intelligent link between humans and machines. The German Bionic smart power suits and wearables protect the health of workers and markedly reduce the risk of accidents and injury to consequently improve work processes. In recognition of this innovative technology, which puts people back at the center of Industry 4.0, German Bionic has received numerous awards, including the CES 2023 “Best of Innovation” Award, the Fast Company “Innovation by Design Award”, the German Entrepreneur Award, and a nomination for the prestigious Hermes Award at the Hannover Messe. German Bionic is headquartered in the USA and Germany with offices in Boston, Berlin, Augsburg, and Tokyo.

<https://www.germanbionic.com>

Contact:

Eric Eitel  
Head of Global Communications  
+49 (0) 175 – 338 04 53  
ee@germanbionic.com  
[www.germanbionic.com](http://www.germanbionic.com)

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