

PRECISION IN MOTION:

Constant Force Springs for Medical Innovation



In the demanding world of medical device manufacturing, precision and reliability aren't just goals—they are requirements. At John Evans' Sons, America's first spring maker, we combine over 175 years of heritage with cutting-edge engineering to help you bring lifesaving technologies to life. Our constant force springs are designed to meet the rigorous standards of the medical industry, providing the dependable performance your critical applications deserve.



The Constant Force Advantage

Unlike traditional helical springs, our constant force springs provide a uniform load throughout their entire extension. This means whether the spring is extended one inch or ten, the force remains steady and predictable. This unique characteristic allows for:

1 Longer Travel in Smaller Spaces:

Ideal for compact medical devices where real estate is at a premium.

2 Smooth, Tactile Motion:

Essential for handheld surgical tools and drug delivery systems.

3 High Cycle Life:

Engineered to withstand the repetitive use required in clinical environments.

Versatility Across the Medical Spectrum

Our springs are integral to a wide range of medical equipment. From providing counterbalance in MRI machines and bedside monitors to ensuring the smooth operation of surgical staplers and dental equipment, we provide the "invisible" force that powers healthcare.



We are particularly proud of our role in the evolving field of robotic surgery. In high-precision surgical robots, our springs assist with arm balancing and articulation, allowing for the fluid, jerk-free movements that surgeons rely on for delicate procedures.

Built for Cleanliness and Durability Spectrum

We understand that medical environments require superior materials. Most of our constant force springs are manufactured from Type 301 Stainless Steel, offering excellent corrosion resistance and the ability to withstand sterilization processes. Whether your device is used in an operating room or a home-care setting, our materials ensure long-term integrity.



Partner with the Experts

When you work with John Evans' Sons, you aren't just buying a component; you are gaining an engineering partner. Our team works closely with you from the initial design phase to final production, ensuring every spring is tailored to your exact specifications. Trust our legacy of excellence to provide the precision your medical devices require. Let's build the future of healthcare together.



Contact John Evans' Sons Today

Our experts offer a depth of expertise to assist you with all parts of the process. We are ready to answer your questions in a timely manner and will help you define what you need. We produce custom springs for all purposes, and we are here to work with you on any of your customization needs. [Contact us today.](#)