# A History of Excellence in Aerospace Design & Engineering



#### Tradition

John Evans' Sons, Inc. is "America's Oldest Springmaker" having operated continuously since being founded in New Haven, Connecticut in 1850. The Company manufactures springs, wire forms, mechanical assemblies and stampings. Industries served include aerospace, defense, medical equipment, home building and in-store displays.

In 1967, a company milestone occurred with a change in ownership, and a move 20 miles northwest of Philadelphia to Lansdale, Pennsylvania. During the last 42 years, under the current leadership, the company has grown considerably. Today, John Evans' Sons, Inc. is located in a modern 52,000 square foot facility and manufactures springs, wire forms, metal stampings, and spring assemblies for commercial and military aerospace applications and other high-tech industries. The company takes pride in manufacturing difficult and unusual spring products as well as high volume precision springs. Continued investment in the physical plant, machinery, and employee education, as well as engineering /design/assistance and outstanding customer service, are paramount to Evans' ongoing success

#### Mission

John Evans' Sons, Inc. is headquartered in Lansdale, Pennsylvania, a suburb of Philadelphia. Located in a large, modern one-story building are the Company's corporate, engineering and manufacturing personnel.

Our engineering group consists of skilled professionals with broad experience in the design and development of all types of springs. The group is backed by an unusually high level of expertise achieved by the Company during its more than 160 years of experience, and the latest in spring manufacturing equipment.

### **Notable Aerospace Applications**

- · Mars rover Curiosity
  - · Airborne FLIR camera mounting
    - · Sub-launch Tomahawk cruise missile
      - · Drone aircraft launch & recovery systems



John Evans' complete product line includes constant force springs, flat springs, helical isolators (cable mounts), mechanical assemblies, compression, springs, extension springs, torsion springs, power springs, spring reels, spring motors, stampings, wire forms and spring testing equipment. We also utilize machined, molded, powdered metal and various other parts in our assembly work.

## Capabilities

Our customers, while having a thorough understanding of their own products, frequently require some assistance in developing spring specifications that will yield optimum pricing and performance characteristics. We are equipped with and very capable at using Dessault Systemes Solid Works for our own tool design as well as file transfer capability with customers and their applications. Assistance from Evans' Engineering Department is always available to customers who may require design or application advice.

Another essential "ingredient", in helping us evaluate whether our efforts to meet customer expectations have been successful, is the objective test data, which can be supplied by our Inspection and Quality Assurance Department.

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America's Spring Company



The Inspection/Quality Assurance area is a major presence at every stage of the manufacturing process, from the receipt and inspection of raw material, to evaluation of the finished product. Their monitoring verifies that each customer's requirements are fully translated into finished goods, meeting all specifications.

Inspection capacity and capability at John Evans ranks among the finest in the springmaking industry. Our quality assurance procedures have been surveyed and approved by a great many of the world's largest corporations. By employing ISO 9001:2008 in conjunction with inspection and calibration systems, we can ensure that customers' most exacting requirements are completely satisfied. Some of our inspection equipment – Evans' own heavy-duty CATS (Computer-Aided Testing System), for example – is custom-designed to enhance our quality assurance efforts. The CATS operates in extension or compression with a 12,000 lb. maximum load capacity.

Other inspection and testing equipment, such as the OMIS II non-contact, three-dimensional video measuring system, and the Micro-Vu thirty-inch comparator, with magnification up to 50x, represents state-of-the-art technology, where computer control, integrated with electromechanical actuation is used almost exclusively.

We are fortunate to have a complete machine shop staffed by a very professional crew of tool-makers. Their main tools include Dessault Systemes Solid Works for design, and Charmilles EDM for tool and die production. This allows us to build, maintain, and repair all tools utilized in our production areas. We even build many of our own high speed, automated, spring manufacturing machines. We feel that this "on-site" capability further reduces cost and lead time for our customers.

As vendors in an intensely competitive international marketplace, we are acutely aware of the direct, symbiotic relationship between the health of our long-term customer relationships and the long-term health of our business. We are here to support, as well as supply, our customers' needs.

## Quality

John Evans' Quality Policy

John Evans' Sons, Inc. is committed to outstanding customer service and continual improvement, through teamwork and the pursuit of technical and manufacturing excellence.

John Evans' Sons, Inc., has received ISO 9001:2008 certification. After close examination by third-party auditors QMI-SAI Global, our company obtained its registration certificate on May 28, 2003. Recently, we also have achieved ISO 13485:2003 certification and are working towards AS9100, to be completed by early 2014.

From our humble beginnings in 1850, to the present day, we continue to proudly make the claim "America's Oldest Springmaker".



