
Senger News & Focus

Senger and Associates, Inc.

www.senger-assoc.com

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Sengers Represent Two New Principles

Exacto Spring Corporation Puts Bounce in Products

If springs and wire products are critical to your product's long-term performance, there's only one logical choice: custom precision solutions from Exacto Spring Corporation.



For decades, Exacto Spring has been designing and manufacturing compression, torsion and extension springs along with custom wire products, all which meet the most rigorous performance requirements imaginable.

The ability for Exacto Spring to meet these requirements comes in part, because they apply advance wire-manufacturing tools and processes to the task. In fact, Exacto has state-of-the-art Statistical Process Control techniques which ensure meeting critical tolerance requirements for every part produced, *with equipment that actually self-adjusts during production.*

Exacto Spring is unique in some other very extraordinary ways:

- Wire diameter can go as small as .001 and as large as .120
- Exacto has a Class 10,000 and a Class 100,000 Clean Room for coiling, ultrasonic cleaning and packaging
- Exacto Spring Corporation is both ISO9002 and QS9000 Certified
- Exacto makes springs for implantable medical applications

Additionally, what sets Exacto Spring apart from their competitors is their service--most notably, their custom engineering capability. Their highly experienced and skilled engineers work closely with their customers by learning more about your products, their applications and the functional specifications they must meet, and then Exacto Spring does whatever it takes to provide the customer with the best possible solution.

Lastly, Exacto Spring's sophisticated packaging systems are the final element in complete, hassle-free care. Whether your product requires tubes, trays, tack board, cell packing, crates, or wires, Exacto Spring guarantees they arrive to you unharmed, on time--and if they don't already have the perfect packaging system for you, they will design one that fits.

Medical Applications

Exacto Spring takes pride in meeting the tightest tolerances for performance. Simply tell Exacto about your products and the functional specifications they must meet. Exacto's application engineers will get back to you promptly with the optimum



solution, and if needed, with prototypes for your evaluation. They'll also provide you with pricing so cost-efficient that you may find outsourcing this critical function the only logical way to go.

Upon approval, Exacto will proceed with manufacturing via their high-precision, fully automated systems. Using exacting inspection equipment like high-powered stereo microscopes, laser micrometers and vision measurement systems, consistently accurate tolerances are ensured. Delivery will come to you in whatever increments you specify, to meet your own manufacturing schedules.



The Senger and Associates, Inc.

Vision Statement:

To be recognized by manufacturing companies as the preferred sales agency in Minnesota that operates with the highest standards and ethics.

H & H Swiss Committed to Quality

Since 1945, a reputation for Old World tradition and attention to detail combined with responsive, integrated management and the most advanced technology available anywhere, has served to set H & H Swiss apart from the competition. As a result, they are the pioneer in growth of quality consciousness in Swiss automatic manufacturing throughout the United States. Their people are dedicated to teamwork as the means for surpassing customer requirements, and to providing the best value possible in precision-turned components.

At H & H Swiss, they believe that their customers deserve constant attention, perfectly machined components, and the



highest total value for the lowest total cost. At H & H Swiss, there is constant and free-flowing communication between managers and technicians, increasing everyone's awareness of, and total involvement in, the production of each order. New ideas and technologies are continually tested,

assessed and developed to maximize productivity, innovation and teamwork.

Open communication with their customers enables H & H Swiss to provide perfect quality, service and on-time delivery schedules. Their management team is available immediately to conform to ever-changing production schedules, and they will recommend both cost and time saving changes.

Manufacturing Processes and Equipment

The Swiss automatic, a three-axis, cam-controlled, bar-turning machine, employs a sliding headstock and guide bushing to generate even the most complex and intricate geometries. Designed in Switzerland, these machines are indispensable to today's demanding industries where precision, quality, miniaturization and economy are vital. Size capacity ranges from .031" to 1" bar diameter, up to 6" length on parts which generally have one or more turned lengths four or more times longer than their respective diameters.

H & H Swiss's most recent technological upgrade features four state-of-the-art 12-axes Tornos CNCs which can be set up to machine even the most complex parts utilizing up to 24 tools. In addition to outstanding versatility, the Deco 2000s offer tremendous cost savings to their customers due to increased machining speed. With the capability to machine both ends of a component part simultaneously, the Deco 2000 maximizes productivity and minimizes production costs, therefore offering tremendous cost savings to customers.



A High Standard of Quality

H & H Swiss continually utilizes Statistical Process Control (SPC) to reliably prevent the production of defects through statistical analysis of the entire manufacturing process.



Capability studies, range and means charts, frequency distribution curves, and histograms provide the information necessary to prevent the production of defects. Parts exhibit remarkably uniform

dimensions, and when supplied with histograms, they can eliminate costly acceptance inspections, meaning that the parts manufactured by H & H Swiss, are ready to go directly to the production line.

In addition, H & H Swiss is ISO9002 registered, which ensures that procedures are in place to directly benefit customers. At H & H Swiss, continuous improvement is measured through quality, customer satisfaction, production rates and delivery. Each month data is recorded, enabling the company to measure their performance in these areas, which translates to increased productivity and better overall service to their customers.

To Learn More

If you would like to learn more about H & H Swiss, Exacto Spring Corporation, or any of the other lines the Sengers represent, contact Senger and Associates, Inc. at (651)633-6040 or at www.senger-assoc.com.