



Coldstream Technology Center  
1500 Bull Lea Rd., Suite 116  
Lexington, Kentucky 40511  
<http://hummingbirdnano.com>

### **Fast Facts**

Founders:	L. Scott Stephens, R. Grant Stephens
Date Founded:	2012
Employees:	3
Headquarters:	Lexington, KY
Revenue:	N/A
University:	University of Kentucky
Federal Funding Agency:	National Science Foundation Department of Education
Initial Research Funding:	\$300,000

Hummingbird Nano, Inc. (HBN) is a high-tech start-up company on the leading edge of precision micro and nano-scale manufacturing. HBN is a manufacturer of ultra-small, precision-molded components for the telecommunications, biotechnology, aerospace, energy, and defense industries. The company specializes in maintaining extreme tolerances and pristine quality using patent-pending machinery developed exclusively for mass production of molded plastic and glass parts.

### **The Story Behind the Company**

University of Kentucky researchers in the Department of Mechanical Engineering wanted to solve problems that limit the mass production of very small molded parts – that of adequate geometric repeatability. Basic research into the limitations of existing machinery revealed the direction for new processes and machines that could be adapted to solve this problem. The result is a manufacturing system for the mass production of micro-sized parts and assemblies with unparalleled precision. This technology now enables products to be produced in quantities exceeding 100 million annually that could not be produced economically before. The initial research that led to this manufacturing technology was undertaken at the University of Kentucky with approximately \$300,000 in funding from the National Science Foundation and the Department of Education.

The launch of HBN signals the transition from an R&D company to a commercial enterprise centered on the manufacturing of molded parts. This manufacturing technology is the basis for HBN’s competitive advantage in the marketplace where it is the sole solution in many cases for supplying economical, mass-produced molded parts with ultra-precise tolerances.