

High-Precision Standard & Custom Micro Components



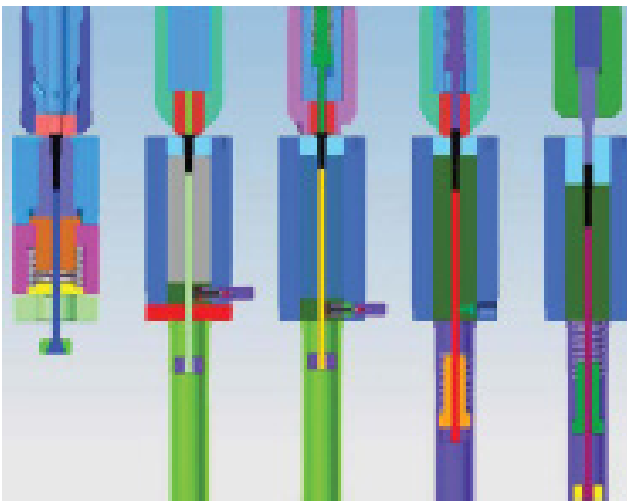
Sussex Wire specializes in the design, manufacturing and distribution of highly engineered, specialty metal parts and components. Our primary expertise is using cold-forming technology to form metal wire and specialty alloys at room temperatures into highly engineered precision, micro-miniature components faster in a more cost-effective manner than traditional machining, stamping, metal injection molding, and casting methodologies.

Engineered Cold Formed Solutions

Sussex Wire is a global pioneer in collaborative design, development, manufacture and control of miniature and micro-miniature metal components for customers seeking a better solution for yield, strength, assembly and cost through the application of cold forming technologies.

What is Cold Forming?

Cold forming, or cold forging, is the application of force with a punch to the end of a precise metal cut-off blank contained within a die. The force exceeds the metal or alloy's elastic limit or yield strength causing plastic flow. Cold forming retains the material's structural properties rather than compromising it as machining processes often do. Cold forming is commonly used for component heading, upsetting, extruding, sizing, piercing, trimming, thread rolling, blank rolling and pointing operations.



Cold Forming-Benefits

- Eliminates costly scrap (net shape)
- Eliminates inefficient secondary operations
- Six+ times increase to component production velocity
- Retains native material mechanical properties
- Reduces tooling cost over product life cycle
- Reduces component part cost

Sussex Wire Advantages

- Collaborative engineering design
- Medical, automotive, defense and micro-electronics market experience
- World-class tool and die making
- Forming to finishing integrated LEAN manufacturing
- ISO 9001:2008 certification
- Production runs up to 500+ million components
- Component tolerances to .0005"
- Material capabilities inclusive of specialty alloys
- Rich 40 year history



Cold Forging & Machining Capabilities



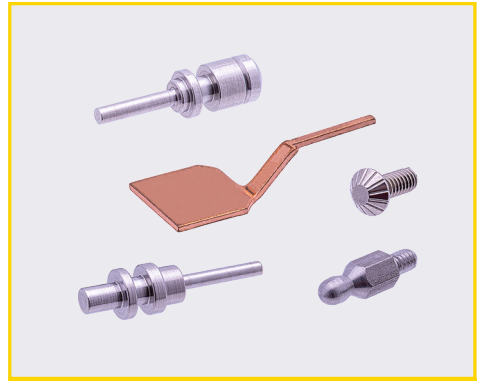
JIT Kanban Inventory Management Capabilities



Single & Multi-Threaded Pins & Leads



Wire Forms



Custom Screw Machined Products



Cold Heading



Roll Forming



Pointing & Tapping



Coining & Stamping



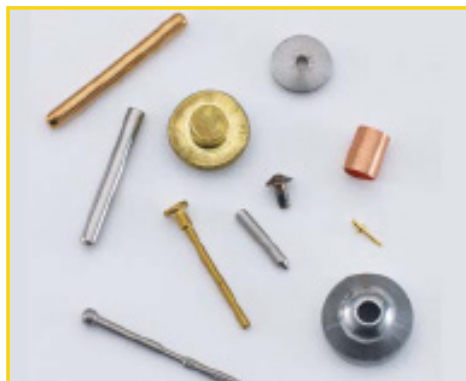
Eyelet & O-rings



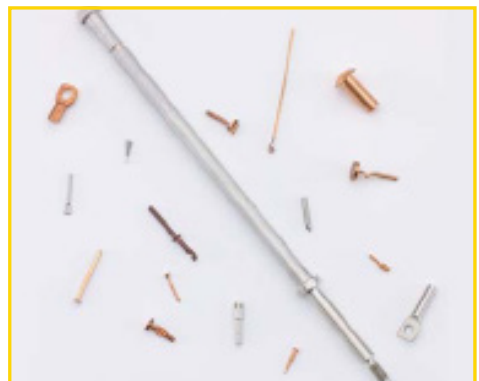
Caps & Buttons



Hubs & Inserts



Valves



Connectors

Process Capabilities

Sussex Wire specializes in small metal parts manufacturing, including producing micro rivets and eyelets, cold headed pins, glass-ceramic hermetic seals, cold headed micro fasteners, micro leads, miniature valve components, and more. We custom design and manufacture small metal components to your specifications in a variety of plating and alloy materials, with tolerances down to 0.0005". With collaborative design, development, manufacture and control of small, miniature, and micro-miniature metal components we support customers seeking a better solution for yield, strength, assembly, and cost.

Diameters	.0035" to .400"
Lengths	Available in all types of lengths both US and Metric
Materials	Various Alloys, Aluminum, Copper, Copper Alloys, Copper Cored, Copper Clad, Inconel, Nickel Alloys, Platinum, Steel, and Stainless Steel
Dimensioning & Tolerancing	AOI, RAM Optical Metrology, Micrometers, Optical Comparators, Drop Gages, Pin Gages, Vernier, 100% Inspection Capabilities
Manufacturing Process	<ul style="list-style-type: none">• Cold Forming• CNC Swiss Micro-Machining• Roll Forming• Threading• Tapping• Turning• Pointing• Electrical Discharge Machining (EDM)• Cleaning• Tumbling• Etching• Plating
Quality Certifications & Compliance	<ul style="list-style-type: none">• ISO 9001:2008• ITAR• NIST Traceability• REACH• DFARS• RoHS• AMS

Markets Served

- Automotive
- Electric Vehicles
- Defense
- Electronics
- Energy, Oil, & Gas
- Medical
- Semiconductor
- Transportation



To order stock or custom parts, visit [SussexWire.com](https://www.SussexWire.com)
or contact us at 610.250.7750 | info@mwcomponents.com