

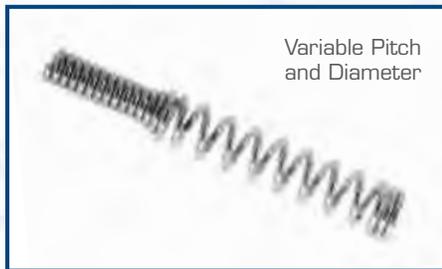


*COILS, WIRE FORMS,  
SPRING COMPONENTS AND  
LASER WELDED ASSEMBLIES*

We manufacture custom wire components for the Medical, Electronics, Aerospace and Military markets. Our specialties include fine and ultra fine wire diameters, unique alloy types and shapes, and high precision, tight tolerance products.

### **PRECISION CAPABILITIES**

- CNC Point Deflection Coiling (Compression, Torsion and Extension Springs)
- Mandrel Winding
- CNC Wire Forming
- Wire Sizes (0.0007" to 0.080")
- Coil outside diameters down to 0.0050"
- Conical Springs
- Variable Pitch and Diameter
- Magazine Springs



We have experience with almost every possible alloy and have availability to the finest quality materials.

### **MATERIALS**

(Round, Flat, Square or Special Shapes)

- Stainless Steels (302, 304, 316 L & LVM)
- Precipitation Hardenable Stainless Steel (17/4, 17/7)
- Cobalt & Moly Alloys (MP35N, 35NLT, Elgiloy & ASTM F1058)
- Precious Metals (Platinum, Palladium, Gold, Silver, others)
- Nitinol (Superelastics & Shape Memory)
- Beryllium Copper, Phosphorus Bronze
- Tungsten, Titanium
- Coated Materials and Exotic Alloys



Abrading and  
Coated Components



We offer special processing capabilities to support and add value to our core capabilities.

### **SPECIAL SUPPORT CAPABILITIES**

- Laser Welding
- Point/Tip Grinding
- Coil End Grinding
- Abrading
- Coated and Plated Components
- Ultrasonic Cleaning, Special Cleaning Processes
- Passivation (ASTM A 967)
- Chemical Oxide Removal and Etching
- Heat Treating (inert and air atmosphere)



Point/Tip  
Grinding

Custom Complex  
Wire Forms



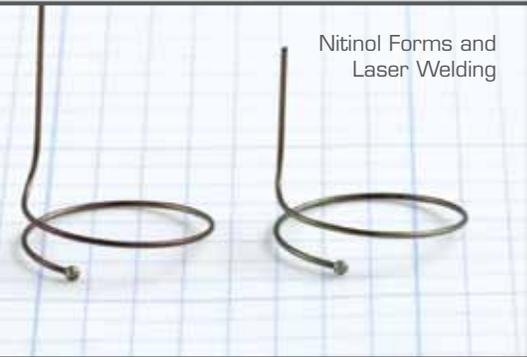
Micro Coiling  
& Forming



Motion Dynamics is known for manufacturing some of the smallest wire components in the world including high precision laser welded Micro Garter Springs. We are capable of utilizing wire diameters down to 0.0007" and producing coil diameters down to 0.005." Micro Garter inside diameters <0.100."

### **MICRO COILING AND FORMING**

- Compression Springs
- Torsion Springs
- Extension Springs
- Complex Wire Forms
- Micro Garter Springs (garter inside diameters <0.100")

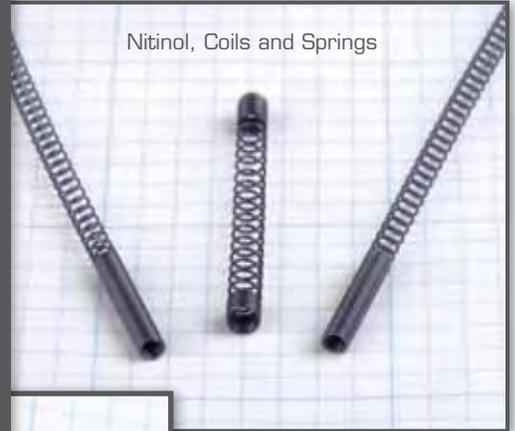


Nitinol Forms and Laser Welding

Motion Dynamics has invested considerable resources in recent years, both in engineering personnel and state-of-the art equipment in order to excel as a supplier of high precision and complex nitinol components. We offer both Superelastic and Shape Memory temperature activated components.

### **NITINOL FORMS, COILS AND SPRINGS**

- Compression, Torsion and Extension Springs
- Precision Wire Forms
- Laser Welded Nitinol Assemblies
- Design Assistance



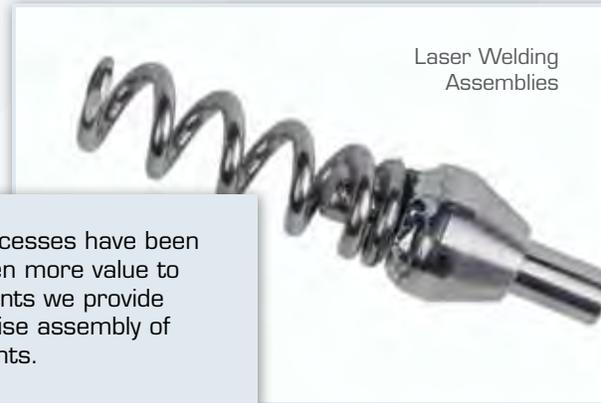
Nitinol, Coils and Springs



Nitinol Wire Forms



Seam Welding



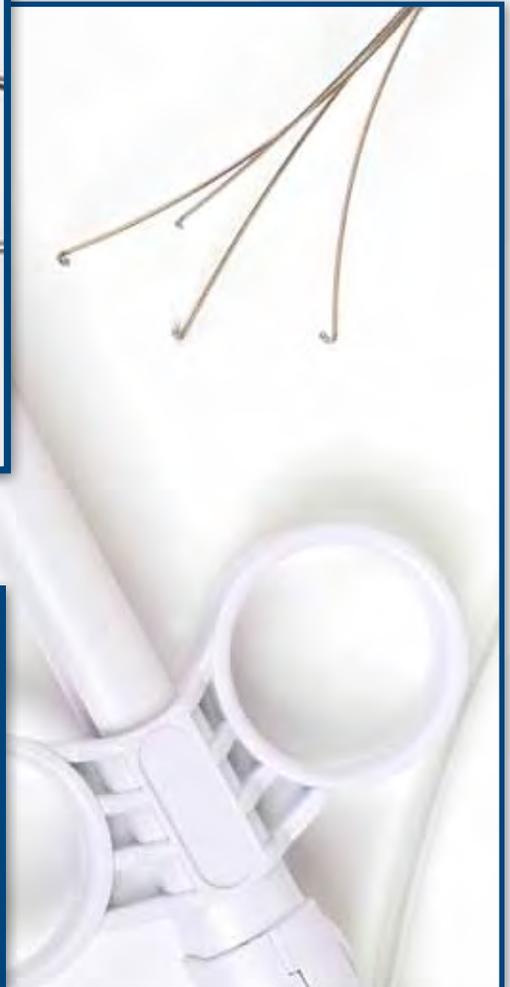
Laser Welding Assemblies

Laser welding processes have been added to offer even more value to the wire components we provide including the precise assembly of multiple components.

### **LASER WELDING**

- Seam, Butt and Penetration Welds
- Tip Radius and Ball Tip Formations
- Spot Welds <0.002"
- Weld Validations via Beam Energy and Pull Testing

Wire Assemblies

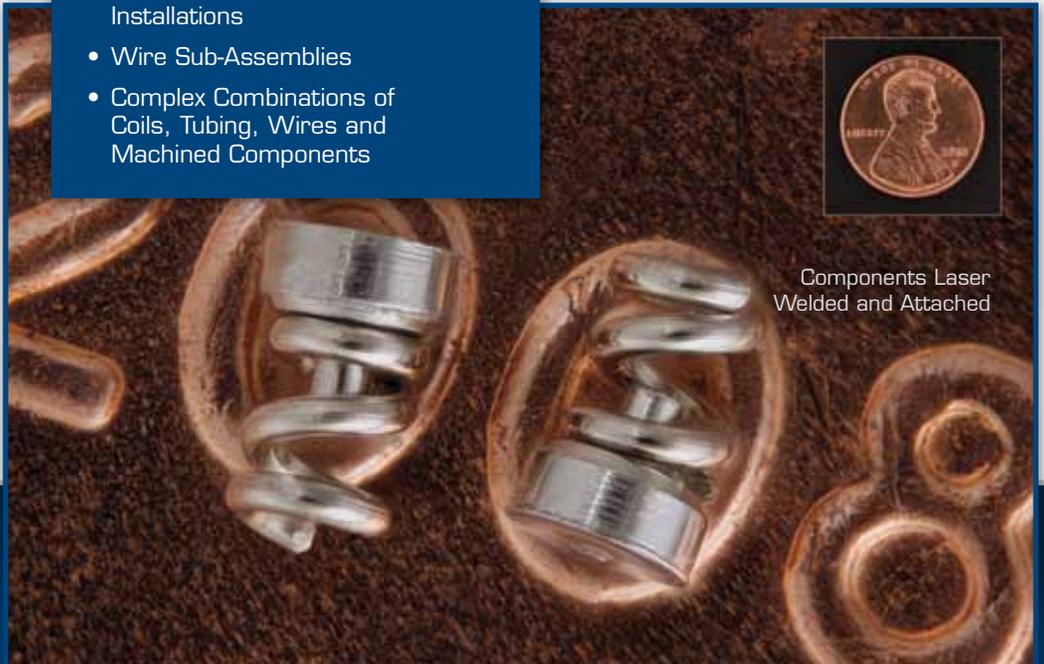


Garter Spring Assemblies

Many micro wire components are combined with others to produce an assembly for specific devices and applications, specifically medical device and cardiac catheter applications.

***WIRE ASSEMBLIES,  
INCLUDING MICRO WIRE  
ASSEMBLIES***

- Components Laser Welded and Attached
- Multiple Component Materials Combined
- Heat Shrink and Jacket Installations
- Wire Sub-Assemblies
- Complex Combinations of Coils, Tubing, Wires and Machined Components



Components Laser Welded and Attached

## **MISSION STATEMENT**

Motion Dynamics Corporation is a specialized spring and wire form company committed to building long-term relationships with customers desiring excellence in all aspects of relationships!

Each of us is committed to understanding our customers and their needs. We will accomplish this by providing unequalled quality and delivery, by dedicating resources to innovative processes and equipment and by hiring and developing people with exceptional skills that uphold our high ethical standards.

## **Quality**

ISO certified to 9001:2008  
Compliance with GMP's for Medical Device  
Manufacturers and the National Nuclear  
Safety Administration (NNSA)



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