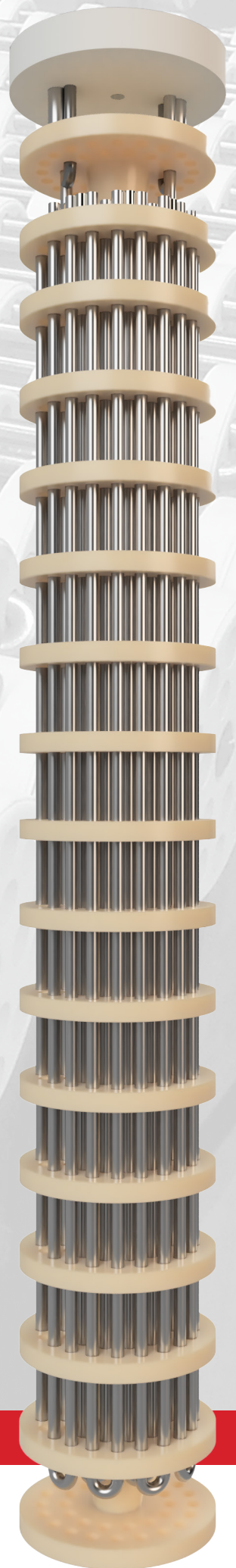




COUNT ON THE EXPERTS

www.USelement.com • 586-977-9600

A division of Industrial Furnace Interiors, Inc.





Customers for Life

Since 1982, we have been committed to the engineering, quality, and delivery of products for industrial heating applications. Today, US Element, operating as a division of Industrial Furnace Interiors, is an industry leader for electric heating elements.

With expertise in metallurgic and electrical engineering, coupled with over 90 years of combined experience, US Element can help you solve your heating challenges, improve existing designs, and help you innovate for the products of tomorrow.

We stand behind every product we make, and we are committed to going the extra step to keep you as a customer for life.

Count on the experts. Count on US Element.

- Bayonet Elements & Radiant Tubes
- Rod Overbend Elements
- Ribbon Elements
- Coils
- Open Coil Heaters
- Heater Repairs & Rebuilds
- Resistance Wire, Ribbon & Strip
- Molybdenum & Tungsten Elements & Components
- Ceramic Tubes, Insulators, and Hangers
- Turnkey System Design & Engineering
- Preventative Maintenance Programs

Heating Element Design

Our goal is to develop a heating system that meets or exceeds your requirements. We will work with you to design a solution which incorporates the most effective cost, performance, and maintenance strategy.

Design Factors

- Power Supply & Controls
- Atmosphere
- Furnace Operating Temperature
- Furnace size & available space
- Air Flow

Design Criteria

- Cost
- Performance (temperature control & uniformity)
- Element Life
- Material Selection
- Maintenance Strategy

Industries Served

- Aluminum
- Automotive
- Defense
- Aerospace
- Sintering / Powdered Metal Products
- Metal Coatings
- Metal / Castings
- Alternative Energy
- Steel Mills / Steel Production
- Bearings
- Glass: Structural and Automotive

Applications

- Annealing
- Tempering
- Sintering / Powdered Metal Processing
- Metal Coating
- Austempering
- Brazing
- Carburizing

Furnace Types

- Aluminum Holding Furnace
- Draw Furnace
- Roller Hearth Furnace
- Temper Furnace
- Atmosphere Furnace
- Bell Furnace
- Car Bottom Furnace
- Continuous Furnace
- Integral Quench
- Muffle Furnace
- Walking Beam Furnace
- Rotary Hearth Furnace
- Shaker Hearth Furnace
- Box Furnace
- Batch Furnace
- Pit Furnace
- Drop Bottom Furnace
- Quench Furnace
- Pusher Furnace
- Tip Up Furnace
- And More...

Electric Heating Elements

The furnace is at the heart of every heat treating operation. The heating elements inside drive the overall quality and performance of the process. Using the best element design will ensure the most optimized solution for your operation.

Material selection, design, and the manufacturing process come together with every heating element made by US Element. We will work with you to design, replace, or rebuild your heating elements to meet or exceed your requirements.

Bayonets



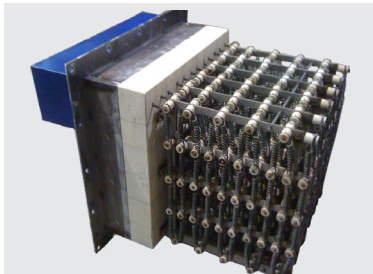
- Up to 2000°F
- NiCr, FeCrAl
- 2-7/8" Dia. up to 7-1/8" Dia.

Radiant Tubes



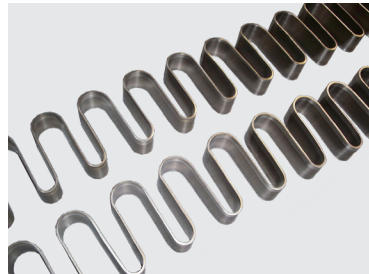
- Fabricated or Cast
- HT, 330 SS Typical
- Designed for Elements & Atmosphere
- Ceramic and Sialon Tubes

Heaters



- Up to 1450°F w/ Airflow
- NiCr
- Temper / Draw Furnace
- Maximum Heat Density

Ribbon Elements



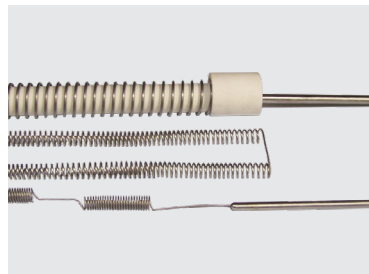
- Up to 2050°F
- NiCr, FeCrAl
- Up to 2" Wide

Rod Elements



- Up to 2100°F
- NiCr, FeCrAl
- Higher Temp. Applications
- Moly, Tungsten

Coils



- Up to 2000°F
- NiCr, FeCrAl
- All Wire Sizes

Complete Turnkey Systems

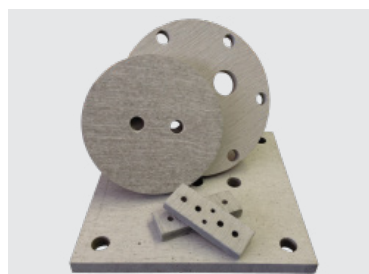
US Element can design and supply complete turnkey systems for new furnace application, furnace rebuilds, or a gas to electric conversion.

Turnkey Systems



- Element Layout
- Support Systems Including Hangers and Ceramics

Refractory Shapes



- Transite, CS-85, Marinite Shapes
- Fiber Modules
- Fiber Gaskets



US ELEMENT
INDUSTRIAL HEATING ELEMENTS

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