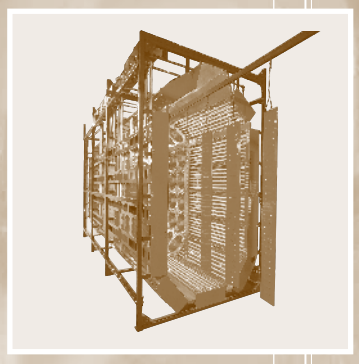

DriQuik™

Curing Solutions

Infrared Process Ovens & Equipment

CCI Thermal Technologies INC.

A Leader in Advanced Heating Solutions

CANADA'S 50 BEST MANAGED COMPANIES

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CCI Thermal Technologies Inc. is a leader in advanced heating solutions. We offer our customers the broadest based industry knowledge, expertise and industrial heating products. In addition to our focus on product quality, we are setting a new industry standard for customer service.

At our facilities across North America we manufacture five of the top brands in industrial heating:

- Cata-Dyne™ - Explosion-Proof Gas Catalytic Heaters
- Ruffneck™ - Heaters for the Harshest Environments
- Caloritech™ - Engineered Electric Heat
- Norseman™ - Electric Explosion-Proof Heaters
- DriQuik™ - Curing Solutions

DriQuik™ is a recognized leader in the design and manufacture of infrared radiant heating systems and components. Greensburg, Indiana located in America's heartland, is the manufacturing center for DriQuik™ Curing Solutions. Our Greensburg plant includes a 6,000 sq. ft., "state of the art" test facility that has the ability to test along the entire infrared curing spectrum for individual product and process suitability, ensuring that our customers receive the best possible value. As the industry leader in custom-engineered curing solutions, CCI Thermal plays a fundamental role in delivering advanced curing technology to the finishing industry.

We invite you to visit *www.ccithermal.com* to view the broad range of innovative industrial heating products manufactured by CCI Thermal Technologies Inc.

Edmonton, Alberta

Oakville, Ontario

Orillia, Ontario

Greensburg, Indiana

Catalogs at a Glance

Caloritech™ Catalog: Section A
Elements and Specialty Heaters

calvane heaters, tubular heaters, bolt heaters, tubular band heaters, mitosis heaters, finned tubular heaters, cartridge heaters, strip and finned strip heaters, hot plate/drum heaters, cast-in heaters, transit heaters.




Caloritech™ Catalog: Section B
Immersion Heaters

screwplug heaters, domestic immersion heaters, urn heaters, flange heaters, over-the-side heaters, pipe insert heaters, gate and gain heaters.




Caloritech™ Catalog: Section C
Air and Space Heaters

infrared radiant heaters, panel heaters, convection heaters, commercial and explosion-proof duct heaters, unit heaters, gate and gain heaters.




Caloritech™ Catalog: Section D
Engineered Products

circulation heaters, heat transfer systems, custom engineered products, panel heaters, control panels, technical data.




Caloritech™ Catalog: Section E
Boilers

hot water boilers, steam boilers, condensate receiver packages, blow off tanks, packaged circulation heaters, calorifiers.




Caloritech™ Catalog: Section F
Controls

electronic controls, industrial thermostats, explosion-proof thermostats, thermoswitches, thermocouples and thermowells, *x-Max*® explosion-proof housings.



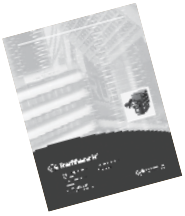

Cata-Dyne™ Catalog

explosion-proof infrared gas catalytic heaters, high temperature industrial infrared heaters, infrared gas catalytic heating systems, accessories.




Ruffneck™ Catalog

explosion-proof electric air heaters, heat-exchanger unit heaters, corrosion-resistant washdown unit heaters, convection heaters, thermostats.






Norseman™ Catalog

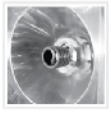
natural convection explosion-proof heaters, forced air explosion-proof heaters, thermostats.




DriQuik™ Catalog

long, medium and short wavelength infrared ovens and emitters, dusters, cooling tunnels and control panels.






Putting Safety First

CCI Thermal has always been committed to the safety and well being of our customers.

We are familiar with the safety regulations of heating products in a wide variety of environments and ensure that our products meet or exceed the requirements for their applications.

CCI Thermal takes great pride in its lines of certified products.

Visit us at *www.ccithermal.com*

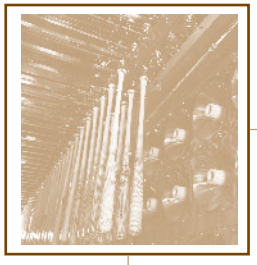
Our web site offers on-line PDF catalogs, product specifications, installation manuals, and technical documentation 24 hours a day. Additionally, you will find easy access to anyone of our factory representatives, regional sales managers or customer service personnel.

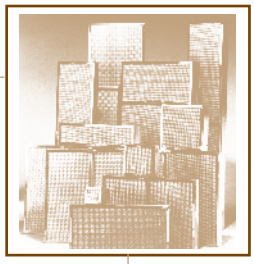
Quality

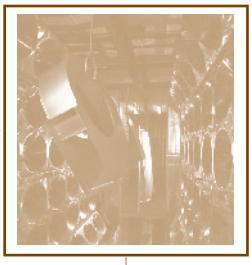
All our business processes are steered by the principles of ISO 9001:2000, providing an operational framework that places emphasis on continual improvement and customer satisfaction.

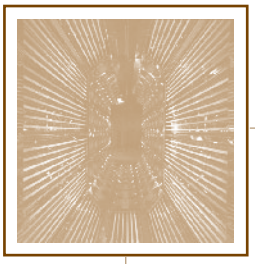
DriQuik™

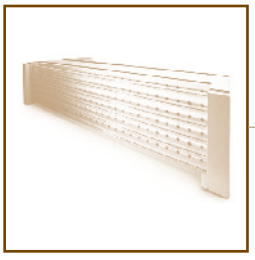
Curing Solutions











The Industry Leader

DriQuik™ sets the standard for electric and gas infrared drying ovens and automated pre-finishing systems. Our company pioneered radiant oven technology in the 1930's and today we design and manufacture custom finishing systems for a growing diversity of products, applications and industries throughout the world.

As one of the key brands of CCI Thermal Technologies Inc., DriQuik™ is committed to offering its customers the broadest based industry knowledge and expertise and a full range of infrared curing equipment.

Custom Engineered Solutions

Every solution that DriQuik™ provides has been custom engineered to precisely suit the customer's process requirements. Starting with individual testing of the parts to be processed, our infrared technical specialists engineer a curing system to optimize your finishing process, resulting in faster cures with fewer defects.

A Commitment to Quality for 60 years

Test Facility

We are committed to providing the best infrared products and systems, built to suit your process requirements. Our research and test center offers the most extensive range of opportunities to prove your process. If you require long, medium or short-wave infrared heat, our test facility can provide superior customer service and product excellence (see page 24 for further details).

Whether your specific test application requires powder coat or wet application, our state-of-the-art facility is designed to quickly and effectively create solutions. With nearly six decades of experience in both designing and manufacturing infrared ovens, we will transform your ideas into reality.

What is Infrared Energy?

Infrared radiation is a form of electromagnetic energy that is generated by the vibration and rotation of atoms and molecules within all objects with temperatures above absolute zero (0°Kelvin; -459°F; or -273°C). Electromagnetic energy, which travels at the speed of light (186,000 miles per second), is comprised of waves that can be measured both electrically and magnetically.

Infrared (literally meaning “below” or “beyond” the red) is located between the visible and microwave portions of the electromagnetic spectrum and shares many of the same properties of visible light, except it has a longer wavelength. When infrared waves encounter a solid object they can be reflected (bounce off), diffracted (scattered), refracted (bent), transmitted (pass through), or absorbed by the object. Several of these effects can take place at the same time.

Infrared Curing of Coatings

Infrared curing, as occurs in an industrial oven application, applies radiant energy to the receiver, or part surfaces, by direct transmission from the emitter. Some of the energy emitted will be reflected off of the part surface, some will be absorbed into the coating and some is transmitted into the substrate. This direct transfer of energy creates an immediate reaction in the coating, quickly elevating the coating temperature. Cross-linking at the molecular level is rapidly enhanced once the surface is exposed to the emitter.

Why Use Infrared?

Infrared is smart. It heats what needs to be heated – your product or its coating, not the surrounding air.

Infrared is direct. It takes less time and energy to do the job.

Infrared is versatile. It handles a huge variety of finishing applications, from oddly shaped and configured pieces to demanding substrates and tricky coatings.

Infrared is environmentally friendly, helping you surpass today’s ever-tightening standards.

What Does This Mean to You?

- Higher production rates
- Lower operating costs
- Minimal equipment footprint
- High quality parts

Customer Care

DriQuik™ provides unparalleled customer service and support. From on-site start-up to ongoing technical assistance, you can be assured that our coating experts will be there any time you need. With decades of experience and a commitment to quality, you can be certain that the DriQuik™ team will provide the best solution to your curing needs – the first time.

The QuikCAT Oven

Flameless Gas Catalytic Long Wavelength

The QuikCAT oven is versatile from low to high density infrared applications. The large emissive surface area allows processing of extremely geometrically complex objects. The QuikCAT oven will provide the curing solution for your finishing needs.

The Emitter:

- Flameless catalytic gas thermoreactor panel

- All major components produced in our own facilities

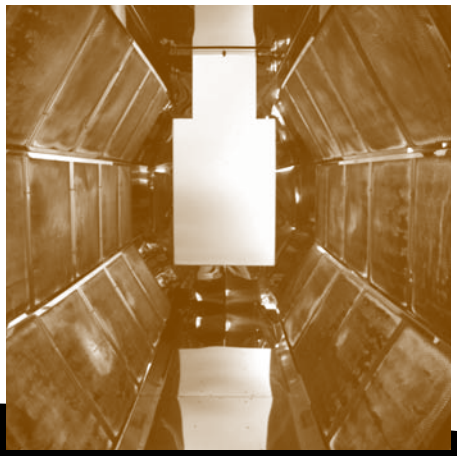
- Patented catalyst manufactured in our Edmonton, Alberta facility

- Preheat tubular element manufactured in our Orillia, Ontario facility

- Assembled and tested in our Cata-Dyne™ facility in Edmonton, Alberta under an internationally recognized ISO-9001:2000 quality management system.

- Two categories of high performance infrared emitters, both with CSA and FM certifications as flameless catalytic gas infrared emitters:

  - Series WX (explosion-proof emitters) certified by CSA, CE/ATEX and FM for Class I, Division I, Group D hazardous area applications.
    - 33% more energy efficient than any competitive emitter.
  - Series G (high performance hot catalyst emitters) certified CSA and FM for non-hazardous area applications.
    - The hottest certified catalytic gas emitter on the market.



- Environmentally friendly – unlike normal combustion, both series of Cata-Dyne™ emitters produce only trace amounts of nitrogen oxides due to their low operating temperatures.
    - Multiple BTU input ratings (4,000 and 6000 Btuh per cu ft.) available.
- Offered in a variety of preheat voltages.
- Natural gas (NG) or propane (LPG) configurations.
- Variety of mounting bracket options.
- Choice of snap switch, thermocouple or thermoswitch emitter monitoring devices.

The Oven System:

- Custom configurations utilizing an array of standard modular heater sections profiled to the specific process and/or application.
- IRI compliant gas trains and gas management systems.
- Reflective bright annealed stainless interior insulated panels.
- Standard features include powder coated U-channel type support frame, engineered exhaust collection and appropriate closure panels.
- Programmable recirculation air systems with engineered internal discharge directional ducting.
- Customized features available upon request or as the process dictates.
- Includes a user-friendly control package with all required components for safe and efficient operation of the oven system (see page 23 for complete explanation of the many QuikCOMMAND features).

The Uses and Benefits:

- The multiple available emitter Btuh input ratings and variety of standard emitter sizes allow the QuikCAT oven package to be a very versatile curing solution.
- This particular DriQuik™ long wavelength technology possessing massive emissive surface area is capable of processing highly complex geometric part profiles.
- Process times typically four times faster than convection, resulting in less equipment and floor space requirement.

The Emitter Specifications:

Industrial Oven Emitter Sizes (in.)	Input Rating Btuh	
	WX Series	G-series
12 X 36	12,000	18,000
12 X 48	16,000	24,000
12 X 60	20,000	30,000
12 X 72	24,000	36,000
18 X 48	24,000	36,000
18 X 60	30,000	45,000
18 X 72	36,000	54,000
24 X 48	32,000	48,000
24 X 60	40,000	60,000
24 X 72	48,000	72,000

The QuikCONE Oven

Electric Ceramic
Long Wavelength

The QuikCONE oven has been at the forefront of the DriQuik™ product offerings since its inception in 1946. It continues to be the product of choice for many manufacturers who have come to trust its reliability and versatility.

The Emitter:

- Utilizes a high-grade nichrome wire that is helically wrapped around a scientifically engineered ceramic cone-shaped core and encased in a high-mass, hardened sand slurry, creating a durable, highly efficient, long wave infrared emitter.

- Hand-made in the DriQuik™ facility in Greensburg, Indiana.

- Offered in a variety of wattages:
  - 500W, 650W, 750W, 1000W in the #2 and #4 series
  - 1000W, 1300W, 1500W in the BR series

- Offered in a variety of voltages (for convenient series wiring):
  - 95V for 380-volt system (four in series)
  - 104V for 208-volt system (two in series)
  - 120V for 240-volt and 480-volt system (two or four in series)
  - 150V for 600-volt system (four in series)

- BR series also offered in a “combo” package (1500W/2000W), producing an effective mix of heated air and long wave infrared; an efficient solution for many water-based coating applications.

The Heater Section:

- Each emitter mounted within an independent polished stainless steel parabolic reflector, enabling a superior uniform heat pattern.
- Offered in two reflector sizes:
  - 10.5-inch by 10.5-inch (#2 and #4 series)
  - 15-inch by 15-inch (BR series)
- Modular industrial heater sections comprised of multiple emitters, either two or four per section.
- Reflector and emitter assembly mounted within a formed steel housing, which is finished in a durable textured polyester powder coat.
  - #2 series, 10 1/2-inch by 21-inch, contains two emitters
  - #4 series, 10 1/2-inch by 42-inch, contains four emitters
  - BR30, 15-inch by 30-inch, contains two emitters
  - BR60, 15-inch by 60-inch, contains four emitters
- Standard back-loading design for safe and convenient maintenance access (front-loading configuration available upon request).

The Heater Specifications:

Heater Part Number	Series	Input (kW)	Size in Inches H	L	D	Fig. No.
#2-500	#2	1.0	10 1/2	21	5 1/2	1
#2-650	#2	1.3	10 1/2	21	5 1/2	1
#2-750	#2	1.5	10 1/2	21	5 1/2	1
#2-1000	#2	2.0	10 1/2	21	5 1/2	1
#4-500	#4	2.0	10 1/2	42	5 1/2	2
#4-650	#4	2.6	10 1/2	42	5 1/2	2
#4-750	#4	3.0	10 1/2	42	5 1/2	2
#4-1000	#4	4.0	10 1/2	42	5 1/2	2
BR30-1000	BR	2.0	15	30	6 1/2	1
BR30-1300	BR	2.6	15	30	6 1/2	1
BR30-1500	BR	3.0	15	30	6 1/2	1
BR60-1000	BR	4.0	15	60	6 1/2	2
BR60-1300	BR	5.2	15	60	6 1/2	2
BR60-1500	BR	6.0	15	60	6 1/2	2
BR60-1500C	BR	6.0	15	60	6 1/2	2

Note: 208V, 240V, 380V, 480V and 600V are the standard available voltages.

The Oven System:

- Custom configurations utilizing an array of standard modular heater sections profiled to the specific process and/or application.
- Standard features include powder coated U-channel type support frame, engineered exhaust collection and appropriate closure panels.
- Customized features available upon request or as the process dictates.
- Includes a user-friendly control package with all required components for safe and efficient operation of the oven system (see page 23 for complete explanation of the many QuikCOMMAND features).

The Uses and Benefits:

- The variety of available emitter wattages and standard heater sizes allows the QuikCONE oven package to be one of the most versatile, yet affordable, in the DriQuik™ product line.
- The even heat patterning produced through the cone-shaped emitter and parabolic reflector makes the QuikCONE oven system most popular for heat sensitive substrates such as wood and plastic.
- The modular design and sturdy emitter allows the QuikCONE heaters to be configured in virtually any pattern.
- Most effective on wet coats (water-based or solvent based) and with substrate temperatures requiring temperatures of 300ºF and below, though capable, in some instances, of curing standard high temperature powder coat on light gage materials.

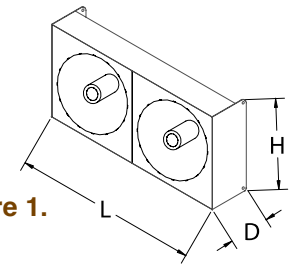


Figure 1.

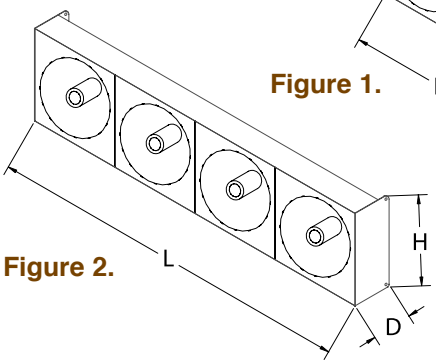


Figure 2.

The QuikSILVER Oven

Electric Quartz
Medium Wavelength

With its quick response capability, rapid heat-up and instantaneous cool down, the QuikSILVER oven allows for pinpoint control accuracy on heat sensitive substrates in continuous process finishing systems.

The Emitter:

- A reliable nickel chromium resistance coil housed in a quartz tube, non-vertical burn design.
- Platinum primary reflector providing a reflective power on par with pure gold and the superior durability that only platinum can offer.
- Manufactured in our DriQuik™ facility in Greensburg, Indiana.
- Offered in a variety of wattages:
  - 900W, 1000W in the BR30 series
  - 1000W, 1500W, 1800W, 2200W in the BR60 series
- Offered in a variety of voltages (for convenient series wiring):
  - 240V for 240-volt and 480-volt systems (one or two in series)
  - 300V for 600-volt system (two in series)
- Emitter temperatures to 1700ºF, within the medium wavelength range.

The Heater Section:

- "Dual Reflector" system, as the emitters - with the built-in primary platinum-backed reflector - are mounted within a bright-annealed stainless steel secondary reflector, enabling virtually all the medium wavelength infrared energy to be efficiently utilized.
- Offered in two reflector sizes:
  - 15-inch by 30-inch (BR30 series)
  - 15-inch by 60-inch (BR60 series)
- Modular industrial heater sections comprised of multiple emitters; two, four or six emitters per section.
- Reflector and emitter assembly mounted within a formed steel housing, which is finished in a durable textured polyester powder coat.
- Standard front-loading design for convenient access, including the "quik-snap" emitter-mounting feature for easy maintenance.
- Includes a stainless steel mesh guard, protecting the quartz tubes without affecting the transfer efficiency of the medium-wave infrared to the substrate.

The Oven System:

- Custom configurations utilizing an array of standard modular heater sections profiled to the specific process and/or application.
- Standard features include powder coated U-channel type support frame, engineered exhaust collection and appropriate closure panels.
- Customized features available upon request or as the process dictates.
- Includes a user-friendly control package with all required components for safe and efficient operation of the oven system (see page 23 for complete explanation of the many QuikCOMMAND features).

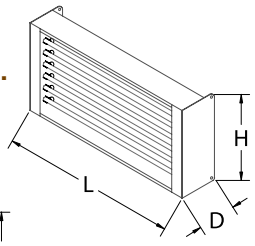


Figure 1.

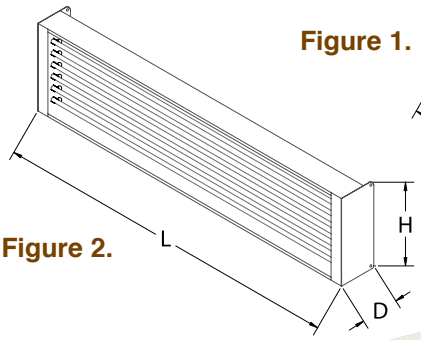


Figure 2.

The Uses and Benefits:

- The even heat patterning, produced through the tubular-shaped emitters and dual reflector system, makes the QuikSILVER oven popular on heat sensitive substrates such as those found in the automotive industry on interior/exterior plastic components and in the woodworking industry on fine wood cabinet doors.
- Most effective in applications requiring surface temperatures in the 120ºF to 325ºF range, such as various wet coat finish systems, particularly on wood and plastic substrates.
- Instant on/off response times makes the QuikSILVER oven "substrate friendly", with no fear of heat damage to the product during line stoppages.
- The quick response of the QuikSILVER oven system also allows for "user friendly" state-of-the-art control capability.

The Heater Specifications:

Heater Part Number	Series	Input (kW)	Size in Inches H	L	D	Fig. No.
BR30-900QT(2)	BR	1.8	15	30	6 1/2	1
BR30-900QT(4)	BR	3.6	15	30	6 1/2	1
BR30-900QT(6)	BR	5.4	15	30	6 1/2	1
BR30-1000QT(2)	BR	2.0	15	30	6 1/2	1
BR30-1000QT(4)	BR	4.0	15	30	6 1/2	1
BR30-1000QT(6)	BR	6.0	15	30	6 1/2	1
BR60-1000QT(2)	BR	2.0	15	60	6 1/2	2
BR60-1000QT(4)	BR	4.0	15	60	6 1/2	2
BR60-1000QT(6)	BR	6.0	15	60	6 1/2	2
BR60-1500QT(2)	BR	3.0	15	60	6 1/2	2
BR60-1500QT(4)	BR	6.0	15	60	6 1/2	2
BR60-1500QT(6)	BR	9.0	15	60	6 1/2	2
BR60-1800QT(2)	BR	3.6	15	60	6 1/2	2
BR60-1800QT(4)	BR	7.2	15	60	6 1/2	2
BR60-1800QT(6)	BR	10.8	15	60	6 1/2	2
BR60-2200QT(2)	BR	4.4	15	60	6 1/2	2
BR60-2200QT(4)	BR	8.8	15	60	6 1/2	2
BR60-2200QT(6)	BR	13.2	15	60	6 1/2	2

Note: 240V, 480V and 600V are the standard available voltages.

The QuikCOIL Oven

Electric Tubular Element
Medium Wavelength

The QuikCOIL oven has become a popular upgrade to our traditional product offerings. Its durability and versatility have entrusted this heater to numerous coating manufacturers for use in many applications across several markets.

The Emitter:

- This unique incoloy sheathed tubular element, with a nickel chromium resistance coil packed in magnesium oxide, has been engineered with exact watt density specifications to assure consistent temperatures and optimum transfer efficiencies of the radiant heat from source to substrate.
- Manufactured in our Caloritech™ facility in Orillia, Ontario under an internationally recognized ISO-9001:2000 quality management system.
- Offered in a variety of wattages:
  - 750W, 1000W in the #2 and #4 series
  - 1500W, 2000W in the BR series
- Offered in a variety of voltages (for convenient series wiring):
  - 208V for 208-volt system
  - 240V for 240-volt and 480-volt systems (one or two in series)
  - 300V for 600-volt system (two in series)
- Emitter temperatures to 1500ºF, within the medium wavelength range.

The Heater Section:

- Each emitter is mounted within an independent polished stainless steel parabolic reflector, enabling a superior uniform heat pattern.
- Offered in two reflector sizes:
  - 10.5-inch by 10.5-inch (#2 and #4 series)
  - 15-inch by 15-inch (BR series)
- Modular industrial heater sections comprised of multiple emitters, either two or four per section.
- Reflector and emitter assembly mounted within a formed steel housing, which is finished in a durable textured polyester powder coat.
  - #2 series, 10 1/2-inch by 21-inch, contains two emitters
  - #4 series, 10 1/2-inch by 42-inch, contains four emitters
  - BR30, 15-inch by 30-inch, contains two emitters
  - BR60, 15-inch by 60-inch, contains four emitters
- Standard back-loading design for safe and convenient maintenance access (front-loading configuration available upon request).

The Heater Specifications:

Heater Part Number	Series	Input (kW)	Size in Inches H	L	D	Fig. No.
#2-750QC	#2	1.5	10 1/2	21	5 1/2	1
#2-1000QC	#2	2.0	10 1/2	21	5 1/2	1
#4-750QC	#4	3.0	10 1/2	42	5 1/2	2
#4-1000QC	#4	4.0	10 1/2	42	5 1/2	2
BR30-1500QC	BR	3.0	15	30	6 1/2	1
BR30-2000QC	BR	4.0	15	30	6 1/2	1
BR60-1500QC	BR	6.0	15	60	6 1/2	2
BR60-2000QC	BR	8.0	15	60	6 1/2	2

Note: 208V, 240V, 480V and 600V are the standard available voltages.

The Oven System:

- Custom configurations utilizing an array of standard modular heater sections profiled to the specific process and/or application.
- Standard features include powder coated U-channel type support frame, engineered exhaust collection and appropriate closure panels.
- Customized features available upon request or as the process dictates.
- Includes a user-friendly control package with all required components for safe and efficient operation of the oven system (see page 23 for complete explanation of the many QuikCOMMAND features).

The Uses and Benefits:

- The variety of available emitter wattages and standard heater sizes allows the QuikCOIL oven package to be one of the more versatile, yet affordable, in the DriQuik™ product line.
- The even heat patterning produced through the coil-shaped emitter and parabolic reflector makes the QuikCOIL oven system popular on substrates with complex geometric part profiles.
- The modular design and sturdy emitter allows the QuikCOIL heaters to be configured in virtually any pattern throughout numerous processes.
- Most effective in applications requiring surface temperatures in the 250ºF to 450ºF range, such as in high solids or powder coat finish systems.
- When production rates increase or finishes change, the QuikCOIL oven is often the preferred choice as a booster system to existing convection ovens, as they provide a quick and even temperature rise in minimal plant space at an affordable cost.

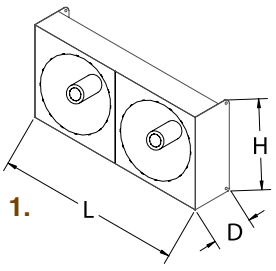


Figure 1.

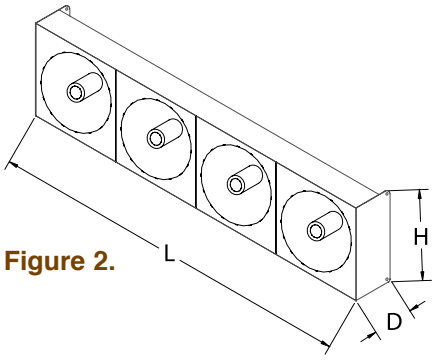


Figure 2.

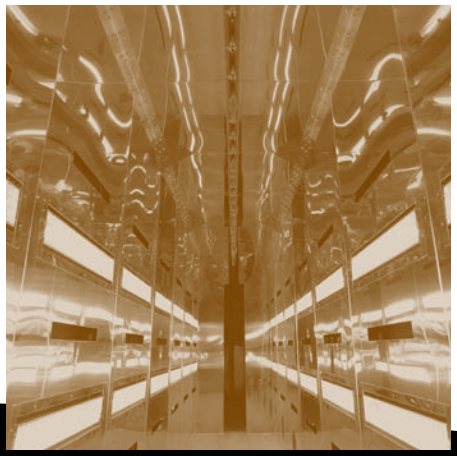
The QuikLITE™ Oven

Electric Halogen
Short Wavelength
Low Density

The Emitter:

- A transparent quartz bulb, with a tungsten (T-3) filament and a built-in high temperature ceramic primary reflector, creating a long life near (short) wave infrared lamp.
- Located in the .75 to 1.5 micron band on the Electromagnetic Spectrum.
- Adheres to the "Halogen Cycle" – a chemical reaction whereby evaporated tungsten particles are returned to the filament, keeping the blackening of the bulb wall and/or the thinning of the tungsten filament to a very minimum.
- Offered in a singular 2500-watt bulb.
- Offered in a variety of voltages:
  - 240V, 480V and 600V

With its rapid response capability and standardized design, the QuikLITE™ oven can provide a cost effective quick curing solution for lower temperature applications and for dimensionally complex parts.



The Heater Section:

- "Dual Reflector" system, as the emitter - with the built-in primary ceramic-backed reflector - is mounted within an anodized extruded aluminum secondary reflector, enabling virtually all the near (short) wave infrared heat to be efficiently focused.
- The heater assembly, with dimensions of approximately 5 1/4 "H x 29 1/4 "L x 2 3/4"D, includes a single 2500-watt bulb, with a fully adjustable reflector and protected by a removable aluminum mesh guard.
- Standard front-loading design for convenient access, including the "quik-snap" emitter-technology feature for easy maintenance.

The Oven System:

- Configured in 3ft standard lengths within a (typically) frameless design.
- Standard configurations consist of emitters in a horizontal position across the top, in a vertical position along the sides or a combination of the two.
- Normally designed with emitters on 22.5" centers in height and/or width (enabling appropriate coverage on the product), 36" centers in length and an 18" emitter to substrate focal distance to assure the most even heat penetration possible into the coated surface.
- The emitter assemblies are flush mount within the interior oven wall, which are composed of 20-gauge, bright annealed 430 stainless steel panels, providing a highly durable and reflective surface which effectively redirects the radiant energy toward the substrate.
- Typically located between the emitter assemblies are air vents from which recirculated air is evenly disbursed across the surface of the substrate.
- Filtered air intakes are generally engineered within the inner top portion of the oven for the most efficient means for re-distribution of the heated air.
- The 4" space between the inner oven wall and the powder coated 20-gauge CRS steel outer panels creates the pre-engineered air plenum for appropriate air distribution throughout the oven chamber.
- Customized features available upon request or as the process dictates, including support frame or entry/exit manual door panels (often required in batch-type production processes).
- Appropriate exhaust containment and capture.
- Includes a user-friendly control package with all required components for safe and efficient operation of the oven system (see page 23 for complete explanation of the many QuikCOMMAND features).

The Uses and Benefits:

- The even heat patterning produced through the halogen bulb-based emitters, with the dual reflector system, makes the QuikLITE™ oven popular on heat sensitive substrates, such as those found in the woodworking industry on fine custom wood cabinet doors.
- Most effective in applications requiring surface temperatures in the 100ºF to 180ºF range, such as various solvent-based or water-based finish systems, particularly on wood and plastic substrates.
- Instant on/off response times makes the QuikLITE™ oven "substrate friendly", with no fear of heat damage to the product during line stoppages.
- The standard package utilizes percentage timers but the quick response of the QuikLITE™ oven system also allows for "user friendly", state-of-the-art control capability.
- Designed specifically as a highly effective, low cost curing solution for low temperature applications; shipped unassembled to save on shipping costs, easy to assemble with simple step-by-step instructions.

The Heater Specifications:

Heater Part Number	Series	Input (kW)	Size in Inches H	L	D	Fig. No.
QL1-2500	QL	2.5	5 1/4	29 1/4	2 3/4	1

Note: 240V, 480V and 600V are the standard available voltages.

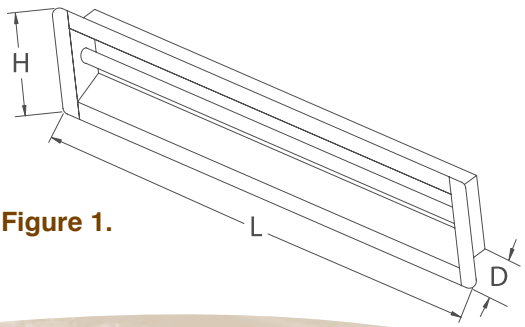


Figure 1.

The QuikKILN Oven

Electric Halogen
Short Wavelength
High Density

The Emitter:

• Halogen T-3 bulb

- Ceramic primary reflector applied to the rear half of the bulb to direct the bulk of the infrared energy to the work piece.

• Offered in a variety of wattages:

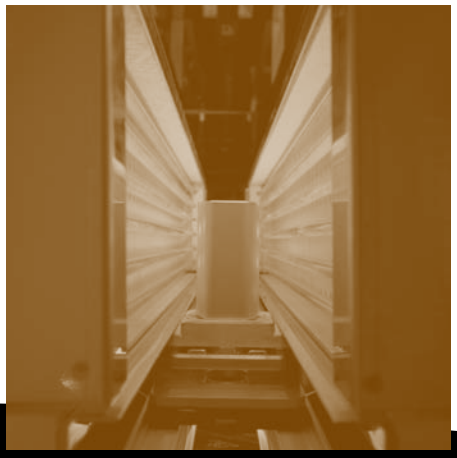
- 1600W, 2500W, in the SS series

- 2500W in the PYRO series

• 480V is standard

- Offered in a variety of voltages upon request

QuikKILN high-intensity ovens are representative of our ongoing commitment to product development, taking infrared into previously uncharted high-temperature and high-speed applications.



The Heater Section:

- Assembled and tested in the DriQuik™ facility in Greensburg, Indiana.
- Engineered to maximize halogen T-3 bulb life
  - Bulb seal area temperature of 300°F (149°C)
  - Bulb sheath temperatures below 900°F (482°C)
- PYRO Series Heater
  - Heater face and interior are manufactured entirely of refractory material to minimize energy transfer to the heater fixture, oven structure, and to maintain infrared reflection/ re-radiation to the oven interior.
  - Pressure ventilated to extend bulb life.
  - Emitter assembly is mounted in a formed stainless steel housing.
  - Standard back-loading design for safe and convenient maintenance access.
  - Ideal curing solution for high temperature processes and/or very high-speed applications.
    - Product temperatures up to 1500°F (815°C).
- SS Series Heater
  - Lower infrared density design than the PYRO series. Pressure ventilation is not required to maintain maximum bulb life.
  - Emitter assembly is mounted in a formed stainless steel housing.
  - Curing solution for applications where the part temperature maximum limit is 800°F (427°C) or below.
  - Suited for high-speed applications.

Figure 2.

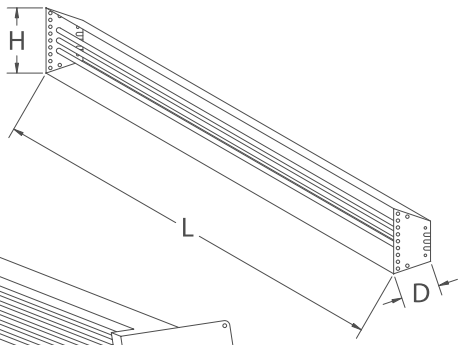
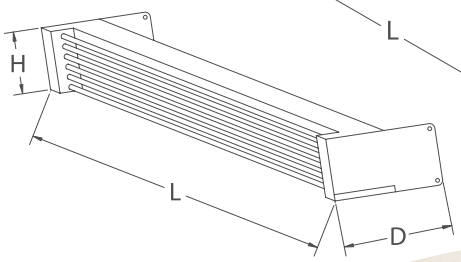


Figure 1.



The Oven System:

- Custom configurations utilizing an array of standard modular heater sections profiled to the specific process and/or application.
- Standard features include powder coated U-channel type support frame, engineered exhaust collection and appro priate closure panels.
- PYRO series ovens interior lined with refractory material when the process temperature requires heat isolation from the emitter and oven structure.
- Insulated reflective stainless steel interior wall panels.
- Customized features available upon request or as the process dictates.
- Includes a user-friendly control package with all required components for safe and efficient operation of the oven system (see page 23 for complete explanation of the many QuikCOMMAND features).

The Uses and Benefits:

- Instantaneous thermal adjustment.
- Process times faster than other infrared technologies.
- Reduces dwell time, eliminating the heat sink problems experienced with convection ovens.
- Most effective on substrates requiring temperatures of 500ºF (260º C) and above, though capable of curing standard lower temperature applications at a high rate of speed.

The Heater Specifications:

Heater Part Number	Series	Input (kW)	Size in Inches H	L	D	Fig. No.
DQ6-2500T3(6)	PYRO	15	6	30	6	1
DQ6-2500T3(3)	PYRO	7.5	6	30	6	1
DQ3SS-2500T3(3)	SS	7.5	5	30	3	2
DQ3SS-2500T3(2)	SS	5	5	30	3	2
DQ3SS-2500T3(1)	SS	2.5	5	30	3	2
DQ3SS-1600T3(3)	SS	4.8	5	20	3	2
DQ3SS-1600T3(2)	SS	3.2	5	20	3	2
DQ3SS-1600T3(1)	SS	1.6	5	20	3	2

Note: 480V is standard; other voltages available upon request
Pyro series emitters include rear side collar for forced-air cooling.

QuikTAK Duster

Automated Final Tacking

The QuikTAK automated tacking system is custom designed to perform the efficient repeatable removal of both particulate contaminants and static charges from products that will be coated, immediately before the coating process.

The Duster System:

- Initial Blow-off
  - Engineered high velocity ionized air blow-off removes loose particulates and eliminates static charge on contaminants and product surface.
- Rotating ostrich feather duster wheel
  - Mechanically removes balance of particulate contaminants.
  - Develops a static charge due to the friction of its rotation against the surface of the product allowing the individual feather ends to hold the removed contaminants.
  - Contaminent laden feather ends further rotate and brush against a release bar.
- Vacuum Collector
  - After the feather releases the particulate, a high velocity air knife directs the contaminant into a vacuum air stream for collection.
- Final Blow-off
  - Parts receive a final blow-off with engineered high velocity ionized air knives to eliminate part static surface charge.
- Includes a user-friendly control package with all the required components for safe and efficient operation of the duster system (see page 23 for complete explanation of the many QuikCOMMAND features).

The Uses and Benefits:

- The QuikTAK system is engineered to address both the part configuration and the substrate type, and provides significant productivity increase.
- Tremendous reduction of labor requirement by successfully automating a manual step.
- Used extensively in the wood and plastic finishing industries where dust particles and static charges present serious impediments to the finishing process.
- Consistent and repeatable particulate contaminant removal immediately prior to coating application.

QuikFLASH Tunnel

Electric Pre-cure Flash

The QuikFLASH Tunnel has become a popular solution to cramped finishing and manufacturing areas by compressing the overall required flash cycle to 1/5th the typical air flash time on most wet coat finishes.

The Emitter:

- Long life, conservatively engineered finned duct heater.
- Manufactured in our Caloritech™ facility in Orillia, Ontario under an internationally recognized ISO-9001:2000 quality management system.
- Offered in a variety of kW for exacting flash heat control:
  - 15kW, 20kW, 30kW, 40kW and 60kW.
- Offered in a variety of voltages (for field wiring):
  - 240V, 380V, 480V and 600V.

The Tunnel System:

- Designed and manufactured in standard 3 ft assemblies.
- Engineered air circulation with high efficiency blowers.
- Strategically located nozzle pattern, producing air discharge capabilities up to 2200 lineal fpm, with air temperatures at approximately 125ºF; optimal ranges for an effective flash cycle.
- Designed for 90% recirculation of the heated air, allowing 10% exhaust with each cycle (via a 6-inch gravity exhaust system), for peak operating efficiency.
- Includes a user-friendly control package with all required components for safe and efficient operation of the tunnel system (see page 23 for complete explanation of the many QuikCOMMAND features).

The Uses and Benefits:

- The variety of available emitter wattages and voltages, along with standard assembly sizes, allows the QuikFLASH tunnel package to be one of the more versatile, yet affordable, in the DriQuik™ product line.
- The even heated air patterning produced through strategically located nozzles makes the QuikFLASH tunnel system popular on substrates with complex geometric part profiles.
- Significantly reduces required air flash times prior to the cure oven cycle, saving valuable floor space and conveyor time.
- Most effective in wet coat applications, particularly on porous substrates such as wood or plastic, where flash cycles are critical.

QuikCOOL Tunnel

Post Cure Forced Cool

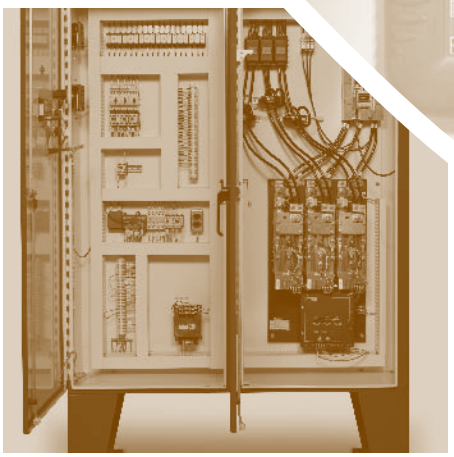
The QuikCOOL Tunnel has become a standard feature on high temperature finish lines where necessary ambient air cool down cycles, following the cure oven cycle, far exceed the available space and conveyor line time.

The Tunnel System:

- Designed and manufactured in standard 3 ft assemblies.
- Aesthetically pleasing textured polyester powder coated exterior panels stabilized with powder coated U channel support frame.
- High efficiency blowers offered in a variety of cfm ratings (sized to the specific application) and voltages (for convenient field wiring).
- Filtered air intake.
- Strategically located nozzle pattern, producing air discharge capabilities up to 2200 lineal fpm.
- Powered exhaust containment and capture, for excess heat removal, available upon request.
- Includes a user-friendly control package with all required components for safe and efficient operation of the tunnel system (see page 23 for complete explanation of the many QuikCOMMAND features.)

The Uses and Benefits:

- The standard assembly sizes allow the QuikCOOL tunnel package to be one of the more affordable, yet effective, solutions, in the DriQuik™ product line.
- The even air patterning produced through scientifically located nozzles makes the QuikCOOL tunnel system popular even on substrates with complex geometric part profiles.
- Significantly reduces required ambient air cool down times following the cure oven cycle, saving valuable floor space and conveyor time.
- The fully contained air chamber of the QuikCOOL tunnel, complete with filtered intake, eliminates area contamination and employee annoyance and safety concerns that floor fans can create.
- Sound level ratings well within OSHA standards.
- Most effective in high temperature finish applications such as powder coatings, high solids, baking enamels or other specialty coatings; on a wide range of substrates.



QuikCOMMAND
Control Panel

Custom Engineered Control Packages

The ability to precisely control every facet of production may be one of the most critical aspects of your operation, and one of the greatest advantages of choosing a QuikCOMMAND panel. From the very simple panel to state-of-the-art PLC controlled systems in multi-door enclosures, QuikCOMMAND panels can be custom-designed and built to suit your needs.

Features and Benefits:

- System evaluation & recommendations
- Custom designed per your application and specifications
- Built complete and 100% tested prior to shipment to eliminate costly on-site troubleshooting
- Reduced operating cost
- ULc listed panel shop
- Automation specialists available for consultation and start-up assistance
- Technical support

Options:

- Integrated booth and gun controls, lighting, conveyor controls
- PLC (Programmable Logic Controller)
  - PLC programming
- Operator interface display (Text or Touch Screen)
  - Operator Interface display programming
- SCR controllers with digital output display
- VFD (Variable Frequency Drives) for motor control
- Photo-eyes
- Processor-based with user-friendly touch control pad and multiple process recipes
- Automatic part identification and recipe selection
- Non-contact pyrometers for temperature verification or closed loop applications
- SCADA and network compatible.
- Automatic electronic booth airflow/pressure balancing utilizing transducers.

DriQuik™ Research & Test Center

Transform your ideas into reality

DriQuik™ is fully committed to provide the best infrared products and systems to suit your specific requirements. To do that, we offer a unique facility, which strategically blends ideas and opportunities into solutions through a large array of test equipment, featuring long, medium and short wave infrared products, along with our highly skilled professionals, who have the expertise and vision to exceed your high expectations.

Here is a sampling of our offerings. We invite you to visit our facility in Greensburg, Indiana to put these and the rest of our products to the test.

- Full scale combination QuikCAT, QuikSILVER and QuikCOIL Infrared Oven system, each an independent 10ft. assembly with motorized movable sidewalls, followed by a 6ft. QuikCOOL Tunnel, all accessed by an adjustable speed overhead monorail conveyor.
- Portable QuikKILN Pyro-series multi-configurable oven.
- Portable QuikLITE™ oven.
- Independent flatline systems consisting of the QuikKILN Pyro-series and SS-series oven, a QuikFLASH and QuikCONE system and a QuikTAK unit, each of which contains an adjustable speed belt conveyor.
- QuikCOMMAND control center including a remote touch control operator pad with multi-recipe program.
- Automated 3-stage pretreatment unit.
- Pressurized downdraft spray booth with integral QuikCAT low density curing system.
- Counter-opposed powder booths.
- Various wet and powder application equipment.
- Hand-held infrared temperature sensing guns.
- Six-channel Datapaq unit.
- Miscellaneous test equipment, including impact test, cross hatch test, assorted rub tests and mil gauges.
- Digital camera.

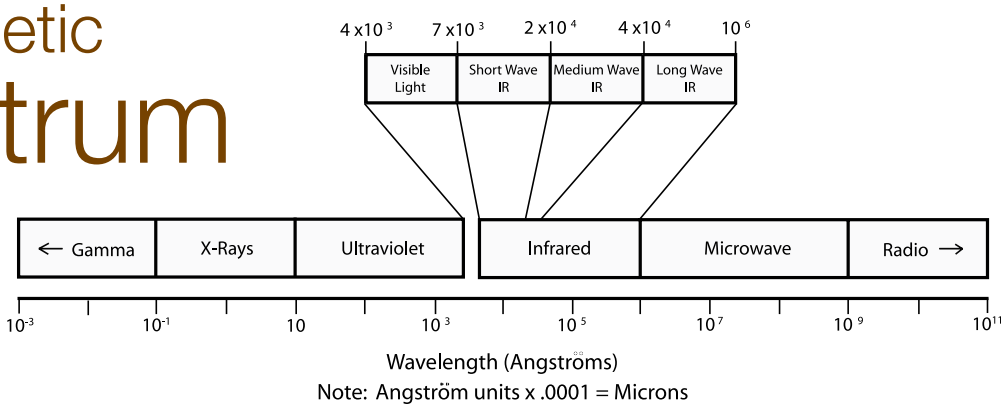
Our Research and Test Center is constantly being evaluated, upgraded and updated as we strive to stay at the forefront of the industrial curing and heating market. We take great pride in testing the full scope of the various infrared technologies to assist in determining the optimal curing solution for your specific process.

Conversion Data

1000 BTU/hr = 0.2929 kW or 292.9 W 1000 BTU = 1.054 MJ 3,412 BTU/hr = 1.0 kW	1 psi = 27.91 inches w.c. 1 psi = 6.895 kPa 1 inch w.c. = 0.247 kPa
1 standard cubic foot NAT Gas = 1000 BTU 1 standard cubic foot LPG = 2500 BTU 1 standard cubic meter NAT Gas = 37 MJ 1 standard cubic meter LPG = 88 MJ	1 pound LPG = 21,560 BTU 1 gallon (Imperial) LPG = 113,500 BTU 1 gallon (US) LPG = 94,600 BTU 1 kilogram LPG = 50.1 MJ 1 liter LPG = 26.3 MJ
4 inches w.c. = 9.9 mbar 7 inches w.c. = 17.3 mbar 11 inches w.c. = 27.2 mbar	4 inches w.c. = 0.99 kPa 7 inches w.c. = 1.73 kPa 11 inches w.c. = 2.72 kPa
1 therm = 100,000 BTU 10 therm (deca therm) = 1,000,000 BTU	ºC = (ºF -32) x (5/9) ºF = (9/5) x (ºC +32)

Single Phase (1Ø)	Kilowatt to Amperage	Three Phase (3Ø)
I = (KW x 1000)/V		I = (KW x 1000)/(V x √3)

Electromagnetic Spectrum



Note: Angström units x .0001 = Microns

DriQuik™

Request for Quote Form

Client Information:

Company Name: _____

Address: _____

City, State (Prov): _____

Country, Zip (Postal Code): _____

Contact Name: _____

Phone / Fax: _____

E-mail: _____

Proposal Type Required: (please circle or comment)

Budgetary Quote Formal Quote

Components Only Complete Oven

Other: _____

Required Date for Proposal: _____

Anticipated Shipping Date for Project: _____

Process Information: (please circle all that apply or comment)

Conveyorized Indexed Process Batch Process

Ramping Process Curing Process Evaporative Process

Preheating Process Other _____

Coating Information:

Coating cures at ambient in _____ hours

Coating can be cured at _____ ºF in _____ minutes

Wet coat (solvent base) or (waterborne)

Powder coat Other _____

If Wet coat, is it two component material? Yes / No

Manufacturer: _____ Brand name: _____

Conveyor Information:

Conveyor Type: (circle one)

Overhead monorail pull cart conveyor

Chain on edge (spindle) flat line

General Conveyor information:

Line speed ____ fpm Parts on ____" centers

Can parts rotate in oven: Yes / No

Indexed Conveyor: Index travel: _____"; Index Pause_____ seconds

Overhead Conveyor:

Top of rail: ____' -_____" above floor

Conveyor slot: _____" high x _____" wide

Chain on Edge: Height of spindle above rail: _____"

Flat Line: Width of flat line _____ "

Part Profile Information:

Part Profile: _____" wide x ____" high x ____" long
(including racking/cart)

Part General Description: _____

Part Thermal Limit _____ ºF

Substrate Information:

Gauge Metal: max gauge _____ min gauge _____

Mixed Weldments thickness: max _____ min _____

Castings - Type _____, max thickness _____

Tubular - Sidewall thickness _____

Utility Services Information:

Gas Type: Natural Gas / Propane

Electrical Power: _____V, ____ph, ____Hz

How did you hear about CCI Thermal Technologies?

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Other: Please define: _____

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To receive your QuikQuote fax this page to: (812) 663-4202 Attn: Sales

CCI Thermal Technologies INC.

Mission Statement

To be recognized as a world-wide industry leader in heating technology. We will provide our customers with the broadest industry knowledge, expertise and products in space and process heating.

To create an internal environment promoting participation, teamwork, training and development for our employees.

To deliver the highest possible quality standards and continue to build a loyal customer base through dedicated customer service.

To promote continuous improvement in all existing product lines and develop and market a wide range of quality heating products through a commitment to research and development.

Cata-Dyne™
Explosion-Proof Gas Catalytic Heaters

Ruffneck™
Heaters for the Harshest Environments

Caloritech™
Engineered Electric Heat

Norseman™
Electric Explosion-Proof Heaters

DriQuik™
Curing Solutions

For more information on CCI Thermal Technologies Inc. and our products, please visit us at:

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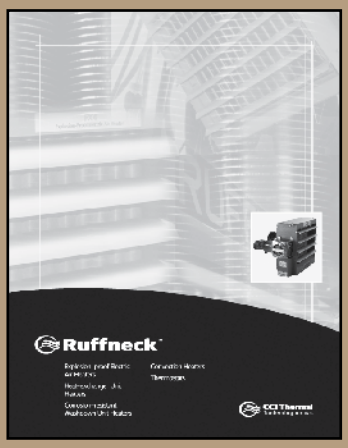
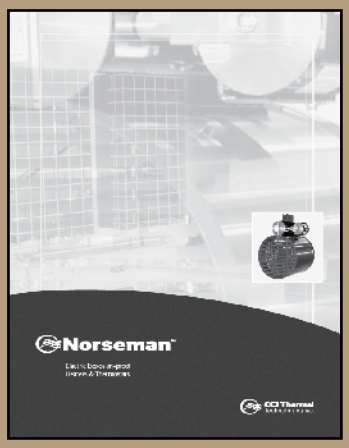


Ruffneck™
Heaters for the Harshest Environments



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