

Superior Thermal Solutions Quick Response Manufacturing Economic Electrical Assemblies World Class Components



Lancer Wearly

We've designed and manufactured thousands of proven components for a wide variety of industries, including:

Consumer Appliances, Commercial Food Service Equipment, Refrigeration, Seating, Electronic Controls, Lawn and Garden, Commercial and Industrial Equipment, Medical and Laboratory Devices.

Our broad-based manufacturing experience provides innovative solutions to your Heating, Wiring, and Electrical Assembly needs. Our solutions will make your products practical and profitable.

# HEATING ELEMENTS THAT EXCEED YOUR STANDARDS

Custom designed to your specifications, all heating elements are fabricated in accordance with the requirements of UL and CUL Recognized Components & Fully Tested per UL 499.



## Fiberglass Insulated Flexible Heating Elements

Flexible fiberglass heating elements (often referred to as "rope" heaters because of their flexibility and appearance) are fabricated by helically wrapping resistance wire around a core material. This cordage is then covered with one or two walls of braided fiberglass yarn.

"Rope" heating elements are ideal for counter-top appliances such as coffee brewers, slow cookers, buffet warmers, and many industrial and commercial applications where long life, low cost flexible heating is required.

#### Flexible Heating Element Selection\*

| Insulation Type                     | Length       | Max. Watts/Foot | Max. lemp.    |
|-------------------------------------|--------------|-----------------|---------------|
| Fiberglass                          | 2" to 100'+  | 144             | 932°F (500°C) |
| <b>PVC</b> (moisture resistant)     | 12" to 100'+ | 2.4             | 221°F (105°C) |
| <b>Silcone</b> (moisture resistant) | 12" to 100'+ | 8.4             | 392°F (200°C) |
| Premium Silicone                    | 12" to 100'+ | 10.8            | 482°F (250°C) |
|                                     |              |                 |               |

\*These are typical values: consult factory for specific applications



## Moisture-Resistant Flexible Heating Elements

If you require moisture resistance in low wattage flexible heaters, JenTer PVC or Silicone insulated heaters can provide the solution. The core of these heaters resembles our high temperature elements, but PVC or Silicone insulation offers both moisture and heat resistance.

Heater length, watt density, insulation color, termination and voltage requirements can be controlled to meet your requirements.





## Foil Laminated Heating Elements

(UL Recognized Component & Fully Tested Per UL 499)

In temperature ranges below 600°F (316°C), foil laminated flexible heating elements can eliminate expensive and complicated bracket mounting while providing a reliable heat source. These elements can be constructed as strip or blanket heaters.

Foil laminated heaters typically contain a flexible fiberglass heating element laminated between two sheets of foil coated with a liner-backed silicone or acrylic (302°F (150°C) max. temperature) adhesive. This adhesive is very aggressive and provides a strong initial bond, as well as a good ultimate bond. Because of the aluminum foil, these heaters provide very even and efficient heating.

Foil laminated heating elements are ideal and cost effective for food warmers, copy machines, medical warming devices and all types of relatively dry applications. They can be designed in a dual wattage or voltage configuration.

Moisture resistant Silicone Blanket heaters are available in temperature ranges below 482°F (250°C).

## Open-Coil Heating Elements

Open-coil heating elements remain one of the most popular heating elements in use today. Whether utilizing nickel/chrome or iron based alloys, opencoil heating elements provide controllable electric heat in a variety of residential, commercial and industrial applications.

JenTer produces these heaters on ceramic or mica forms using AWG 12 to AWG 40 gauge wire. These elements typically contain one or more resistance coils, a thermostat, and a thermal fuse. The complete assemblies can also contain voltage dropping coils to provide a low voltage source for PM motors.

Compact, economical, open-coil elements are ideal for personal care appliances, small area heaters, hot air blowers and high temperature flame-less heat guns.

# LEAD WIRES & HARNESSES FOR PERFECT CONNECTIONS

JenTer has built a solid reputation as a quality wire processor meeting the needs of our commercial and industrial customers. While we deliver high volume, fully automated production, we also provide short run, custom leads and harnesses in low quantities. That makes JenTer the perfect source for production runs.

Our manufacturing capabilities include: wire cutting and stripping, terminating, harnessing, soldering, welding, splicing, stripping, heat shrinking, RF welded post insulating and all related wire operations.

## **Lead Wire Styles**

JenTer processes all types of wire from PVC, polypropylene, and silicone to mica insulated – we can meet your most demanding applications.



## <u>Wire Harnesses</u>

JenTer processes a full range of wire sizes, from 28 gauge to 2/0 battery cables. We also process coaxial cable and a variety of "hard to strip" products. In addition to manufacturing single-conductor products, we design and fabricate complete wiring harnesses. These harnesses can be manufactured with a variety of single conductor leads or multi-conductor products, including SJO & SJT cordage. JenTer provides complete fabrication, assembly, and testing of each harness to ensure efficient installation to customer products.



## **Wire Terminals**

Virtually any type of terminal can be incorporated in your wiring design. We are tooled to apply terminals from all major manufacturers including: Tyco (AMP<sup>®</sup>), Ark-Les<sup>®</sup>, ETCO<sup>®</sup>, Panduit<sup>®</sup>, Molex<sup>®</sup>, Packard<sup>®</sup>, T&B<sup>®</sup>, 3M<sup>®</sup>, and others. Our machine shop can also design and build custom tooling for your special terminal applications.

## **Assemblies**

Our electrical assembly, wire processing, and harnessing experience, enable us to supply customers with complete assemblies. Our associates are highly skilled in manufacturing & testing of a variety of custom assembled products.



# **RESPONSIVE BUSINESS PARTNER**

JenTer is widely recognized throughout the industry for its ability to resolve complex designs, manufacture intricate assemblies, and react to customer delivery requirements. JenTer produces custom heating elements, electrical assemblies, and wiring harnesses for home appliances, commercial appliances, and industrial equipment. Millions of our heaters are used in products as diverse as coffeemakers, quartz tube heaters, bag sealers, ATM machines, fuel pumps, seating, radiant heaters, blood analyzers, and food warmers. Contact us, we'll provide samples promptly and work with you to meet your requirements.

JenTer Technologies... recognized for high quality electrical assemblies and reliable customer service



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