



RESISTANCE WIRE EXPERTS, FROM DESIGN TO MANUFACTURING

As resistance wire specialists, our capabilities range from product development or co-development with customers to bulk wire production for use in your final products.

TYPICAL APPLICATIONS

- Heating pads and mats
- Insufflation units
- Medical appliances
- Medical breathing circuits
- Fluid warmers
- Incubators
- Perimeter heaters
- Coffee makers

VALUE-ADDED SERVICES

- Application, evaluation, and design
- Cold ending
- Complete assemblies
- Molded wire sets
- Multiple wattage's
- Specialized coating and winding applications

CORE MATERIALS

- Polyester
- Fiberglass
- Nomex
- Kevlar
- Glass
- Fiberglass with kevlar core

WIRE

Material	Wattage	Temperature Rating
PVC	Up to 2.5 Watts per ft. (8.2 W/m)	UL 105° C (221° F)
Silicone	Up to 10 Watts per ft. (33 W/m)	UL 150° C (302° F)
High-Temp Silicone	Up to 15 Watts per ft. (49 W/m)	UL 230° C (482° F)
Glass Rope	Up to 15 Watts per ft. (49 W/m)	UL 350° C (662° F)
Heater Wire	Resistance Low to .22 ohm/ft and High to 27000 ohms/ft	N/A

Heating is largely dependent up (1) proximity of the heating element to the surface being heated, (2) ambient temperature, (3) air movement, (4) heat sinking, and (5) insulation.



Made in the U.S.A

Alloy (16 guage to 43 gauge)

Material	Metal Composition	Resistance (Ω/circ mil ft)
Pure Copper	100% Cu	10
Alloy 30	2% Ni 98% Cu	30
Nickel	95% Ni	57
Alloy 90	11% Ni 89% Cu	90
Alloy 120 (self-limiting)	70% Ni 30% C	120
Alloy 180	22% Ni 78% Cu	180
Alloy 294	45% Ni 55% Cu	294
Stainless Steel	18% Cr 8% Cu 74% Fe	433
Nickel Chrome	80% Ni 20% Cr	650
Nickel Chrome	60% Ni 15% Cr 25% Fe	675

TESTING, CERTIFICATION, & STANDARDS

Heater wire is tested to customer specifications for electrical resistance and dielectric strength. They comply with UL, CSA and other global compliance standards, and manufactured in plants that are ISO 9001:2000 registered.

