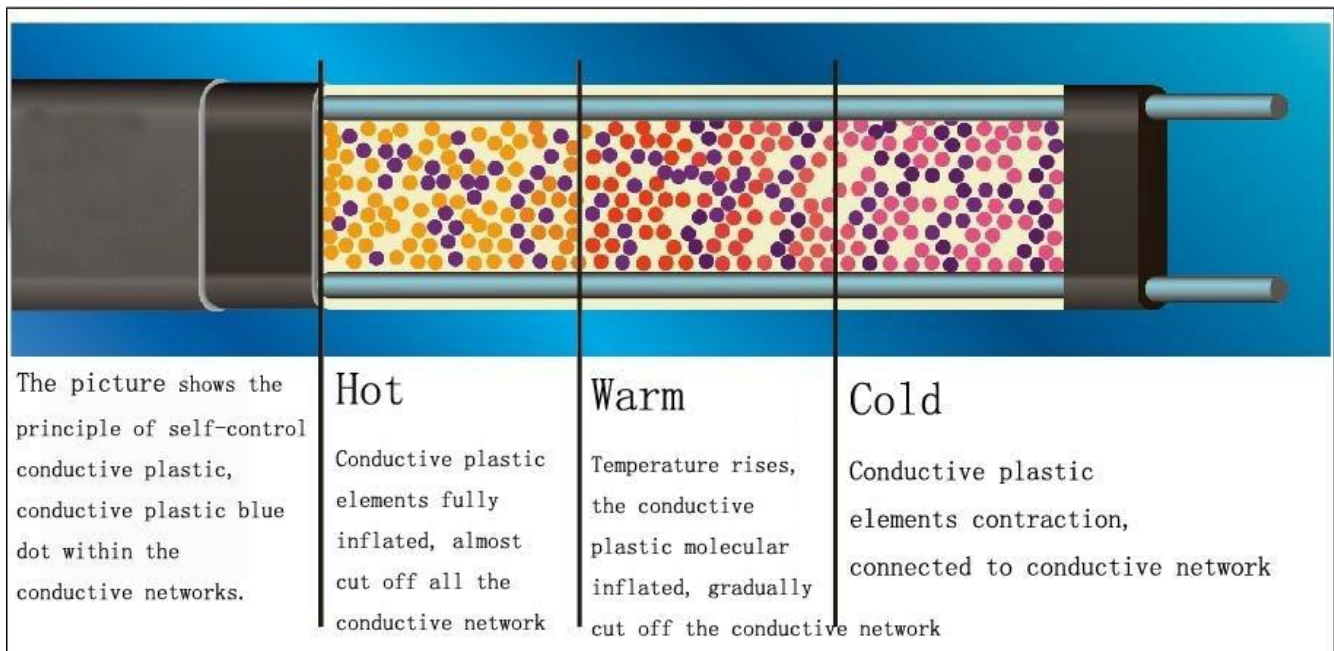


Heat tracing cable working principle?The most widely used electric heating cable is the self-limiting temperature heating cable. In the actual heating application, it can reach more than 80% utilization rate of the heating system. The self-limiting temperature heating cable is composed of a conductive polymer, two parallel metal wires and an insulating sheath. Its characteristic is that the conductive polymer has a very high positive temperature coefficient characteristic, and they are connected in parallel, can automatically adjust the output power with the temperature change of the heated system, automatically limit the heating temperature, and can be arbitrarily shortened or used in a certain range,[What are the influencing factors of uneven heating of electric heating tape?](#)



Heating principle of electric heating cable

The electric heating cable is composed of nano-conductive carbon particles and two parallel bus bars with an insulating layer. Due to this parallel structure, the Jiuzi brand electric heating cable can be cut to any length on site and connected by a two-way or three-way junction box. .

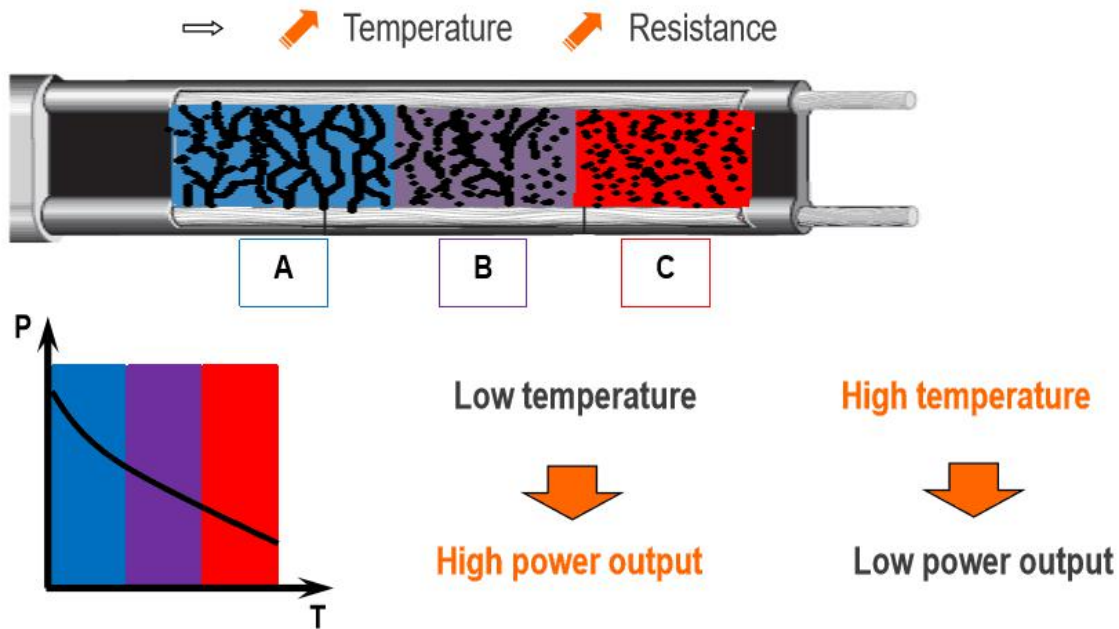
In each heating cable, the number of circuits between the bus bars changes with the influence of temperature. When the temperature around the heating cable becomes cold, the conductive plastic produces micro-molecule contraction to connect the carbon particles to form a circuit, and the current flows through these circuits. Heat the heating tape.

When the temperature rises, the conductive plastic produces micro-molecule expansion, and the carbon particles gradually separate, causing the circuit to terminate, the resistance rises, and the heating cable will automatically reduce the power output.

When the temperature becomes cold, the plastic returns to the state of micro-molecular contraction, the carbon particles are connected to form a circuit, and the heating power of the heating tape automatically rises.

The SR cable matches its power output accurately to the ambient temperature

The SR cable has a Positive Temperature Coefficient (PTC) characteristics:



The self-limiting temperature heating cable has the advantages that other heating equipment does not have. The temperature controlled by it will not be too high or too low, because the temperature is automatically adjusted.

In summary, the self-limiting temperature electric heating cable has the advantages of preventing overheating, easy to use and maintain, and energy saving. It is suitable for temperature control, heat tracing, heat preservation, and heating of pipelines, equipment and containers, especially when materials are easily decomposed, deteriorated, crystallized, and frozen by condensation. It has a wide range of uses in petroleum, chemical, electric power, metallurgy, light industry, food, refrigeration, construction, gas, agricultural and sideline product production, processing and other sectors.

