

Heating Elements

For many applications, heating elements may be made from wire or strip in Nickel-Chromium or Iron-Chromium-Aluminium alloys. These can generate furnace temperatures up to 1280°C (2336°F).

For furnace temperatures up to 1600°C (2912°F) or in lower temperatures where high power inputs are required, Silicon Carbide heating elements are often ideal.

For furnace temperatures up to 1800°C (3272°F) and in some other applications, Molybdenum Disilicide heating elements can provide the answer.

Metal alloys in Wire/Strip/Rod

For furnace temperatures up to 1250°C, nickel-chromium alloy (Nicrothal) or iron-chromium-aluminium alloys (Kanthal A-1, Kanthal AF) are often ideal and low-cost solutions. At Modutemp, we keep a wide range of these materials on hand to be able to produce these elements in-house.

Silicon Carbide

For furnace temperatures up to 1600°C, silicon carbide elements can often provide rapid heating with very long service life. To obtain the best performance from SiC elements, the power supply must be properly designed for the application. Some means of power adjustment is usually required to cater for the resistance changes that will occur with this type of element.

Molybdenum Disilicide

For furnace temperatures reaching up to 1700 or 1800°C, molybdenum disilicide elements provide a reliable heat source. Processes at much lower temperatures may find them advantageous in some circumstances.

For a new installation, it is vital that the entire element array and its power supply be carefully designed and matched, to ensure the required performance is achieved.

