

Advantages of doped tungsten wires

W31: W31 wires are standard doped tungsten wires with excellent non-sagging properties.

W91: W91 wires are non-sagging wires developed for higher-temperature use than W31 wires. They are suitable for halogen lamp filaments. Doped tungsten wire has higher non-sagging properties by maintaining inter-granular strength and suppressing void production at elevated temperatures by reducing the impurities content using our own technology.

Adding tungsten rhenium can significantly improve the ductility (plastic) and recrystallization temperature. Some tungsten rhenium alloy after appropriate annealing treatment, the extension rate of 5%, much higher than pure tungsten higher. Adding Tungsten thorium oxide (ThO₂) the formation of tungsten thorium alloy with high thermal electron emission ability, can be used as hot cathode tube, welding electrodes, but the long-term radioactive ThO₂ not been resolved.