

Temperature control during operation of a magnesium electrolytic cell in a molten still electrolysis process for producing magnesium, and especially an automatic temperature control device for multiple magnesium electrolytic cells. A thermocouple, a transformer control cabinet, and a high pressure centrifugal ventilator are respectively connected to a programmable controller, wherein the programmable controller is further connected to a computer, to form the automatic temperature control device for the magnesium electrolytic cell. The automatic temperature control device for the magnesium electrolytic cell is employed, to achieve the purpose of automatically controlling the temperatures of multiple magnesium electrolytic cells, so as to improve the temperature control precision of the magnesium electrolytic cells, thereby increasing the current efficiency and decreasing the power consumption per unit of metal magnesium. The computer can display the temperatures of all of the magnesium electrolytic cells on the same panel, to as to realize the centralized monitoring of the temperatures of all of the magnesium electrolytic cells. Moreover, the device has an AC heating function, so that when a DC power supply fails, the electrolyte is not solidified, thereby avoiding loss.