

ABSTRACT

A water-cooling device and a single crystal furnace are provided. The water-cooling device is applied within the single crystal furnace and comprises a water-cooling jacket; wherein along an axial direction of the water-cooling jacket, the water-cooling jacket comprises a first end and a second end opposite to each other; when the water-cooling jacket is arranged in the single crystal furnace, the second end is arranged adjacent to a crucible in the single crystal furnace; along a direction from the first end to the second end, the water-cooling jacket comprises a first portion and a second portion, wherein the first portion comprises cooling zones and non-cooling zones arranged at intervals.

(Figure 1)