Abstract

The present disclosure provides testing method for morphology and position of solidification front in casting process of aluminum alloy. The testing method includes: performing preheating treatment on a grain refiner to obtain a preheated grain refiner; and at a moment A of the casting process, mixing the preheated grain refiner with an aluminum alloy melt flowing through a flow channel, and continuously injecting a mixture into a casting mold for solidification and forming to obtain an aluminum alloy ingot. According to the testing method, which may avoid human errors caused by measuring the depth of the solidification front through a conventional insertion method, the morphology and the position of the solidification front in the present disclosure are displayed more intuitively, and the accuracy of measuring results is significantly improved, which helps to improve the quality of the aluminum alloy ingot.