Title of the invention: VORTEX CHAMBER BODY FOR METAL MELTING FURNACE AND METAL MELTING FURNACE USING SAME

Abstract:
[Problem] To provide a vortex chamber body for a metal melting furnace that is compact requires little installation space is inexpensive and is easily maintained. [Solution] The present invention is equipped with: a furnace main body having a containment space in which molten metal is contained; and a vortex chamber body having a vortex chamber that connects with the containment space of the furnace main body. The vortex chamber body is equipped with a divider plate erected as a vertically removable weir in the vortex chamber. The divider plate is arranged such that on the side of the vortex chamber connecting with the containment space the lengthwise direction of the divider plate matches the direction of the connection. The divider plate divides the connecting side of the vortex chamber forming a first vortex chamber opening that connects with both the containment space and the vortex chamber and a second vortex chamber opening that connects with both the containment space and the vortex chamber with these vortex chamber openings being located on both sides of the divider plate. A gap that enables the molten metal to rotate is formed between the tip portion of the divider plate in the lengthwise direction on the inside of the vortex chamber and the inner wall of the vortex chamber body opposing the tip portion.