

ABSTRACT

Provided is a roasting method capable of reducing both C and S components in minerals down to 0.5 % or less, respectively, and securing a yield ratio of 90% or more for the Mo component. In a rotary kiln 7, a V, Mo and Ni containing material containing C and S components is subjected to oxidizing roasting to remove the C and S components from the material before reducing the material by means of a reducing agent in order to recover valuable metals composed of V, Mo and Ni. The rotary kiln is equipped with a burner 11 disposed on a material charge side 8a of the roasting furnace 8 to which the material is charged. In the roasting furnace, a direction along which the material moves and a flow of oxygen-containing gas introduced into the roasting furnace 8 are set to be parallel with each other.