

ABSTRACT

Alloys of the Pt-Cr-V were studied in the as-cast and heat treated conditions using scanning electron microscopy with energy dispersive x-ray spectroscopy and x-ray diffraction. The solidification projection and isothermal section at 1000 °C were derived. A liquidus surface projection of the Pt-Cr-V was deduced using the overall compositions, primary phases and the solidification sequences, and the invariant reactions were derived. There were two ternary phases and one of them was the primary phase in two alloys. The liquidus surface comprised mainly (Pt) and (V,Cr) solid solutions.