This Sheet Has Been Replaced



Abstract

TARGET FOR MAGNETRON CATHODE SPUTTERING SYSTEM CONSISTING OF A COBALT-BASE ALLOY

A target for magnetron cathode sputtering systems consists of a cobalt-base alloy which contains further elements so that intermetallic phases may be observed on the basis of the phase diagram in the equilibrium state at the operating temperature of the target. The corn boundaries, fines boundaries or twin grain boundaries or slip bands of the cobalt mixed crystal forming the matrix are decorated with the elements forming the intermetallic phases, wherein the X-ray diffraction patterns produced by the target exhibit reflections of an intermetallic phase which is absent in the main as cast and forms only during a heat treatment in the temperature range below the solidus temperature of the alloy due to a solids reaction.