

Abstract

ALLOY MEMBER, PROCESS FOR PRODUCING SAID ALLOY MEMBER, AND PRODUCT INCLUDING SAID ALLOY MEMBER

Provided are: an alloy member that is excellent in homogeneity of both the alloy composition and microstructure and excellent in shape controllability and includes a high entropy alloy having high mechanical properties and high corrosion resistance, a process for producing the same, and a product including the alloy member.

In the present invention, the alloy member having a chemical composition comprising elements of Co, Cr, Fe, Ni, and Ti each in an amount within a range of 5 atomic% or more and 35 atomic% or less and Mo in an amount within a range of more than 0 atomic% and 8 atomic% or less, the remainder consisting of unavoidable impurities, wherein ultrafine grains having an average grain diameter of 100 nm or less are dispersed and precipitated in a parent phase crystal.

Figure 4B