~~ALLOY MEMBER~~ PRODUCTION METHOD OF ALLOY MEMBER, ALLOY MEMBER, AND PRODUCT USING ALLOY MEMBER

ABSTRACT

~~A production method for an alloy member having mainly high hardness and high resistance to corrosion and produced by an additive manufacturing method, the alloy member, and a product using the alloy member are provided. The production method for an alloy member includes: an additive manufacturing step of forming a shaped member through an additive manufacturing method using an alloy powder containing elements Co, Cr, Fe, Ni, and Ti each in a range of 5 atom% to 35 atom% and containing Mo in a range exceeding 0 atom% and 8 atom% or less, the remainder being unavoidable impurities; and a heat treatment step of holding the shaped member in a temperature range higher than 500°C and lower than 900°C directly after the additive manufacturing step without undergoing a step of holding the shaped member in a temperature range of 1080°C to 1180°C.~~ A production method for an alloy member having mainly high hardness and high resistance to corrosion and produced by an additive manufacturing method, the alloy member, and a product using the alloy member are provided. The production method of an alloy member includes: an additive manufacturing step of forming a shaped member through an additive manufacturing method using an alloy powder containing elements Co, Cr, Fe, Ni, and Ti each in a range of 5 atom% to 35 atom% and containing Mo in a range exceeding 0 atom% and 8 atom% or less, the remainder being unavoidable impurities; and a heat treatment step of holding the shaped member in a temperature range higher than 500°C and lower than 900°C

directly after the additive manufacturing step without undergoing a step of holding the shaped member in a temperature range of 1080°C to 1180°C.

FIG. 1