NI-BASED CORROSION RESISTANT ALLOY POWDER FOR ADDITIVE MANUFACTURING AND MANUFACTURING METHOD OF ADDITIVE MANUFACTURING PRODUCT USING SAID POWDER

[ABSTRACT]

The invention addresses the problem of providing an Ni-based corrosion resistant alloy powder that is suitable for additive manufacturing, and a manufacturing method for an additive manufacturing product using the powder, the product having excellent corrosion-resistance and few defects. The invention consists of an Ni-based alloy powder having a component composition, in percentages by mass, of 14.5-23.9% Cr, 12.0-23.0% Mo, 0.01-7.00% Fe, 0.001-2.500% Co, 0.010% or less Mg, 0.040% or less N, 0.001-0.50% Mn, 0.001-0.200% Si, more than 0-0.50% Al, 0.001-0.500% Ti, 0.250% or less Cu, 0.001-0.300% V, 0.0001-0.0050% B, 0.0001-0.0200% Zr, and 0.0010-0.0300% O, the remainder being Ni, and contained as inevitable impurities, less than 0.05% C, less than 0.01% S, and less than 0.01% P. The angle of repose of the Ni-based alloy powder is 48 degrees or less.

FIG. 1