

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

5

[ABSTRACT]

To provide a Ni-based corrosion resistant alloy powder suitable for additive manufacturing and a manufacturing method using this powder for manufacturing an additive manufacturing product that has excellent corrosion resistance and few defects. This Ni-based corrosion resistant alloy powder for additive manufacturing has a component composition which contains, in mass %, Cr: 14.5-24.5%, Mo: 12.0-23.0%, Fe: 0.01-7.00%, Co: 0.001-2.500%, Mg: 0.010% or less, N: 0.040% or less, Mn: 0.001-0.50%, Si: 0.001-0.200%, Al: greater than 0-0.50%, Ti: 0.001-0.500%, Cu: 0.250% or less, V: 0.001-0.300%, B: 0.0001-0.0050%, Zr: 0.0001-0.0200% and O: 0.0010-0.0300%, the remainder being Ni and unavoidable impurities; the C, S and P contained as the aforementioned unavoidable impurities include less than 0.05% of C, less than 0.01% of S and less than 0.01% of P, wherein the powder has a particle distribution in which d10 is 15-100 μm , d50 is 30-250 μm and d90 is 50-480 μm .

20 FIG. 1