[CLAIMS]

[Claim 1]

A Ni-based corrosion resistant alloy powder for additive manufacturing, composed of a powder of a Ni-based alloy having a component composition including,

in mass%,

Cr: 14.5 to 23.9%,

Mo: 12.0 to 23.0%,

Fe: 0.01 to 7.00%,

Co: 0.001 to 2.500%,

Mg: 0.010% or less,

N: 0.040% or less,

Mn: 0.001 to 0.50%,

Si: 0.001 to 0.200%,

Al: more than 0 and 0.50% or less,

Ti: 0.001 to 0.500%,

Cu: 0.250% or less,

V: 0.001 to 0.300%,

B: 0.0001 to 0.0050%,

Zr: 0.0001 to 0.0200%, and

O: 0.0010 to 0.0300%,

with the remainder being Ni and unavoidable impurities,

wherein C, S and P are contained as the unavoidable impurities (C: less than 0.05%, S: less than 0.01% and P: less than 0.01%), ~~and~~

wherein a repose angle of the Ni-based alloy powder is 48 degrees or less.

wherein, in the Ni-based alloy powder, in a cumulative distribution curve showing the relationship between a particle size and a cumulative volume from a small particle size side obtained by a laser diffraction method,

a particle size d10 corresponding to a cumulative frequency of 10 volume% of the powder is 7 μm or more and 35 μm or less,

a particle size d50 corresponding to a cumulative frequency of 50 volume% of the powder is 10 μm or more and 60 μm or less,

a particle size d90 corresponding to a cumulative frequency of 90 volume% of the powder is 20 μm or more and 98 μm or less, and

wherein, in the cumulative distribution curve, the uniformity represented by (d90-d10)/d50 is 1.5 or less.

~~[Claim 2]~~

~~The Ni-based corrosion resistant alloy powder for additive manufacturing according to claim 1,~~

~~wherein, in the Ni-based alloy powder, in a cumulative distribution curve showing the relationship between a particle size and a cumulative volume from a small particle size side obtained by a laser diffraction method,~~

~~a particle size d10 corresponding to a cumulative frequency of 10 volume% of the powder is 7 μm or more and 35 μm or less,~~

~~a particle size d50 corresponding to a cumulative frequency of 50 volume% of the powder is 10 μm or more and 60 μm or less, and~~

~~a particle size d90 corresponding to a cumulative frequency of 90 volume% of the powder is 20 μm or more and 98 μm or less.~~

~~[Claim 3]~~

~~The Ni-based corrosion resistant alloy powder for additive manufacturing according to claim 2,~~

~~wherein, in the cumulative distribution curve, the uniformity represented by (d90-d10)/d50 is 1.5 or less.~~

[Claim 2~~4~~]

The Ni-based corrosion resistant alloy powder for additive manufacturing according to ~~any one of claims 1 to 3~~claim 1,

wherein the component composition of the Ni-based alloy further includes Ta: 2.5% or less.

[Claim 3~~5~~]

The Ni-based corrosion resistant alloy powder for additive manufacturing according to claim 1~~any one of claims 1 to 3~~,

wherein the component composition of the Ni-based alloy further includes W: 5.0% or less.

[Claim 4~~6~~]

A method of manufacturing an additive manufacturing product, comprising

performing additive manufacturing using the Ni-based corrosion resistant alloy powder for additive manufacturing according to any one of claims 1 to 3~~5~~ as a raw material powder.

[Claim 5~~7~~]

The method of manufacturing an additive manufacturing product according to claim 4~~6~~,

wherein the additive manufacturing product is a member for semiconductor manufacturing device.

[Claim 6~~8~~]

The method of manufacturing an additive manufacturing product according to claim 4~~6~~ or 5~~7~~,

wherein the additive manufacturing is a powder bed fusion method.