CLAIM

[CLAIM 1] A method of surface-treating a metal component, comprising:

a polishing step polishing a surface of a metal component formed into a given shape by chemical polishing or electrolytic polishing; and

a heat treat pseudo-plating step forming a pseudo-plated layer on the surface through a heat treatment conducted by heating the metal component at a solution treatment temperature or above in a reducing atmosphere after the polishing step.

[CLAIM 2] The method of claim 1, wherein the polishing step scrapes the surface of the metal component by 0.5 micrometer or more.

[CLAIM 3] The method of claim 1 or 2, wherein the heat treat pseudo-plating step forms the pseudo-plated layer through a solution treatment conducted by heating at 850 degrees C or above in the reducing atmosphere.

[CLAIM 4] The method of any one of claims 1 to 3, further comprising:

a preprocessing step preprocessing the metal component by barrel polishing before the polishing step.

[CLAIM 5] The method of any one of claims 1 to 4, wherein the metal component is a component made of stainless steel to be used for a disk drive.

CLAIMS

[CLAIM 1]

A method of surface-treating a metal component, comprising:

a polishing step polishing a surface of a metal component formed through press working into a given shape and a fracture face at a punched portion by chemical polishing or electrolytic polishing; and

a heat treat pseudo-plating step forming a pseudo-plated layer on the surface through a heat treatment conducted by heating the metal component at a solution treatment temperature in a reducing atmosphere after the polishing step, wherein

the polishing step removes irregularities or scratches at a micro level on the surface of the metal component and increases a smoothness of the fracture face at the punched portion, and

the heat treat pseudo-plating step after the polishing step reduces oxides on the surface of the metal component and promotes a smoothness of the surface due to a diffusion phenomenon, thereby to form the pseudo-plated layer whose surface having a smoothness that is equivalent to that of a plated surface, having no dusts and making contaminants spattering from an outside hard to adhere thereto constitutes the surface of the metal component.

[CLAIM 2]

The method of claim 1, wherein the polishing step scrapes the surface of the metal component by 0.5 micrometer or more.

[CLAIM 3]

The method of claim 1 or 2, wherein the heat treat pseudo-plating step forms the pseudo-plated layer through a solution treatment conducted by heating at 850 degrees C or above in the reducing atmosphere.

[CLAIM 4]

The method of any one of claims 1 to 3, further comprising:

a preprocessing step preprocessing the metal component by barrel polishing before the polishing step.

[CLAIM 5]

The method of any one of claims 1 to 4, wherein the metal component is a component made of stainless steel to be used for a disk drive.