CLAIMS

1. A doughnut-shaped magnetic-disk glass substrate comprising a pair of main surfaces, a side wall surface, and a chamfered surface between the main surfaces and the side wall surface,

wherein regarding surface properties of at least one of the side wall surface and the chamfered surface, an arithmetic average roughness (Ra) is 0.015 μm or less, and a bearing factor of a roughness cross-sectional area is 95% or more when a roughness percentage is 60% in a bearing curve of a roughness cross-sectional area.

2. The magnetic-disk glass substrate according to claim 1,

wherein regarding surface properties of at least one of the side wall surface and the chamfered surface, an amount of change in the roughness percentage is 25% or less when the bearing factor of the roughness cross-sectional area increases from 20% to 80% in the bearing curve of the roughness cross-sectional area.

3. The magnetic-disk glass substrate according to claim 1 or 2,

wherein regarding surface properties of at least one of the side wall surface and the chamfered surface, a maximum height (Rz) is 0.15 μm or less.

4. The magnetic-disk glass substrate according to any one of claims 1 to 3,

wherein the arithmetic average roughness (Ra) and/or the maximum height (Rz) and the bearing curve of a roughness cross-sectional area are measured in a region having a predetermined size on the side wall surface and/or the chamfered surface.

5. The magnetic-disk glass substrate according to any one of claims 1 to 4,

wherein at least one of the side wall surface and the chamfered surface is on the outer circumferential side of the glass substrate.

6. The magnetic-disk glass substrate according to claim 5,

wherein the surface on the outer circumferential side of the glass substrate is the side wall surface.

7. A magnetic disk in which at least a magnetic recording layer is formed on the surface of the magnetic-disk glass substrate according to any one of claims 1 to 6.

8. A method for manufacturing a magnetic-disk glass substrate comprising polishing processing in which a polishing liquid containing polishing abrasive particles is used to perform main surface polishing on a doughnut-shaped glass substrate including a pair of main surfaces, a side wall surface, and a chamfered surface between the main surfaces and the side wall surfaces,

wherein regarding surface properties of at least one of the side wall surface and the chamfered surface of the glass substrate, an arithmetic average roughness (Ra) is 0.015 μm or less, and a bearing factor of a roughness cross-sectional area is 95% or more when a roughness percentage is 60% in a bearing curve of a roughness cross-sectional area.

CLAIMS

1. A doughnut-shaped magnetic-disk glass substrate comprising a pair of main surfaces, a side wall surface, and a chamfered surface between the main surfaces and the side wall surface,

wherein regarding surface properties of at least one of the side wall surface and the chamfered surface, an arithmetic average roughness (Ra) is 0.015 μm or less, and a bearing factor of a roughness cross-sectional area is 95% or more when a roughness percentage is 60% in a bearing curve of a roughness cross-sectional area.

2. The magnetic-disk glass substrate according to claim 1,

wherein regarding surface properties of at least one of the side wall surface and the chamfered surface, an amount of change in the roughness percentage is 25% or less when the bearing factor of the roughness cross-sectional area increases from 20% to 80% in the bearing curve of the roughness cross-sectional area.

3. The magnetic-disk glass substrate according to claim 1 or 2,

wherein regarding surface properties of at least one of the side wall surface and the chamfered surface, a maximum height (Rz) is 0.15 μm or less.

4. The magnetic-disk glass substrate according to any one of claims 1 to 3,

wherein the arithmetic average roughness (Ra) and/or the maximum height (Rz) and the bearing curve of a roughness cross-sectional area are measured in a region having a predetermined size on the side wall surface and/or the chamfered surface.

5. The magnetic-disk glass substrate according to any one of claims 1 to 4,

wherein at least one of the side wall surface and the chamfered surface is on the outer circumferential side of the glass substrate.

6. The magnetic-disk glass substrate according to claim 5,

wherein the surface on the outer circumferential side of the glass substrate is the side wall surface.

7. A magnetic disk in which at least a magnetic recording layer is formed on the surface of the magnetic-disk glass substrate according to any one of claims 1 to 6.