

ABSTRACT

The present invention provides a method for producing a glass substrate for a magnetic disk in which the occurrence of micro-waviness on the glass substrate is prevented in a cooling step after a chemically strengthening step so that the glass substrate has a significantly smooth principal surface, and provides a method for producing a magnetic disk in which head crash, thermal asperity failures, and the like are prevented, the flying height of a magnetic head can be decreased, and high-density recording is enabled.

In a method for producing a glass substrate for a magnetic disk including a chemically strengthening step in which a glass substrate is immersed in a heated chemically strengthening salt solution prepared by dissolving a chemically strengthening salt under heating, and metal ions in the glass substrate are ion-exchanged with metal ions in the chemically strengthening salt, wherein the chemically strengthening step is carried out using a chemically strengthening salt solution in which the dissolved chemically strengthening salt does not solidify until the temperature decreases to a temperature that provides hardness at which the surface shape of the glass substrate is not deformed by a force applied to the glass substrate when the chemically strengthening salt having adhered onto the glass substrate solidifies.