

MANUFACTURING METHOD OF MAGNETIC HEAD SLIDER, MAGNETIC HEAD SLIDER
AND MAGNETIC DISK DEVICE

ABSTRACT

A manufacturing method of a magnetic head slider 5 is to perform milling processes for at least three times to a slider main body 50 to form a flying surface, and thereby, the milling process is performed at variety of depths more than the number of milling processes. These three times milling process composed of: for example, a first milling processes forming a first mask on the slider main body 50 and performing a milling at a first depth; a second milling process changing the first mask to a second mask and performing the milling at a second depth, after the first milling process; and a third milling process changing the second mask to a third mask and performing the milling at a third depth, after the second milling process. Namely, a cycle of the masking, the milling, and a removal of the mask is performed three cycles, and thereby, milling surfaces with at least four varieties of heights or more can be formed easily.

FIGURE 1.