ALUMINUM BRONZE ALLOY AND SLIDING MEMBER USING SAID ALLOY

Abstract

The present invention provides an aluminum bronze alloy excellent in both of the corrosion resistance (suppression of precipitation of a β phase) and the wear resistance (security of the hardness of the metal at a certain level or higher) and capable of being stably manufactured. The present invention also provides a sliding member using the aluminum bronze alloy and having the corrosion resistance, the wear resistance and the stability during manufacture. The aluminum bronze alloy of the present invention is composed of copper (Cu), aluminum (Al), nickel (Ni), iron (Fe) silicon (Si), and inevitable impurities, and has a structure composed of an α phase, a coarse Fe-Si-based intermetallic compound of 1 μm or larger, an infinitesimal κ phase different from the Fe-Si-based intermetallic compound, and a trace amount of inevitable phases.

Figure 2