

ABSTRACT

There is provided a corrosion-resistant member in which a corrosion-resistant coating is difficult to peel off from a base material even when subjected to a thermal history. A corrosion-resistant member includes: a metal base material (10); and a corrosion-resistant coating (30) formed on the surface of the base material (10). The corrosion-resistant coating (30) is a stack of a magnesium fluoride layer (31) containing magnesium fluoride and an aluminum fluoride layer (32) containing aluminum fluoride in order from the base material (10) side. The aluminum fluoride layer (32) is a stack of a first crystalline layer (32A) containing crystalline aluminum fluoride, an amorphous layer (32B) containing amorphous aluminum fluoride, and a second crystalline layer (32C) containing crystalline aluminum fluoride in order from the magnesium fluoride layer (31) side. The first crystalline layer (32A) and the second crystalline layer (32C) are layers in which diffraction spots are observed in electron beam diffraction images obtained by electron beam irradiation and the amorphous layer (32B) is a layer in which a halo pattern is observed in an electron beam diffraction image obtained by electron beam irradiation.

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Fig.1