

METHOD FOR MANUFACTURING COMPOSITE STRUCTURE AND METHOD FOR MANUFACTURING INTEGRATED COMPOSITE STRUCTURE

ABSTRACT

Provided is a method for manufacturing a composite structure which can easily form a complicated shape and can manufacture a composite structure being excellent in lightness and mechanical properties without requiring much cost. A method for manufacturing a composite structure according to the present invention is a method for manufacturing a composite structure in which a first member and a structure material as a second member are integrated. The method includes: an arrangement step of arranging a structure precursor including a resin and reinforced fibers in a mold made of the first member; a heating step of heating the structure precursor to equal to or higher than a temperature at which a storage elastic modulus (G') of the structure precursor is less than 1.2×10^8 Pa; a shaping step of expanding the structure precursor by heating to form a structure material as a second member, and bringing the structure material into close contact with the first member to obtain a composite structure; and a cooling step of cooling the composite structure, the first member having a bending modulus of 5 GPa or more at a temperature of the heating step, the structure material as the second member including a resin, reinforced fibers and voids.

[No Suitable Figure]