

Abstract

A method for controlling a jib crane by calculating a linear fractional transformation (LTF) expression of a lower dimension model having regard to variation in load-rope length of the jib crane and performing a feedback control using gain-scheduled control which uses the calculated linear fractional transformation (LTF) expression includes steps of performing linear combination of a feedback control command for performing the feedback control with an operation command from an operation lever and changing ratio between the feedback control command and the operation command so as to prevent sway of load notwithstanding variation in the load-rope length and thereby enable the load to be moved to a target position. By this arrangement, a control can be made following the operator's operation command and positioning of the load can be made with pleasant feeling of operation while performing prevention of sway of the jib crane. Thus, a jib crane control method and device can be provided which can eliminate delay in actual movement to the operator's operation command while realizing prevention of sway of a load and vibration of a mast.