walls so that a degree of mounting can be controlled, and a degree of mounting inner blocks can be efficiently performed.

【Technical Solution】

One aspect of the present invention provides a marine floating dock mounting degree control system, including: a monitoring portion including a draft sensor disposed in a dock and measuring a bending degree of a bottom of the dock and a photographing portion disposed outside the dock and measuring a status of sidewalls of the dock; a measurement portion that is disposed in the dock and measures a status of ship-body blocks mounted in the dock in real time; a mounting degree control portion that is disposed in the dock and controls a mounting degree of the dock that varies according to an effect of the ship-body blocks mounted within the dock; and a controller that analyzes a current situation of the dock and a current situation of the mounting degree based on information measured by the monitoring portion and the measurement portion and controls the mounting degree control portion to control the mounting degree of the dock according to a result of analysis., wherein the controller

~~The controller may include~~ comprises a coordinate transformation portion that transforms the information measured by the monitoring portion and the measurement portion into one reference coordinates and an analysis portion that analyzes the current situation of the dock and the current situation of the mounting degree based on the coordinate information transformed by the coordinate transformation portion.

The measurement portion may measure a ground marking position and a support level value on the dock before the ship-body blocks are mounted within the dock, and while the ship-body blocks are mounted within the dock, the measurement portion may measure the ship-body blocks so that the ship-body blocks are arranged,

【CLAIMS】

【Claim 1】

A marine floating dock mounting degree control system comprising:

a monitoring portion comprising a draft sensor disposed in a dock and measuring a bending degree of a bottom of the dock and a photographing portion disposed outside the dock and measuring a status of sidewalls of the dock;

a measurement portion that is disposed in the dock and measures a status of ship-body blocks mounted in the dock in real time;

a mounting degree control portion that is disposed in the dock and controls a mounting degree of the dock that varies according to an effect of the ship-body blocks mounted within the dock; and

a controller that analyzes a current situation of the dock and a current situation of the mounting degree based on information measured by the monitoring portion and the measurement portion and controls the mounting degree control portion to control the mounting degree of the dock according to a result of analysis.

~~【Claim 2】~~

~~The marine floating dock mounting degree control system of claim 1,~~ wherein the controller comprises a coordinate transformation portion that transforms the information measured by the monitoring portion and the measurement portion into one reference coordinates and an analysis portion that analyzes the current situation of the dock and the current situation of the mounting degree based on the coordinate information transformed by the coordinate transformation portion.

【Claim ~~3~~2】

The marine floating dock mounting degree control system of claim 1, wherein the measurement portion measures a ground marking position and a support level value on the dock before the ship-body blocks are mounted within the dock, and

while the ship-body blocks are mounted within the dock, the measurement portion measures the ship-body blocks so that the ship-body blocks are arranged, and

after the ship-body blocks are mounted within the dock, the measurement portion measures a position where the ship-body blocks are mounted.

【Claim 43】

The marine floating dock mounting degree control system of claim 1, wherein one or more measurement portions are disposed in the dock, and

each measurement portion measures a status of the ship-body blocks mounted within the dock by using a local coordinate shape (LCS) that is based on a position of each measurement portion, and

each measurement portion measures a common point that is placed outside the dock so that the coordinate transformation portion coordinate-transforms the information of the ship-body blocks measured by the measurement portion.

【Claim 54】

The marine floating dock mounting degree control system of claim 1, wherein the photographing portion captures an image of a part of the sidewalls of the dock and captures the dock by using a global coordinate shape (GCS) that is based on inner walls of the dock, and

the draft sensor measures a bending degree of the bottom of the dock by using the GCS that is based on the inner walls of the dock.

【Claim 65】

The marine floating dock mounting degree control system of claim 21, wherein the photographing portion captures an image of a common point that is placed outside the dock so that the image captured by the photographing portion is coordinate-transformed by the coordinate transformation portion.

【Claim 76】

The marine floating dock mounting degree control system of claim 21, wherein the coordinate transformation portion transforms coordinates of the information of the dock monitored by the monitoring portion and coordinates of the information of the ship-body blocks measured by the measurement portion into one coordinate system.

【Claim 87】

The marine floating dock mounting degree control system of claim 1, wherein the controller controls the mounting degree control portion so that the information measured by the monitoring portion and the measurement portion follows a predetermined mounting degree reference value.

【Claim 98】

The marine floating dock mounting degree control system of one of claims 1 through 87, wherein the mounting degree control portion ballasting controls a bottom surface of the dock according to control of the controller.