

Fully automated Steel Plate Bending System for Ship Building IHIMU- α

Advanced Line Heating Process for Hull steel Assembly

Conventional method for Curved shell plate Line-Heating



▶ Indispensable for ship performance



▶ Available for forming hull curvature

Dependence upon worker's experience, perception and know-how.

- ▶ Heating points and conditions (Heat input)
- ▶ Heating surface and sequence
- ▶ Supporting condition of steel plate etc.

Using its cutting edge FEM structural analysis and Robot Technology, IHIMU has developed IHIMU- α , fully automated steel plate bending system which eliminates human factors.

General view of the system



Heating robot system



Completely unmanned to the finish

- ▶ Heating and water cooling of steel plate
- ▶ Plate supporting and reversing
- ▶ Measurement of processing result
- ▶ Judgment of correction necessary
- ▶ Calculation of correction plan
- ▶ Execution of correction heating

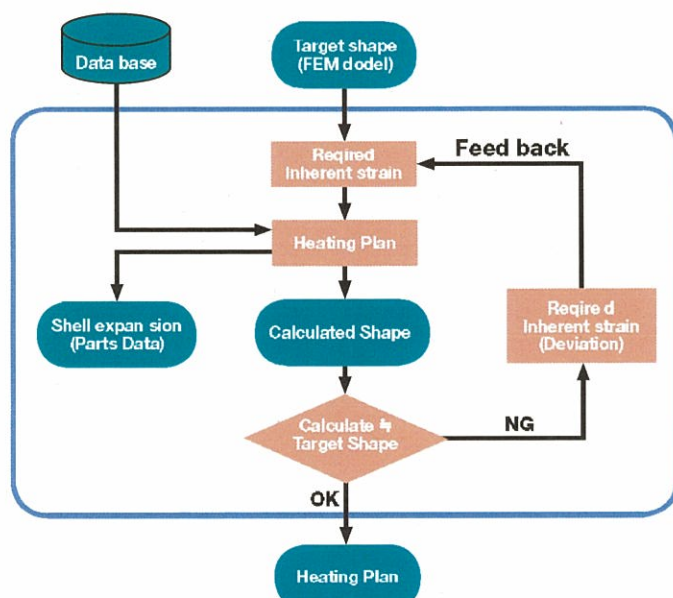
Plate reversing system



Plate supporting system



Heating plan calculation flow



Automatic operation flow

