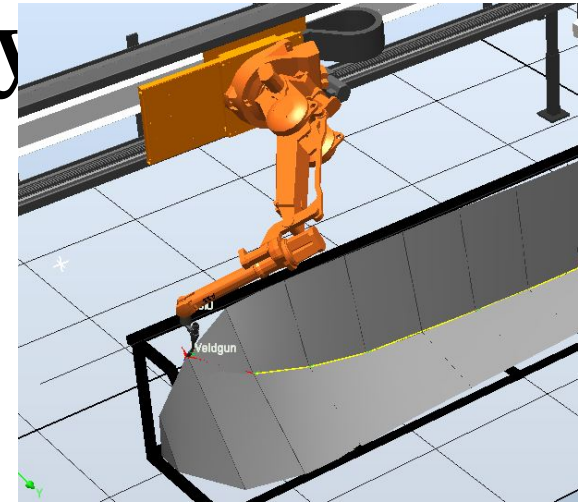


Automatic welding strategy for Aluminium Boat [1]

Company:
Tøllefsen Båt AS



Simulation made by Kristine Thevik,
Narvik University College 2011

Description:

Vessel series “Fjordfangst” are boats developed for professional usage by the North- Norwegian manufacturer Tøllefsen Båt AS. “Fjordfangst” are robust aluminium boats with a versatile group of users ranging from fisheries towards educational- and even military- institutions.

As of today, the manufacturing of “Fjordfangst” is characterised by labour intensive manual production methodologies and there is a need to investigate the possibility to introduce some more automatic manufacturing principles.

Developments:

A robot cell for automatic welding of the hull was designed and verified by simulations by virtual manufacturing software.

Container Washing System [2]

Company:
Clean Cargo AS



With permission from Clean Cargo AS

Description:

Norwegian company Clean Cargo AS plans to develop an automatic container washing system

Developments:

This project focus on the mechanical design of such system, from conceptual towards a more detailed design of the parts that do not exist in the market today. Correspondent Computer Aided Design (CAD) models, structural analysis using the finite element method as well as some dynamic simulations are further carried out to verify the proposed solutions

Robotized press-brake solution

Company:
Furstål AS



Description:

Today the production of steel type fence holders is carried out entirely by human labour. The company would like to achieve lower production cost and less human intervention through automation.

Developments:

An analysis of the existing manufacturing line and a review of “on-the-market” solutions. Further a new robotized solution is proposed.

References

- [1] Thevik Kristine (2011)
Robotised welding strategy in manufacturing of aluminium boat
Master thesis at: Høgskolen i Narvik

- [2] Francisco Javier Rodríguez Pérez (2011)
Container washing system
Master thesis at: Luleå Tekniska Universitet