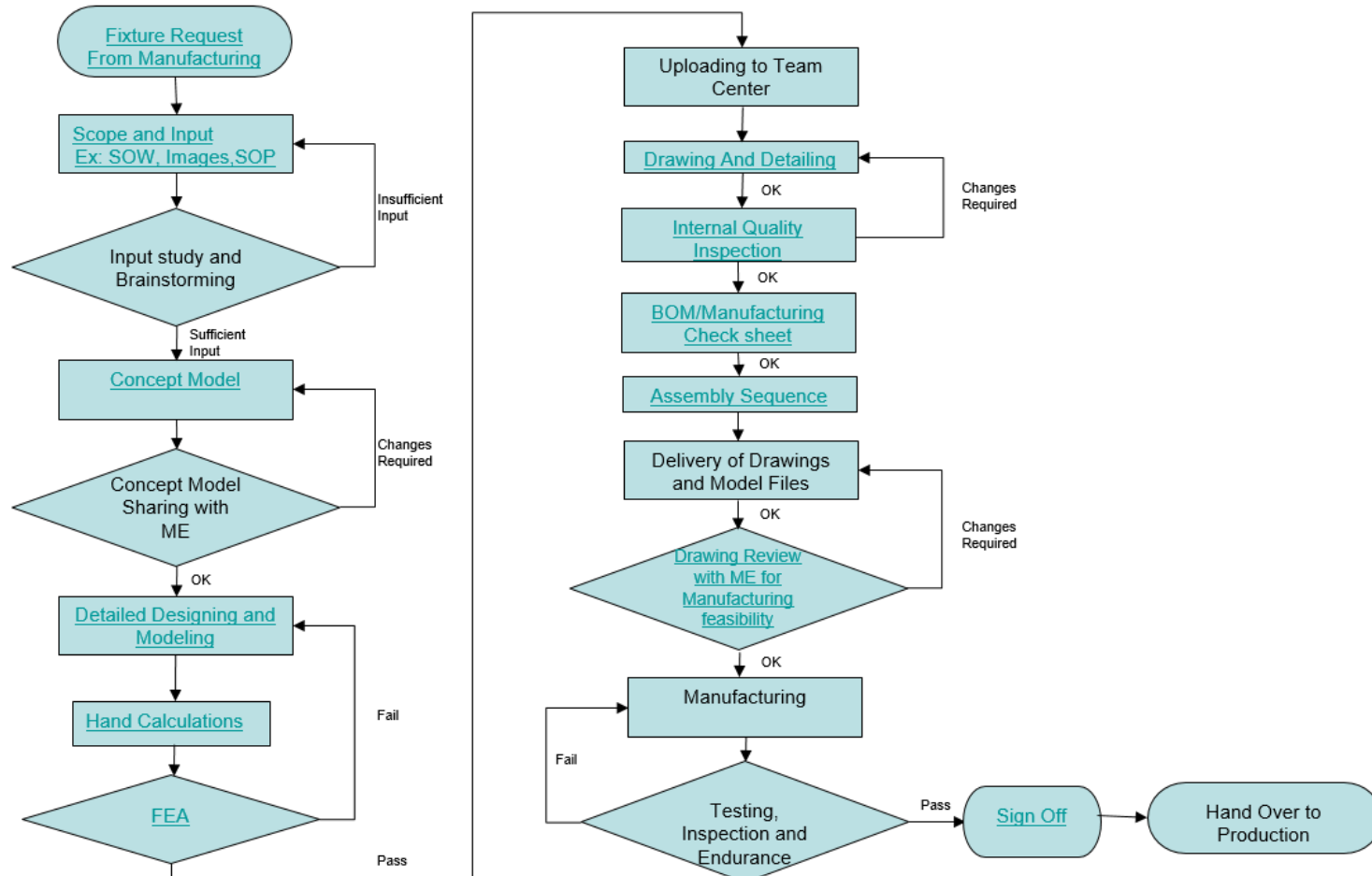


# Summary

**Project Name:** Tooling: Assembly Handling, Welding & Testing Devices

**Scope:** Conceptualization & Detail Design of Assembly Handling, Welding & Testing Devices

**Software:** UG NX, Solid works, Ansys



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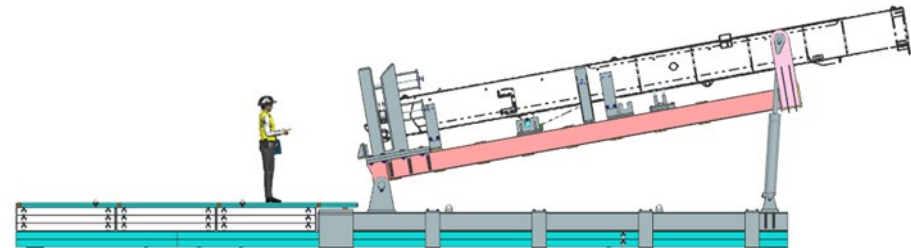
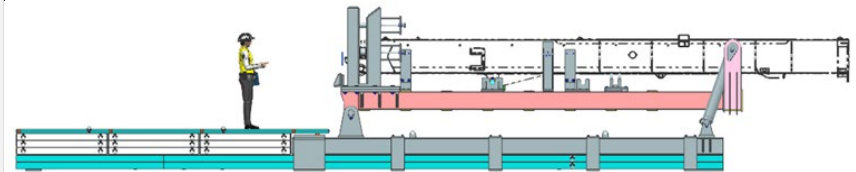
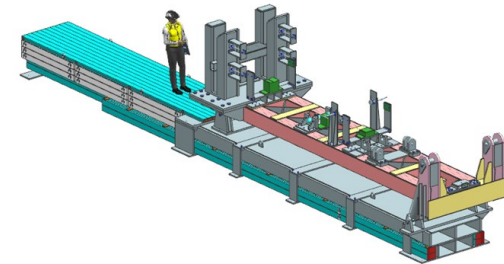
**Software:** UG NX, Solid works, Ansys

## Boom Test Fixture:

- One of the largest fixture built in OKC facility, the outline dimensions of fixture is 46'x10'x8'.
- 15 different variant booms of RT, TC and BT machine models.
- can be tested in this fixture.
- The fixture helps in avoiding the rework after assembly onto the machine.
- To test the different variants of booms in one common fixture
- To test extend and retract position of the boom

## Accomplishment:

- The fixture has been Tested and Proven to be effective in increasing the efficiency of testing the Boom.



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## **Cab Test Fixture:**

- Test Fixture is connected to the Cab at the assembly station (on ground before installation on the machine).
- Most of the Cab functions are Tested and verified before the cab is installed on the crane.

## **Accomplishment:**

- Improved Productivity by eliminating rework after cab installation on the machine.



# Summary

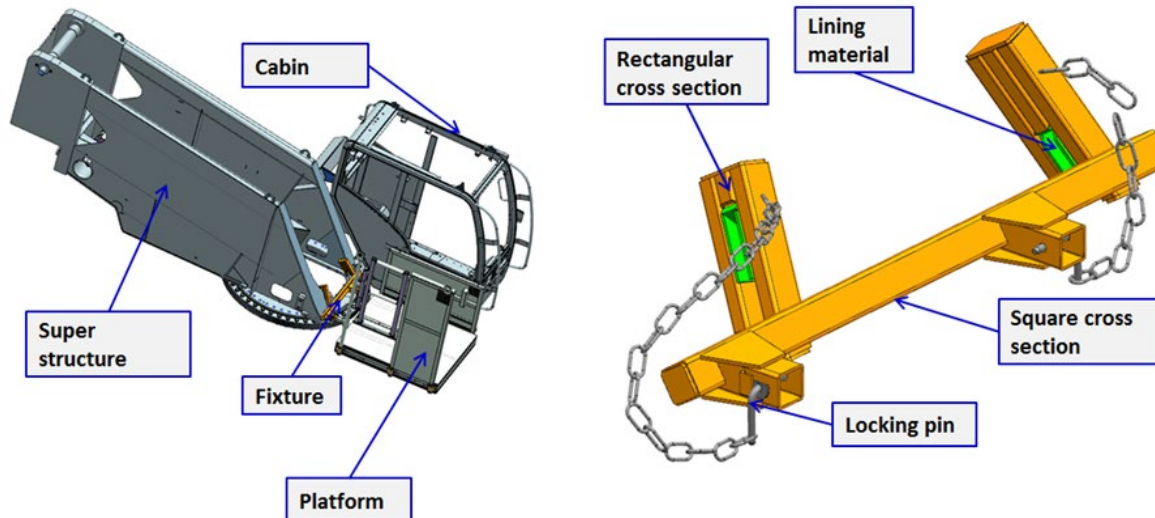
**Project Name:** Tooling: Assembly Handling, Welding & Testing Devices

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## Fixture to mount the safety device seating :

- Fixture to hold the safety seating device to assemble the Under carriage with the superstructure.
- The safety device is to be inclined at  $2^\circ$  with the ground when fixed with the fixture
- The mounting to be same as used in the existing to communize the seating unit"



# Summary

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## Boom Rotation Fixture:

- Conceptualized, designed, analyzed & fabricated a mobilizing Boom rotation fixture for different type of booms.
- Design intent was to come up with boom rotation fixture to avoid use of overhead crane & also to avoid shock load on the crane which occurs during rotation of Boom.
- This fixture has increased productivity & ease of Process.
- The fixture was developed using standard components used on aerial devices and material available in plant.



# Summary

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## Work Platforms for Truck Crane Assembly line:

- Designed & Developed Assembly line work platforms for Truck Cranes A Work Platform could be used at different Work Areas (Left Side or Right Side of the product being assembled).
- Two Persons weighing 300 lbs each are able to work safely from the work platforms
- One person is able to move the Work Platform around the shop floor
- Work Platforms comply with OSHA guidelines

