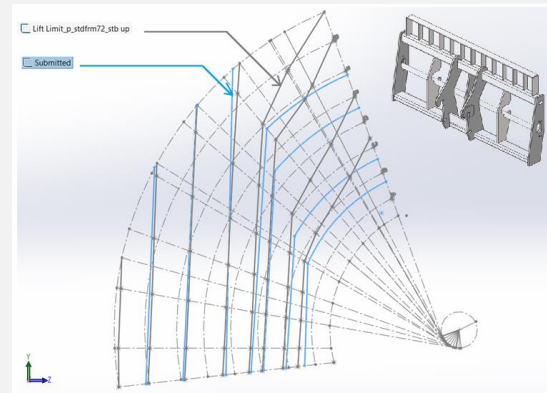
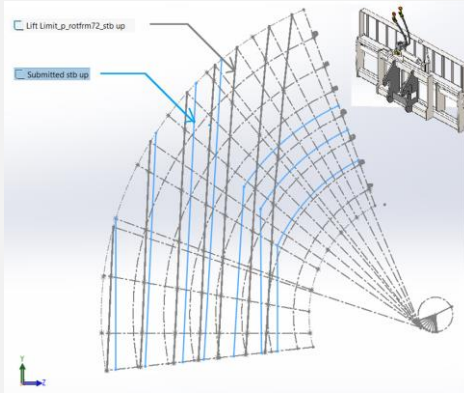


# Stability Validation and Load charts for MEWP Machine:

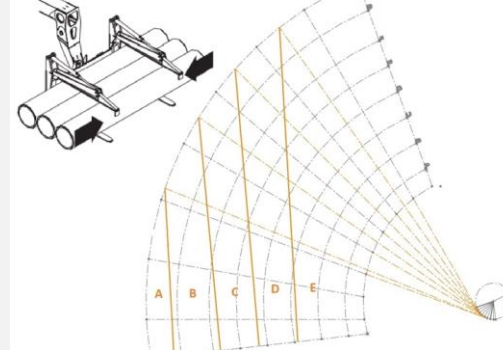
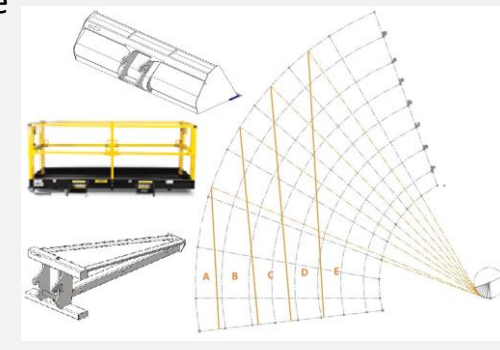
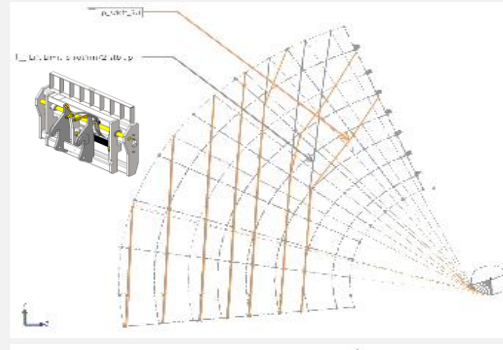
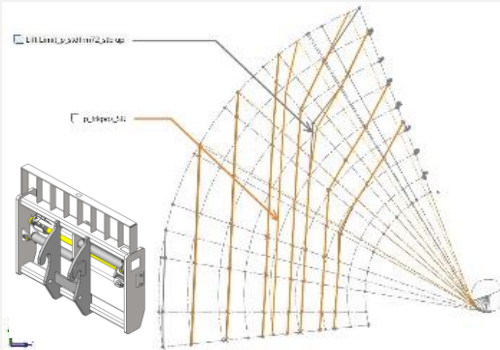
## • Standard attachments

- Standard carriage
- Rotate carriage
- Swing carriage
- Shackle



## • Uncommon attachments

- Side shift
- Truss boom
- Fork positioner
- Bucket
- Platform
- Pipe hold down device
- Lift-N-Tow



Stability and load chart creation for both Standard and Uncommon attachments.

- Analytix, Kinematic tool was used to study the stability of the machine. Model was parametrically built in Analytix with corresponding weights and dimensions of the sub-assemblies to carryout tipping analysis for different configurations.
- Stability was verified for front, back and side tip cases.
- Kinematic multi variant lift tool was used to position the machine at multiple configurations (All possible positions) and verified for overturning and restoring moments wrt. tipping line.
- From the study, if stability index  $< 1$ , Appropriate changes were made to design by positioning of weights to counter the turning moments.
- Load chart is created based on the Stability criteria.