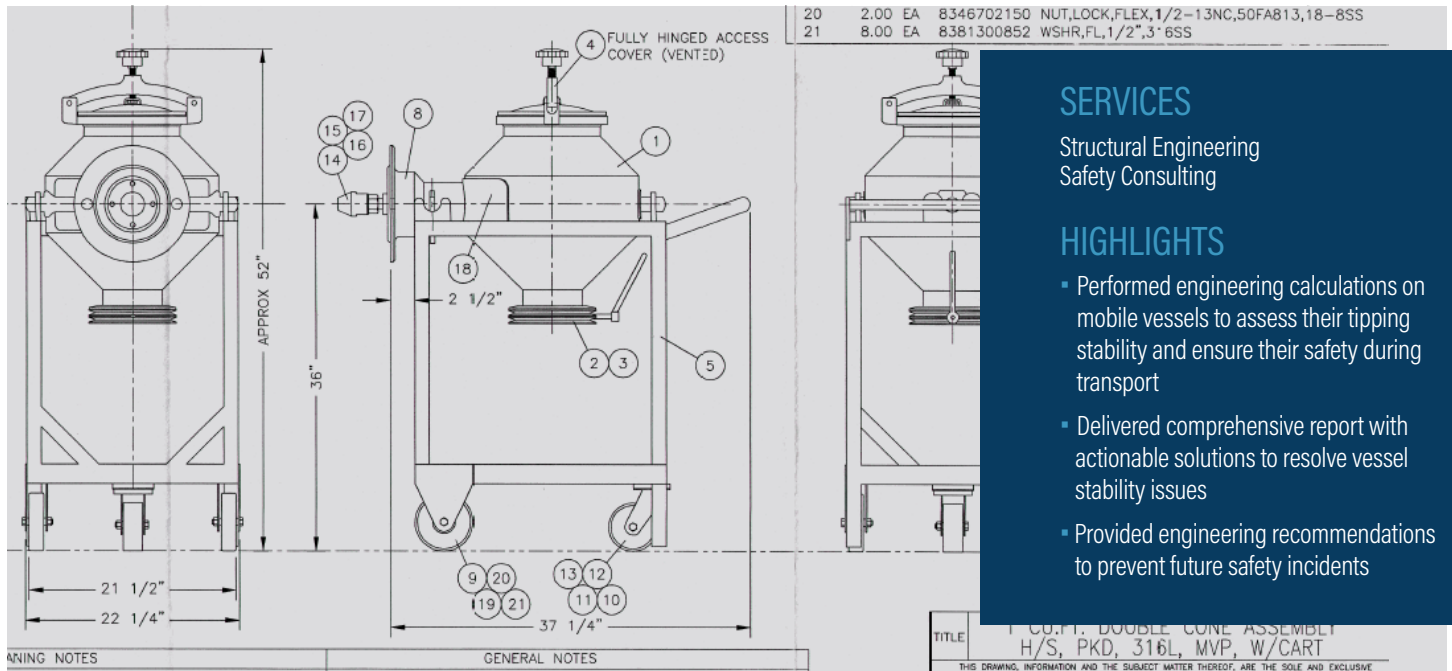


VESSEL STABILITY STUDY MINIMIZES RISK & IMPROVES SAFETY

ABOUT THE CLIENT

Our client is a global, Fortune 500 healthcare company dedicated to transforming lives through innovative pharmaceuticals, vaccines, and consumer health products. They are as committed to serving patients around the world as they are to ensuring the safety of their facilities. EAD supports our client's safety initiatives with world-class engineering solutions.



SERVICES

Structural Engineering
Safety Consulting

HIGHLIGHTS

- Performed engineering calculations on mobile vessels to assess their tipping stability and ensure their safety during transport
- Delivered comprehensive report with actionable solutions to resolve vessel stability issues
- Provided engineering recommendations to prevent future safety incidents

PROBLEM TO SOLVE

One of our client's employees was seriously injured when a mobile process vessel tipped over during overseas transport. This major safety incident instigated a corporate-wide effort to identify and evaluate other mobile vessels at risk for tipping. EAD's structural engineering team was entrusted with evaluating the tipping stability of our client's wheeled vessels to determine if they were safe to transport.

SCOPE OF WORK

The engineering team conducted a stability analysis on a sampling of vessels. The analysis defined the horizontal loads required to start or stop the vessels from rolling, calculated for the momentum and sloshing effects of stopping filled vessels, and evaluated the stability of the vessels' wheels.

RESULT

After the evaluation, EAD provided recommendations for corrective modifications to vessels found to be unsafe and unstable. We recommended the installation of a push bar in some vessels near the center of mass to reduce the likelihood that an operator might pull them and accidentally cause them to topple. In others, we recommended that vertical stops be welded to the vessel frames to prevent the vessels from overturning if they became unstable. Along with the recommendations, we also created drawings detailing the optimal dimensions and location of the proposed vessel modifications.

The stability analysis and engineering solutions helped ensure both the safety of our client's team and their vessels. EAD continues to provide our expertise in safety, engineering, and project management to develop innovative solutions that resolve critical safety issues.

