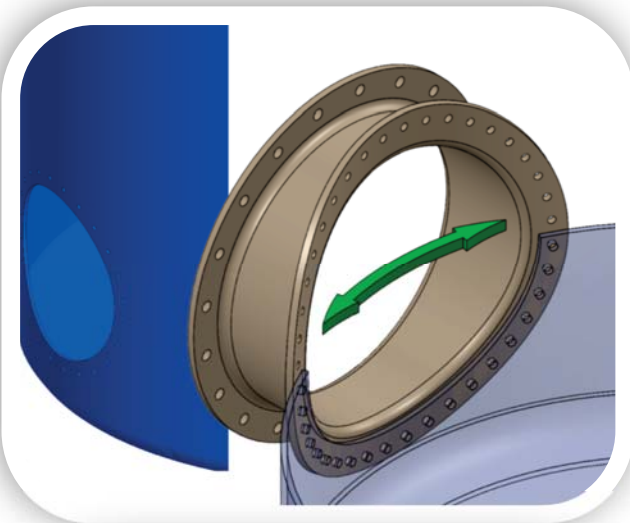
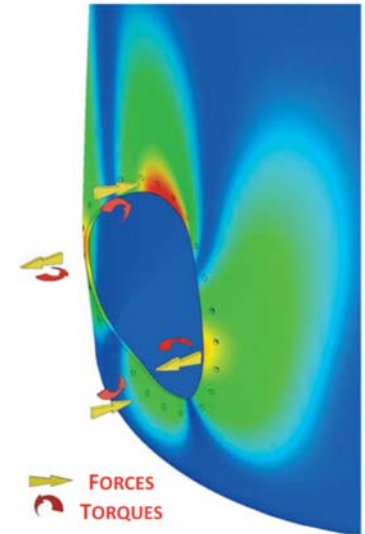




# WHY OUR REVOLUTIONARY DESIGN PERFORMS

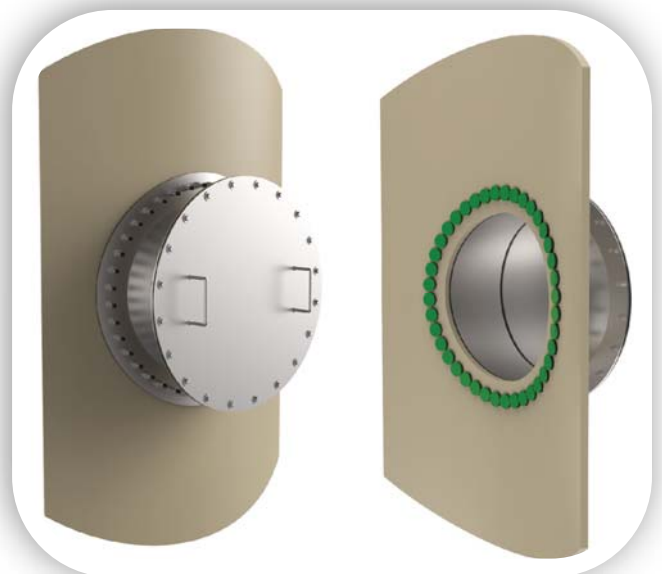
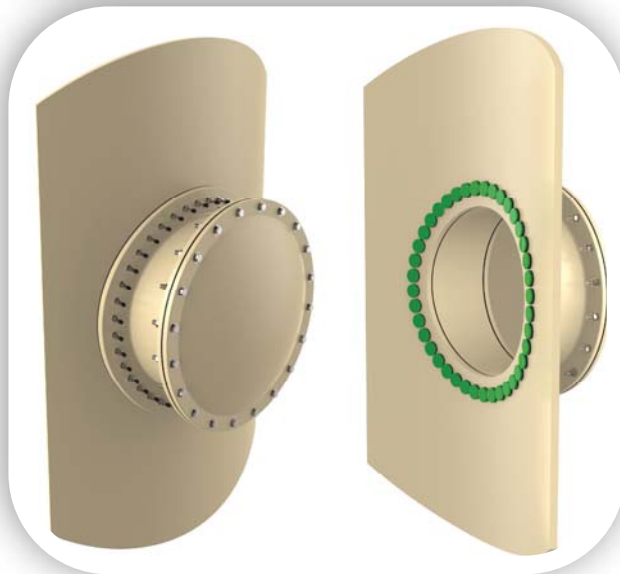
## THE CHALLENGE

The finite element analysis image to the right illustrates the stresses imposed by a “flat saddle” 24” side manway when mounted to a 12’ diameter tank. Similar stresses exist when installing smaller fittings that are not radiused to match the tank wall. This limits the size of fitting that can be safely installed onto radiused tank sidewalls. As the tank diameter decreases, the allowable fitting size is also reduced.



## THE SOLUTION

The finite element analysis image to the left illustrates the absence of stress imposed by our patented “radiused saddle” mounting system. This stress-free aspect of our design enables our large fittings and side manways to be safely and reliably mounted onto small diameter tanks.



The remarkable performance track record of our fittings and side manways is testament to the importance of stress elimination on both the tank and the fitting. Available in fiberglass and stainless steel as standard. Hardware options include 316SS, titanium, and C-276 Hastelloy. Standard gaskets options are EPDM and Viton. We have been granted U.S. Patent no. 9,464,745 for our fiberglass version of large fittings including side manways.