

Pressure Vessel Design– Mulgrave Machine Works Point Tupper and Goldboro, Nova Scotia

In addition to executing projects for the Owner, Sable Offshore Energy Inc. (SOEI), and the Owner's Alliance Partners, *ACCENT* has also completed a number of contracts for third-party vendors involved in the Sable Offshore Energy Project. One such company is Mulgrave Machine Works (MMW) who was awarded the contract to fabricate fifteen pressure vessels (nine drums and six towers) for the Goldboro Gas Plant and the Natural Gas Liquids Fractionation Plant. *ACCENT* was engaged by MMW to design these vessels and provide fabrication details.

Design was carried out in accordance with SOEI specifications and the ASME Boiler and Pressure Code, Section VIII. COADE PV Elite software was used in the analysis of the vessels; all designs had to be approved by the Nova Scotia Department of Labour.



A number of these towers had special features, such as oversized manways, which had to be designed using piping codes, low design temperatures (in one case as low as -110°C), and other such features which had to be incorporated into the design. *ACCENT* also designed lifting lugs, davit connections, platform clips, etc.; the attachments to the vessels were analyzed using WRC 107.

The drawings produced included the general arrangement drawing and fabrication drawings for each vessel. The general arrangement drawing showed the layout of the vessel with all ASME notations; fabrication drawings detailed nozzles, skirts, saddles, insulation and platform clips, as well as the head and shell welding details, and davit details.