

Frac Tanks

Coating and Foaming

Ar-Tech Coating Ltd.

March 2016

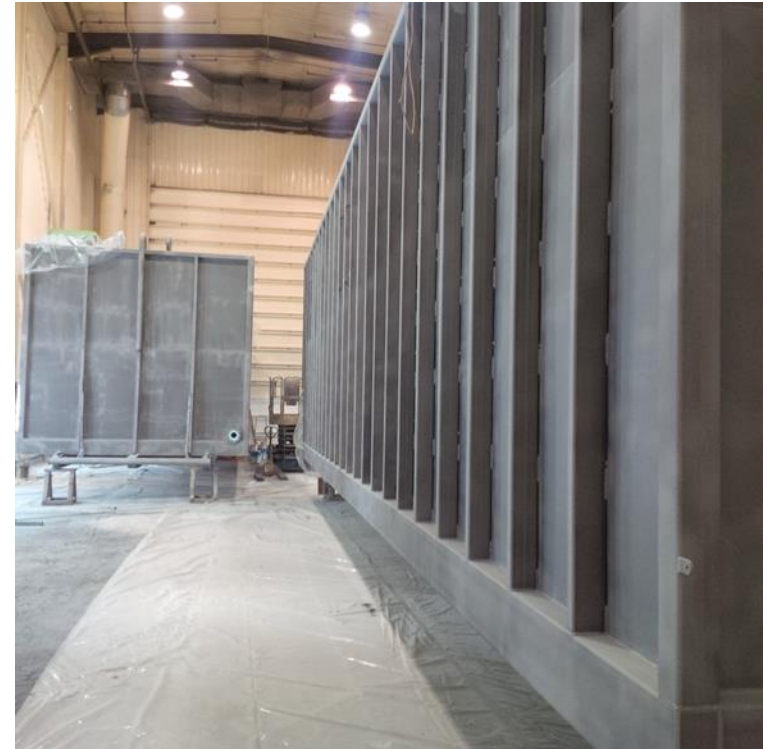


Background

The project was to coat, foam and paint six frac tanks for future deployment in the field. The tanks were new construction and dimensions were 12' high, 12' wide and 50' long. All coating and foaming work was completed two at a time in Coating Shop 1 at Ar-Tech in Taber AB during a two month period.



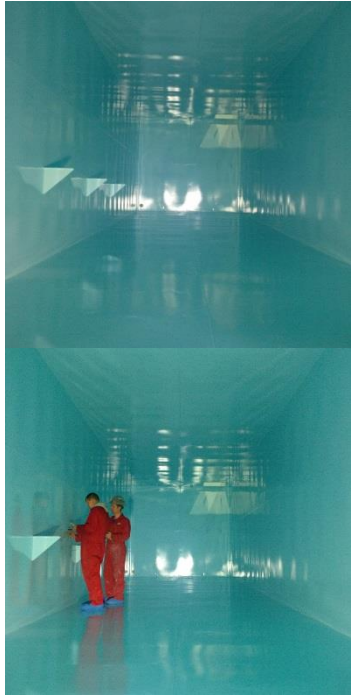
The above frac tank is being staged for blasting in the Ar-Tech blast building. Internal blast will be white metal SSPC-SP5, required for most epoxy coatings, while the external blast will be a commercial blast SSPC-SP6.



Ar-Tech coating shops were built to house large projects in an environmentally controlled setting for ensuring blast retention and optimal coating conditions. Both tanks fit with plenty of room for exterior and interior work to be conducted safely.

Application

The tanks were laid out in the blast and coating shops so that they could be completed 2 at a time. Interior coating was Devchem 253 with Devmat 111 applied to the floor and 8" up the walls. The exterior was to be insulated with 2" foam and then painted with a black elastomeric. Some paint detailing was done to the stairs and ladder extensions.



After a white metal blast Devchem 253 is applied to the tank floor, ceiling and walls. Applicators confirm that the coating thickness is in spec.

A Devmat 111 overcoat is applied to the floor and 8" up the walls for additional abrasion resistance. Coating thickness on the floor ranges from 25 to 30 mils. Holiday testing and final cure ensures coating integrity.

The tank externals are insulated with a polyurethane spray foam. In this instance the application thickness is 2" on the panels. The foam is then coated with a black elastomeric for UV and moisture resistance. Foam build on the tank ribs can not exceed 1/2" so that widths for highway transport are not exceeded.