



Case Study: Vapor Control Antifreeze Thief Hatch

Background

Vapor control products have been designed and operated in the same manner for years. Thief hatches are located on the tank roof to allow for emergency pressure and vacuum relief. The majority of hatches come from the U.S.A., they are not ideally suited for use in Canadian winters. The warm tank processes combined with cold ambient air in the winter often causes condensation. Ice begins to build up on the thief hatch the same way a car window develops frost.

Challenge

Hawkeye Industries undertook the challenge to develop a freeze resistant thief hatch.

Solution

The answer is the Marsh Hawk Anti-Freeze Thief Hatch. Recessing both the pressure and the vacuum gasket inside the tank prevents exposure to extreme temperatures. Condensation drips back into the tank instead of freezing. Jon Johnston of TankSafe Inc. also supports the hatch. He states, "For the last four years we have offered the Hawkeye hatch with all our tanks and consistently receive positive feedback from our customers."

"The quality, reliability and convenience of [the Marshhawk] compliments our product ideals very well."

***- Vice President
Marketing & Sales
TankSafe Inc.***



Above: Typical Hatch showing evidence of icing up.
Below: Tank implosion due to icing on vacuum relief.



Benefit

Preemptive tank design using the Marsh Hawk will increase safety and assist in maintaining the integrity of the tank investment. It is operationally more efficient by eliminating flutter and low leak rates because of a single spring adjustable pressure setting, guided release and seating. "Our customers convey that this hatch prevents freezing and is easy to adjust in the field." Jon Johnston. A single gasket for both pressure and vacuum further decreases maintenance costs.