

# The ACD Submerged Motor Pumps are Ideal for Many Applications

**A**CD'S Model AC/TC-34 and TC-34.2 submerged pumps are a sealess design with integral pump and motor vertically mounted in a sump or tank. The sealess design meets or exceeds all EPA and OSHA standards. The TC-34 is extremely durable and can handle tough pumping requirements, including methane (LNG) and other light-end applications, in addition to the more traditional fluids like nitrogen and argon.

The TC-34 is designed to endure thousands of starts per year without requiring an overhaul. The submerged pump's design, unlike conventional trailer pumps, does not include a mechanical seal, which is a major cause of wear and maintenance. Instead, the pump and motor are completely immersed in fluid, allowing the unit to operate for longer periods between overhauls.

ACD has more than 30 years experience designing and manufacturing submerged pumps, from dockside loading pumps to truck mounted units. A larger capacity model is also available for significantly higher flows and pressures.

The AC/TC-34 has many uses in filling applications and the customer benefits from the pump's ability for multiple instantaneous quick starts. Because the pump is immersed in a vacuum-jacketed sump where it is continuously flooded in a liquid, the traditional waiting period for the pump to cool down is eliminated,

providing more deliveries per day with lower product losses results in maximized profits.

The AC/TC-34 in argon service provides the most benefits to the customer by eliminating cool down time of the pump without product loss. When coupled with the proper tank system and with resources saved by not venting expensive argon, the pump will provide a valuable return on investment.

Among other key features of the AC/TC-34 are the product-lubricated bearings and motor, which benefit from immersion in the cryogen. Diverting and filtering a portion of the pumped product flow through the bearings provides longer bearing life and pump operation. At the same time, the cooling effect of the cryogen makes it possible to reduce the motor's physical size. The pump is also fitted with a state-of-the-art inducer to provide minimal NPSH required for the pump to operate without cavitation. The AC/TC-34 is normally driven by a variable frequency drive controller for greater flexibility as it relates to variable flows and differential pressures as well as reducing speed to obtain a positive flow in extremely low NPSH conditions.

For more information, visit [www.acdllc.com](http://www.acdllc.com).

