

## WHAT CAN ADVANCED PROTECTION PUMPS DO FOR ME?

Exploring the advantages of AP pumps in marina, aviation and aboveground installations.

### WHAT IS AN ADVANCED PROTECTION PUMP?

Advanced Protection pumps are designed specifically to be corrosion-resistant and provide long service life. Certain applications, such as Ultra Low Sulfur Diesel (ULSD) or High Ethanol fuel are more affected by microbial activity, which produces an acetic by-product that accelerates corrosion. However there are other less-obvious applications which could benefit from Advanced Protection pumps.

Building on the internal Alcohol-Gasoline (AG) construction for biofuel compatibility, the Advanced Protection option includes powder-coated and e-coated finishes to protect the exterior cast surfaces, as well as stainless steel fasteners, riser, coupler and variable length column pipe assembly.

### ULTRA LOW SULFUR DIESEL (ULSD)

Franklin Fueling Systems designed the Advanced Protection pump to target acetic-related microbial corrosion in the tank, most associated with ULSD. The Advanced Protection pump was also designed for future-proofing against even lower sulfur content in gasoline moving forward.

The removal of the sulfur content enables microbial growth to flourish, creating a more corrosive, acetic environment than in regular diesel. This can cause standard STPs to corrode and reduce their service life.

Advanced Protection is available as a factory installed option on biofuel-compatible submersible turbine pumps (STPs) and Intelligent Submersible Turbine Pumps (ISTs). STPs provide a fixed speed solution, while the variable-speed ISTs offer energy savings during non-peak business hours and increased flow during peak hours.

### ABOVEGROUND STORAGE TANKS (AST)

In AST applications the pump manifold is often left exposed to the elements, whereas in an underground installation it would be covered by a containment sump. The tough construction of the Advanced Protection pump, with its powder coated manifold and stainless steel parts, helps avoid the harmful effects of exposure to weather conditions in AST applications.



### MARINA

Marina applications are often above ground, meaning they face the same challenges as AST applications with the added hazard of a wet and salty corrosive environment.

Whether an above ground or underground installation, the marina environment is naturally more corrosive than other applications,

and usually endures more extreme weather. The anti-corrosion design of the Advanced Protection pumps makes them the ideal solution for this corrosive environment as they are designed to outlast standard STPs.

### AVIATION

Aviation applications require a very clean environment for the fuel in order to avoid contamination; they often employ floating suction and other filtration systems to ensure this.

The stainless steel elements in the Advanced Protection pump resist corrosion, which reduces the amount of debris in the storage tank that can lead to reduced filter cleaning, saving downtime and money.

### ADDITIONAL PROTECTION

Intake Filter Screens (IFS) can provide an added defense against in-tank debris that can be associated with accelerated corrosion issues.

The IFS prevents debris as small as a grain of sand (0.009" openings) from entering the pumping system, without reducing the output performance of the submersible. Adding just one inch to the length of the pump motor assembly,

the IFS can be factory installed as our 'K' option or easily field retrofitted onto FE Petro™ or competitive four inch pump motor assemblies.

## LEON SCHUSTER (Product Manager, Submersible Pumping Systems)

In my 20+ years with Franklin I've had roles in Engineering, Technical Support, and Product Management of Dispensing Systems and Submersible Pumping Systems. In my current role as Pumping Systems Product Manager, I've been focused on supporting and growing the FE Petro™ branded products, as well as introducing new products to the pumping systems offering for petroleum and diesel exhaust fluid.



### Do you have a question for a Product Manager?

If you have a question for one of our product managers, please submit your question to [info@franklinfueling.com](mailto:info@franklinfueling.com).