

# HydrX™ Fuel Conditioning System Frequently Asked Questions



## Do I need a new site to install the HydrX™ Fuel Conditioning System?

No, the Fuel Conditioner is designed to install in most existing sumps. There is a list of sump criteria, including minimum height and diameter, and one spare bung for exchanging fluids. The system will also require minimal wiring for operation and monitoring that will route between the Submersible Turbine Pump (STP) sump and the Automatic Tank Gauge (ATG).



## Is HydrX compatible with New to Industry (NTI) sites?

Yes, provided the NTI sites meet the requirements on the [HydrX Fuel Conditioning System Submittal Form \(577014-471\)](#). Consult Veeder-Root Technical Support at [technicalsupport@veeder.com](mailto:technicalsupport@veeder.com) or 1-800-323-1799 for additional assistance with HydrX specifications.



## Does HydrX work with steel tanks?

Yes, provided the steel tank and STP sump meet the criteria defined in the [HydrX Fuel Conditioning System Submittal Form \(577014-471\)](#). HydrX mounting hardware is designed around typical fiberglass underground storage tank (UST) STP sump configurations. Steel tanks often have more variability and customization as compared to fiberglass USTs. Therefore, it is important to ensure the tank and sump configuration complies with the requirements defined in the Submittal Form.



## Does HydrX work with Aboveground Storage Tanks (ASTs)?

The HydrX Fuel Conditioning System hardware is designed around typical UST sump and manway configurations. Consult Veeder-Root Technical Support at [technicalsupport@veeder.com](mailto:technicalsupport@veeder.com) or 1-800-323-1799 to determine if your AST is compatible with HydrX.



## How does the Fuel Conditioning System deal with tank tilt?

The sweep operation mode creates a liquid sweeping motion along the length of the tank floor, which pushes water to the lowest point in the tank. Vacuum mode is then activated, where it will easily pull and filter the water through the Fuel Conditioner.



## What ATGs & STPs are supported?

A TLS-450PLUS ATG is required to support HydrX. It does work with Veeder-Root and FE Petro® 4" STPs up to 4HP, provided they have spare ports.



## Does HydrX require any new software updates with the TLS-450PLUS ATG?

Yes, the HydrX software feature enhancement is required (P/N: 332972-032), which is available free of charge. The TLS-450PLUS ATG also requires software version 9R or higher to run this enhancement.



## Does HydrX require any new modules within the TLS-450PLUS ATG?

HydrX requires two intrinsically safe inputs, one low voltage external input and, in the case of sites with mechanical line leak detection (MLLD), one output relay. If the TLS-450PLUS has the required spare inputs and outputs (I/O), no new modules will be required.



## What does Intelligent Operation mean?

Intelligent Operation refers to the Auto Run functionality within the Fuel Conditioning Controller (FCC). If water extraction and any required fuel circulation ends before the programmed Auto Run end time (i.e., no more water is being collected), the FCC automatically shuts down the pump and goes into an idle state. For further information, see the [HydrX Fuel Conditioning Controller Setup & Operation Manual \(577014-466\)](#).



## Can the magnetostrictive probe that monitors product and water in the UST be in a different sump, or must the probe be in the same sump as the STP and HydrX?

Yes, the product probe can be in a different sump, assuming that sump is still part of the same tank.



## How often will filters need to be changed?

The filters have been engineered for optimal life; however, filter life is directly correlated to the amount of sediment and water in the tank and will vary by site. Typical installations are expected to require one to two filter changes annually. The Fuel Conditioning System will monitor and display anticipated filter life, making maintenance schedules predictable.



## How long does it take to drain the Fuel Conditioning System?

The drain flow rate is approximately 125 GPM, so with a full reservoir (5 gallons) it will take 4 minutes to drain. Additional time should be accounted for to walk out to the sump, remove the cover, connect the hose via quick connect fitting and replace the cover after draining the water containment vessel.



## What do I do with the removed water?

The wastewater should be added to your oil-water collection system at the site.



## Can this system support manifolded tanks or manifolded STPs?

No, manifolded tanks and manifolded STPs are not supported at this time.



## Will the Fuel Conditioning System operate in freezing conditions?

Yes, if the pump can recirculate fluid daily, the system will allow for operation in freezing conditions.



## Is tank cleaning required prior to installation of the Fuel Conditioning System?

While tank cleaning is not required, it is a recommended best practice prior to installation of HydrX in order to preserve fuel quality, overall tank health, and to provide optimum performance of the system. If a tank is clean to start, the result will be a lower cost of ownership due to less frequent filter replacements, component services, and/or fueling system maintenance.



## Should I use biocides in addition to the Fuel Conditioning System?

Biocides, while not a recommended component to the Fuel Conditioning System, may be used at the customer's discretion.