



H&T Water Treatment System Rehabilitation Services

Application:

Water Treatment Equipment Upgrade Capabilities

System Design:

- Ion Exchange
- Softener Systems
- Horizontal & Vertical Filters
- Carbon Contactors
- Forced Draft & Vacuum Degassifiers

In these days of tightening budgets, many municipalities are choosing to upgrade their old water treatment equipment rather than replace them.



When they do, they turn to H&T for assistance in engineering a complete solution.

Hungerford & Terry is uniquely positioned to not only supply new water treatment equipment, but also retrofit other manufacturers systems with the robust H&T design and materials that have earned universal acceptance for over 100 yrs.

Water treatment pressure vessels typically outlast the ancillary equipment. This means the internals and face piping along with the control system can be brought up to the current technology quite easily while saving the cost of new vessels and the logistics of replacing them.

With over 113 yrs. of experience building water treatment systems and more than 13,000 contracts to date, we are uniquely positioned to provide upgrade services to most major filtration or ion exchange systems on the market today. This includes systems of other manufactures designs.

Our upgrade capabilities are not limited to pressure vessels only. PLC control systems, automated valve packages, face piping and instrumentation are all engineered solutions we can provide.

At Hungerford & Terry we treat rehab projects the same as new build systems, which means complete submittal documents will be produced for all equipment supplied as required. (i.e.. Mechanical Layout & Electrical drawings, etc.)

Our experienced service department technicians can provide initial site equipment evaluations and recommendations upon request, as well as on-site supervisory support to ensure all questions are answered completely and the work is performed correctly. They will also assist in the commissioning of the system when ready.

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Example Case:

Collingswood NJ– Filter Vessel / Internal piping upgrade project

(Qty=8) 8ft Diameter 16ft OAL Single Cell Horizontal Filters

Application:

Fe & Mn Filtration

Originally Installed
1950's

System Design:

(8) 8'x 16' OAL Filters

Date: 2018-2020

Additional documentation:

[HFS Series - Hungerford & Terry \(hungerfordterry.com\)](http://www.HungerfordTerry.com)

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Fig.1 Pre-Rehab

Due to the age of the equipment, a complete overhaul of the filters internal piping design needed to be address. (Fig.1)

Unfortunately due to the age there were no existing vessel drawings to reference.

Another challenge was the WTP's concrete building had limited space between structure and filters as well as between filters. (Fig.4)

H&T engineers visited the jobsite to take all the required dimensional measurements and advise on the assembly process with the contractor.

Even though tank walls had extensive corrosion, third-party wall thickness testing indicated adequate material integrity for system operating pressure.

Using Sch.80 PVC pipe with proper support hardware, the internal piping system (Fig.2) was upgraded to the H&T Self-Cleaning "Sand Valve" underdrain system. (Fig.3)

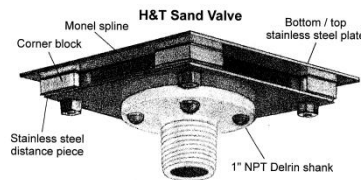


Fig.3 Sand Valve



**Fig.2 Post-Rehab
Before Sand Valve Installation
and concrete fill**



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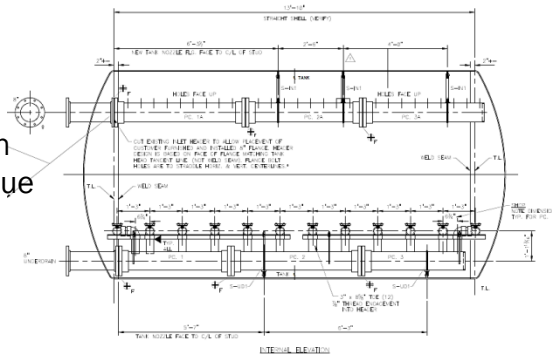
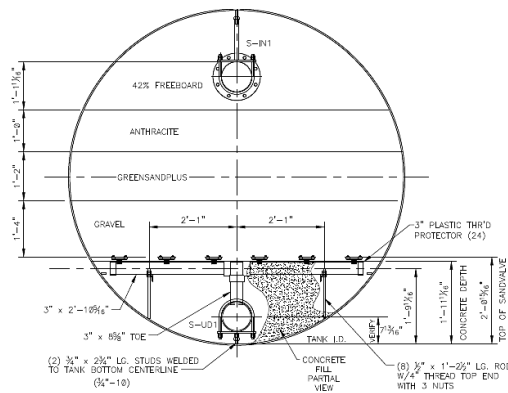
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Fig. 4 Spacing

Segmented inlet & underdrain header pipes were required due to clearance constraints.

With limited space available above the man way openings, the internal piping design was modified to fit within these confined spaces.



Schedule 80 PVC pipe with concrete sub-fill and the H&T Self-Cleaning “Sand Valve” provide a corrosion resistant design for maintenance free operation.

With a fresh liner coating inside and out, the project is completed and all vessels are back in service.





Hungerford & Terry capabilities not limited to water filtration.

- Boiler Feed water - Demineralization & Polishers
- Vacuum & Forced Draft Degasifiers
- Electrical Control System Upgrades
- Automated Valve upgrades

Application:

H&T Rehab Services

Scope of work possible:

- Wrapped Laterals
- Valves & Instruments
- Media Replacement
- Ancillary Equipment
- Internal Distributor Piping
- PLC Control Upgrade



Chino CA



Plover WI



Bradenton FL

Since 1909 Hungerford & Terry Inc. sets industry standards in the engineering, design and manufacture of innovative and efficient water treatment systems.

Systems include removal of Iron, Manganese, Arsenic, and Radium; High-efficiency / low-waste Nitrate removal; PFOS/PFAS, Color removal, Chrome-6 removal, Perchlorate removal, Forced Draft & Vacuum Degasifier Towers, Condensate Polishers and complete Demineralizers including Softening Systems.

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