



Engineered Water Heating Solutions

NEW

UNLINED ENGINEERED DUPLEX ALLOY

PVI is pleased to introduce a new tank and heating surface material - AQUAPLEX™ that eliminates the need for a water side protective lining.

PVI current tank preparation and lining process has not required the installation of sacrificial anode rods * due to their Polyshield or Nickelshield lining process complying with ASTM D-5162 Standard.

Now with the application of AQUAPLEX™ Duplex Alloy in their tank construction, PVI are able to offer storage water heater solutions for

- High Temperature Potable Water
- Base Metal Solution not subject to stress chloride cracking
- Does not require a tank lining.

Please see enclosed a summary sheet outlining the various characteristics of the AQUAPLEX™ Duplex Alloy.

Also enclosed are brochures on new AQUAPLEX™ products

- Power VT Plus – 95% to 98% Thermal Efficient, 399 to 2,000 MBH
- Tricon – 92% to 95% Thermal Efficient, 399 to 2,000 MBH
- Turbopower 99 – 99% Thermal Efficient, 2,000 MBH

AQUAPLEX & LEED

- 80% Minimum Post Consumer Recycled material in Base Metal
- No Lining Material – No VOC's emitted during manufacturing process
- Less material required to achieve desired strength, therefore weight reduction
= less energy required to transport and handle

Plus 92% to 99% Thermal Efficient to ANSI Z21.10.3 Storage Water Heaters

True System Operating Efficiency

*Sacrificial Anode Rods – used as a temporary tank corrosion protection. ASME code HWL-200 in respect to glass lining states that “the discontinuities shall average not more than 1/8 sq inch per 1 sq foot”, that works out to 25 sq inch in a 400 US gallon tank.

Domestic Water Heater Tank Lining 101

- Q. What normally fails in a Domestic Water Heater?
- A. *“The Lining”*
- Q. Why do manufacturers line their tanks?
- A. *In order to separate and protect the steel from the corrosive aspects of heating and removing/replacing the water in domestic applications.*
- Q. Then why do manufacturers utilize sacrificial anode rods?
- A. *Because they cannot guarantee complete coverage for their lining application. Discontinuities are acceptable by code.*
- Q. Why does PVI not use Anode Rods?
- A. *Because they guarantee their Polyshield® or Nickelshield® lining to be void-free to ASTM D-5162 “Wet Electrode Standard”. PVI lining is applied after all fabrication has taken place.*
- Q. So is a tank with no required anode rod protection and a warranty of 10 to 20 years a beneficial feature for the owner?
- A. *YES*
- Q. A tank with lining and sacrificial anode rod is the first level of protection. A tank with a lining that does not require an anode rod to protect the tank is the second level of protection. What would the third level of protection be?
- A. *NO LINING REQUIRED.*

PVI would like to introduce you to the next level of Domestic Water Heater Tank Construction.

“UNLINED ENGINEERED DUPLEX ALLOY”

AquaPLEX™

Please see the enclosed information on the latest development in “Storage Water Heater Tank Construction” from PVI Industries Inc.