

Titanium Tube Stacks

Titanium is the ultimate 'fit and forget' solution for any application where super aggressive water conditions exist, including salt water, or contaminated / mineral rich fresh water. It resists chemical attack indefinitely and also eliminates the possibility of 'galvanic reaction' between dissimilar materials – often the cause of premature failure in certain operating conditions.

Bowman can now offer Titanium tube stacks as an option for many of our Header Tank heat exchangers, providing a highly durable, long life solution for the most demanding applications.

All Titanium tube stacks benefit from a full 10 year guarantee and, as a further advantage, they also offer the ability to operate at higher flow rates compared to standard cupro-nickel, without the risk of tube erosion.



GUARANTEED
10
YEARS

Full 10 year guarantee on all titanium material in contact with cooling water.

Installation and Maintenance

- 1: Bowman Header Tank heat exchangers must always be mounted above the engine's cylinder head level.
- 2: The engine water circuit should be arranged so that it is self-venting on initial filling.
- 3: A by-pass type thermostat should be used and arranged so that only the heat exchanger is by-passed when the engine is cold.
- 4: Ensure all other cooling components are positioned in the circuit so they receive the full flow of coolant from the engines water pump. These units include water jacketed Exhaust Manifolds (if fitted), Oil Coolers, Charge Air Coolers and Exhaust Gas heat exchangers.
- 5: Automotive type thermostats, which simply interrupt the cooling water flow when the engine is cold, are not recommended for use with Bowman header tank heat exchangers.
- 6: When operated unattended, it is recommended that an automatic engine shut down system is always installed.
- 7: Bowman recommend using an ethylene glycol solution on the engine circuit in the concentration advised by the engine manufacturer for the operating conditions. Should you intend to use an alternative coolant, please contact our technical sales team.

Total Engine Cooling Solutions

For nearly 100 years, Bowman has provided efficient, reliable cooling solutions for normally aspirated and forced induction engines. During that time the company has amassed a wealth of expertise and can provide a complete cooling solution for both marine and land based stationary engines, including:

Charge Air Coolers

Improved combustion efficiency and reduced fuel consumption are just some of the benefits provided by Bowman charge air coolers.



Exhaust Gas Heat Exchangers

Recovers valuable 'waste heat' from the engines exhaust stream for use as a valuable 'free' energy resource



Engine & Gearbox Oil Coolers

A range of compact units suitable for engine or transmission oil cooling



Fuel Coolers

Bowman in line plate fuel coolers are compact, easy to install and suitable for use with all fuel types – including ethanol rich fuels

