TI 016

Pressure Shocks from Air Bubbles in the Coolant

Technical Information

Although air bubbles in the coolant are not a problem in themselves, they can have a dampening effect on pressure surges. Air trapped in front of an unopened valve could be detrimental to the Graphite Units.

If the graphite unit is under pressure, any trapped air will evacuate quickly, however slowly the valve is opened.

The coolant liquid will rapidly and immediately fill the space left by the air, only to be stopped by the partlyopened valve, causing local water hammer pressures, as high as 40 - 60 bar. The graphite units can be destroyed by such high local pressures.



Remedy: All valves in the liquid outlet piping must be opened before start-up.

Note: To avoid damage from expansion-induced forces, inlet and outlet valves must never be closed at the same time. This is mandatory.



GAB Neumann GmbH | Alemannenstrasse 29 | D-79689 Maulburg T +49 (7622) 6751 0 | F +49 (7622) 6751 20 | info@gab-neumann.de Page 1/1 (Version:02/2018) Graphite and SiC Heat Exchangers and Process Equipment