PURGING DEVICES FOR HOT WATER HEATING SYSTEMS

The water that is used initially to fill a hot water heating system contains dissolved air. Make-up water subsequently added will similarly have a high air content. Heating this water releases the air and permits it to be circulated in the system, from which it must be vented.

The purpose of the Air Purger is to continuously separate and collect any air from the water as it circulates so that it may be vented automatically by a float air vent without the necessity for frequent manual venting.

DESCRIPTION:

Each Air Purger is a fabricated steel system with two passages through which boiler water flows. Internal contours and baffles are designed for low flow resistance characteristics and efficient separation of the air from the water.

All models have tappings for installation of float air vents to provide complete purging and venting. An additional bottom tapping is also provided for easy mounting of an expansion control or fill valve for combining automatic fill valve and expansion control.

OPERATION:

While the circulating pump is operating, system water continuously flows through the purger. The more dense water flows at nearly maximum velocity through the lower passage of the purger and directly to the system piping. The less dense water, containing dissolved air, moves into the upper channel. This area is so designed as to free the air or gases and to accumulate them at the venting port. The water thus freed of its air content rejoins the main flow.

INSTALLATION:

The Air Purger should be installed horizontally on the main as close to the boiler as possible. These units must be installed so that water flows through them in the direction indicated by the arrow. Float Air Vent should be screwed into the opening marked “Vent”. (Be sure the air valve cap on the Float Vent is loose to permit air to escape.)