Subject: Blowdown of Water Column & Boiler Sight Gauge

Dirty crud laden water can get into a new or rebuilt sight glass and affect the visual clarity of the water level and illuminator. In most installations, there is a water column between the boiler and the sight glass. If the water column is not blowdown on a frequent basis, the water will accumulate crud and foreign matter. That crud will make its way into the sight glass. At that point, both the water column and sight need a blowdown.

Blowdown Procedure:

1. Close both the steam and water valves between the boiler drum and the water column or sight glass.
2. Open the drain valve fully on the bottom of the water column or sight glass.
3. Crack open the steam valve and allow a gentle rush of steam to pass through the water column or sight glass for no longer than 20 seconds.
4. Close the steam valve.
5. Inspect the sight glass to ensure that all foreign matter is flushed from the glass or mica. If the sight glass is not visually clean, repeat steps 3 and 4.
6. Close the blow-down valve (drain) and simultaneously open the steam and water valves, slowly bringing the equipment back to a normal operating level.
7. Note, any trip or alarm circuits that are actuated by the equipment being blown-down should be bypassed to prevent false alarms during the blow-down process

Additional Tip:

1. Follow the below instruction to place the sight glass back into service after blowdown.
2. Fill the sight glass with clean water by keeping the lower isolation water valve closed.
3. With the lower valve closed, slowly open the upper isolation steam valve.
4. The condensate flow from the steam side will cool and fill the sight glass with clean water.
5. After enough condensate has cooled to water, at a determined level, open the lower isolation water valve.
6. These steps fill the sight glass with clean water opposed to filling from the water column.

Additional questions, please contact Questtec Solutions at 281.240.0440 or email kbaker@qtslevel.com.