Coal and Ash Handling Sumps- Applying the Pitbull® Pump

The Common Problems

1) During wash-down, piles of solids can get washed in as a 'slug' and blind off the suction. Once flow stops then the rest of the wash-down mixture has a chance to settle and further bury the pump.
2) Lower flow scenarios, water and solids drain to the pump but the flow and velocity are low. The pump fills too slowly to suspend solids and they drop out in the pump and around the inlet. The check valves get bound in dropped solids and the pump plugs up.

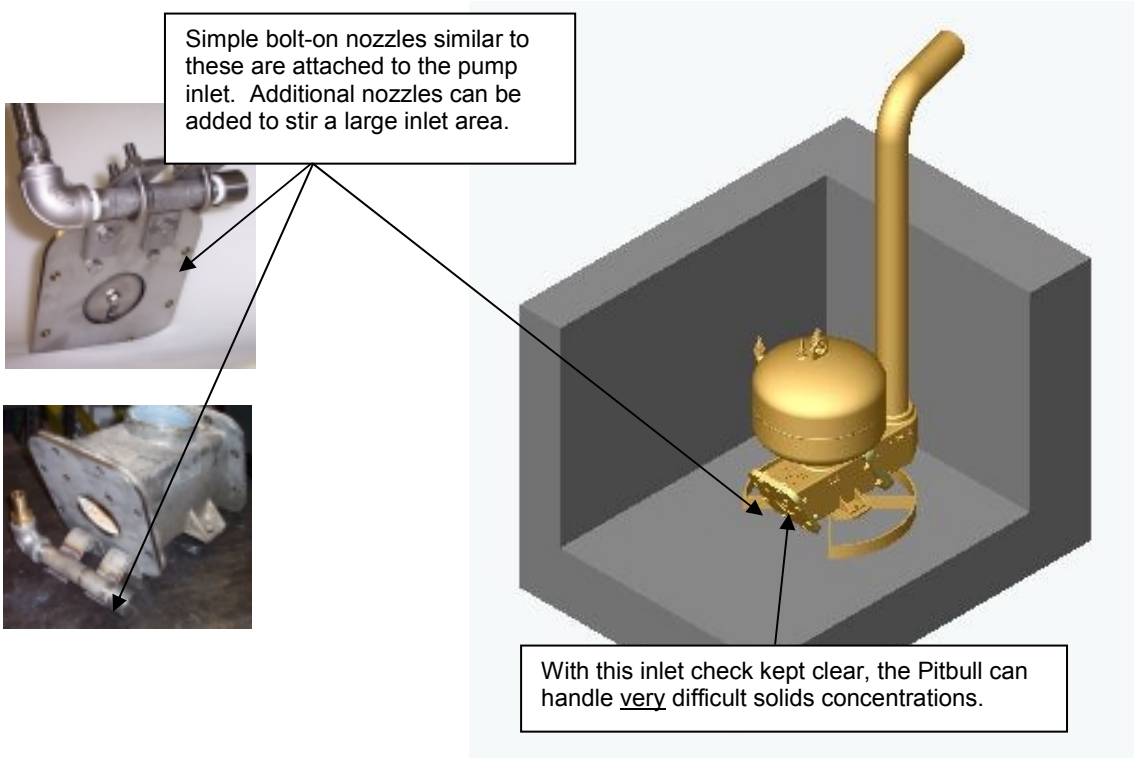
Solutions

Install a water jet/nozzle pointed directly at the lower half of the inlet check valve port. The nozzle should be sized for about 10 gpm/40 lpm (max) for a 4" submersible. Water should be turned on to this nozzle right ahead of the wash-down process and run during the duration and for a few minutes afterwards. The nozzle will keep the check valve functioning under high solids concentrations and also induces/pull material into the pump. Also, equipping the AP200 control panel with the V750 flow inducer option will give the pump suction at its inlet which will helps thick materials to flow in.

► *CIPC builds bolt-on nozzle assemblies with the proper angle/alignment/size for this purpose.*

General low flow settling problems. These requires using the same water jet/nozzle as used in the manual (wash-down) mode but adding a timer and valve sequence so that the pump inlet is cleared on a regular basis. An example would be to run the jet for 5 minutes every hour. This keeps both the inlet and the pump clear of build-up, and can also help the discharge line from plugging.

► *CIPC builds electronic timer and solenoid valve packages for automated jetting and can duplicate the function in all-pneumatic components.*



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