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STEAMPRO CONDENSATE REMOVAL DEVICES (SP-CRD) FOR: SUPERHEATED HIGH PRESSURE STEAM / ELECTRICAL POWER GENERATING PLANT

Power Plants use Superheated High Pressure steam. Power Plants do not want to see and cannot afford to see any condensate. Condensate is an unnecessary evil to any power plant. That is one of the reasons Power Plants use Superheated Steam.

Conventional Steam Traps are designed to look for and work with condensate. When a Steam Trap accumulated enough condensate, it opens up and discharges the condensate. Meanwhile, the Steam Trap sits there losing heat and generates its own condensate. After a while, it opens up and dumps the condensate it accumulated. If a chunk of expected condensate arrives at the Steam Trap and it happens to be close, which is most of the time anyway, it will not respond to the need to remove the condensate. The condensate traveling at high speed with the steam will skip over the little hole, just like the car one is driving and skip over a small port hole in the pavement. Conventional Steam Traps are not effective in Power Plant applications or SuperHeated area.

SteamPro-CRD is designed to discharge steam and condensate **immediately, completely and continuously**. Steam and condensate both compete to get through the nozzle. The capacity of the nozzle depends on the size of the diameter of the orifice. The capacity is normally high due to the extreme high pressure found in power plants. The SP-CRD continuously discharges only steam, **over 15 kilogram per hour** at a steam pressure of 90 bars. When a chunk of condensate unexpectedly arrives at the drain hole, it will be pulled through and discharged. Therefore, we will not see the problem of accidental condensate entering into an electric turbine which could be terrible expensive to have such happening. **The SteamPro-CRD will truly serve as a functioning Safety Device. A Steam Trap will not.**

A conventional Steam Trap, depending on its physical size, maybe losing more than 100 kilogram per hour of steam by radiating the heat! For very high pressure steam, the SP-CRD nozzle will last only about six (6) months. The nozzle should be replaced with everyone of your scheduled maintenance.

Power plants also need Steam Traps for the soot blowers. Typically, the steam pressure is 40 or less bars. The SteamPro has a flanged unit rated at a maximum steam pressure of 40 bars. Each and every SteamPro is tested with hydrostatic pressure equals to five (5) times the rated steam pressure. SteamPro-CRD will serve the soot blowers safety. SteamPro-CRD requires little or no maintenance and should have a useful life expectancy of ten (10) years or more.



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(On November 2005 at Kuala Lumpur, Malaysia)

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