



AquaSeal™

AquaSeal water-cooled liquid ring vacuum pump systems

AquaSeal water-sealed liquid ring vacuum pump systems are liquid ring vacuum pump packages using water as the seal liquid. The systems (in capacities ranging from 15 - 39,000 CFM) are designed to operate for no recovery, partial recovery or full recovery (with heat exchanger).

No-recovery systems use water fed to the pump and is discharged down the drain or used for another purpose.

Partial recovery systems re-circulate about 50% of the seal-water, while fresh seal-water is added for make-up. Consideration must be given to heat build-up.

Full recovery systems recover and re-use close to 100% of the seal-water. Because of heat build-up a heat exchanger needs to be used. However, if the separator tank is large and the pump is small, radiation can dissipate sufficient heat and the system could work without a heat exchanger.

DEKKER's AquaSeal water-sealed liquid ring vacuum pump systems are used in the Chemical and Pharmaceutical industries and in general industrial process applications where large amounts of condensable vapors are extracted from the process. Typical applications include: dehydration, distillation, evaporation, filtration, impregnation, vacuum cooking, vacuum cooling and for condenser exhausters in the Power Industry. AquaSeal water-sealed liquid ring vacuum pump systems offer unmatched efficiency when pumping saturated gas mixtures by taking advantage of high condensing effects which drastically reduce the vapor content in the inlet volume to the pump. This results in substantial power savings over steam-jet vacuum systems.

