

Development of Energy-Saving continuous high capacity, purification, separate technology of mixed refrigerant

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Refrigerant gas is known to be the main culprit of global warming. However, refrigerant gas can not be used. It is used in many fields. Therefore, it is necessary to use waste refrigerant separately/ refined.

In this study, several major waste refrigerants mixtures are about to be separated and reused. Target mixtures are R-134 & R-12, R-125 & R-32 and R-410A & R-22. Using some distillation technology, it has to be separated each other. Target produce purity will be 99.5 wt% of R-134A, R-125 and R-22. Then, capacity target is 5 ton/day. Each of those processes was simulated using Aspen Plus. This process was design continuous type. Detailed design is currently in progress of the optimized heat pump.

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