## News from Pope



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## POPE TURNKEY EVAPORATION & DISTILLATION PLANT FOR HEAT SENSITIVE MATERIALS

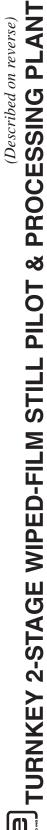
Pope Wiped-Film Still technology is utilized in this two-stage pilot plant and processing unit. Heat sensitive, high molecular weight, viscous or foaming materials can be effectively separated. Material examples include foods and flavors, pharmaceuticals and biologicals, fats and oils, petrochemicals, polymers and a wide range of specialty chemicals. Operations include molecular distillation, evaporation, concentration, stripping, deodorization and reactions. Waste solvent recovery is another major application.

Material is pumped into a vertical heated evaporation chamber and spread as a thin film on the inner surface by rotating slotted wiper blades. Residue passes down through and out of the heated zone within seconds as the volatiles are condensed and collected. The combination of vacuum-lowered evaporation surface temperatures and brief residence time provides the gentlest possible thermal separation, resulting in low degradation, high yield and high quality.

The unit, as pictured, is completely self-contained (including full instrumentation) and ready for evaporation and/or molecular distillation operation by itself, or in combination with existing processes. Continuous or batch, single or two-stage modes, may be selected. The  $2.36 {\rm ft}^2$  ( $0.22 {\rm m}^2$ ) 316 stainless steel still bodies (glass or Hastelloy also available) allow feed rates from 2 to beyond 50 liters/hour, depending upon the application. Vacuum levels from 300 Torr to better than 5 x  $10^{-3}$  Torr and temperatures from ambient to beyond  $400^{\rm o}{\rm C}$  are possible. Pope's new 12",  $10.5 {\rm ft}^2$  ( $1 {\rm m}^2$ ) process still model is also offered allowing flowrates of up to 60 gallons/hr., depending on specific application.

Pope Scientific Inc. designs custom still systems to fit nearly any application, requirement and budget. Process-dedicated or versatile development units are available. Application specialists are on hand to discuss customer projects, from feasibility and preliminary design through installation, training and after-sale consultation. Typically, projects are initiated by customer's submission of an "Applications Questionnaire" and, when appropriate, trial sample processing in Pope's well-equipped testing laboratory. Total confidentiality is maintained.

Call or write Pope Scientific for further information on pilot/processing systems or on our standard line of laboratory Wiped-Film Stills. Contact the Applications Engineering Department to discuss feasibility testing, or to schedule toll processing services for feedlot batches from 1 to 1000's of gallons.





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