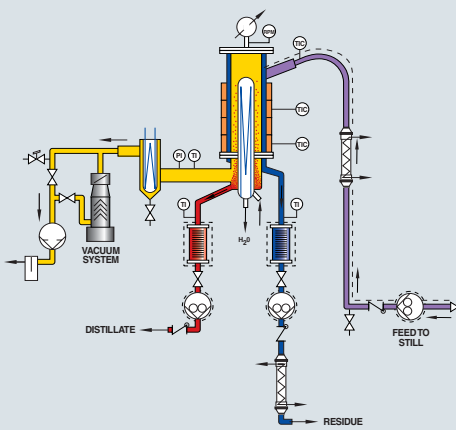


# POPE 20" PRODUCTION SERIES WIPED-FILM MOLECULAR STILLS

For high vacuum molecular distillation, evaporation or concentration of heat sensitive materials at throughputs up to 600 kg/hr.



## APPLICATIONS

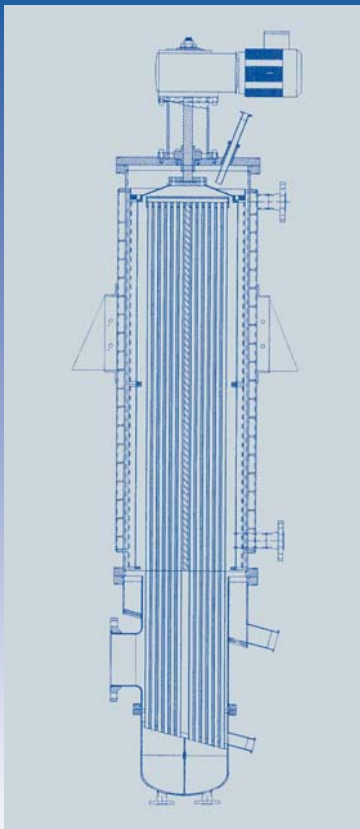
- ▲ Polymer Devolatilization
- ▲ Edible Oil Deodorization and Deacidification
- ▲ Vitamin and Pharmaceutical Purification
- ▲ Extract and Biomaterial Concentration
- ▲ Food, Flavors and Fragrance Isolation
- ▲ Wax and Silicones Fractionation
- ▲ Decolorization
- ▲ Moisture Removal
- ▲ Solvent Recovery
- ▲ Many Others

- ▲ Pope, recognized worldwide for proven high performance in distillation equipment and technology, now offers a 20" production series of Wiped-Film Molecular Stills. These stills operate at high vacuum with short residence time, resulting in the lowest possible thermal degradation and highest possible product quality. Diagonally slotted rotating wiper blades provide optimal heat and mass transfer efficiency, with control of film thickness and residence time. This wiper design also eliminates contaminating residue entrainment (flinging) that is possible with other wiping mechanisms such as rollers.
- ▲ Pope Wiped Film Molecular Stills are available as basic unit components, or as complete turnkey processing plants. For feed streams with a high percentage of volatiles or as a first stage in a multistage system, we offer a 20" Wiped-Film Evaporator (WFE) with external condenser. Turnkey systems are designed and engineered to suit particular applications and requirements.



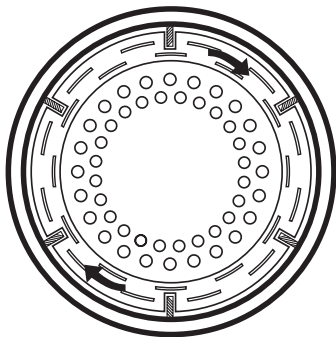
Phone: 262-268-9300  
Fax: 262-268-9400  
e-mail: sales@popeinc.com  
www.popeinc.com

20" Production Series  
Wiped-Film Molecular Still Plant



Cutaway view showing internals.

Cross sectional view.



## Engineered Systems:

- ▲ Turnkey processing systems are custom engineered and fabricated to particular requirements, either for dedicated process applications or multi-purpose use. Pope's experienced design and engineering team will handle all phases of your projects from application feasibility testing to final system design, manufacture and process start-up. All aspects are carefully considered including general flow scheme, operating parameters, materials of construction, selection of subcomponents (pumps, valves, heaters, etc.), electrical classification, control system, physical support and more.
- ▲ Typical systems include two stages. Often a first stage is necessary for degassing and/or primary devolatilization of feed. Depending on the application, this may be a Wiped-Film Molecular Still or Evaporator, or a baffled flashing chamber. Devolatilized material is then transferred to the second stage for further separation.
- ▲ Post-installation technical support is available from Pope's highly knowledgeable Application and Service groups. Full single-vendor responsibility for system performance is assured with Pope turnkey distillation systems.

## Specifications:

	<u>Model P25</u>	<u>Model P35</u>
<b>Internal Diameter:</b>	20"	20"
<b>Heated Surface Area:</b>	25 ft <sup>2</sup> (2.3 m <sup>2</sup> )	35 ft <sup>2</sup> (3.3 m <sup>2</sup> )
<b>Internal Condenser Surface Area:</b>	62.5 ft <sup>2</sup> (5.8 m <sup>2</sup> )	87.5 ft <sup>2</sup> (8.1 m <sup>2</sup> )
<b>Throughput Range*:</b>	250-1000 lbs/hr (110-450 kg/hr)	350-1400 lbs/hr (160-630 kg/hr)
<b>Height (still &amp; drive only):</b>	10 ft (3 m)	13.4 ft (4 m)
<b>System Height, Minimum:</b>	18 ft (5.5 m)	21 ft (6.4 m)
<b>System Height, Typical:</b>	23 ft (7.0 m)	30 ft (9.1 m)
<b>Two-Stage System Footprint, Typical:</b>	8 x 16 ft	8 x 16 ft

\* Application dependent

	<u>Model P25 &amp; Model P35</u>
<b>Vacuum Range:</b>	760 to 1 x 10 <sup>-3</sup> mm Hg
<b>Temperature Range, With Hot Oil:</b>	25 to 350° C
<b>Temperature Range With Steam:</b>	25 to 150° C
<b>Jacket Rating:</b>	50 PSI @ 350° C, standard (other ratings optional)
<b>Heating Energy Requirement:</b>	Application dependent
<b>Rotary Vacuum Seal:</b>	Crane type 8 mechanical
<b>Wetted Metal Components:</b>	316L SS (Hastelloy & others available)
<b>Wipers:</b>	Teflon (carbon & others available)
<b>Elastomers:</b>	Viton (Kalrez & others available)
<b>Wetted Metal Finish:</b>	Welds ground (pharmaceutical or food grade polish available)



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**Larger and smaller sizes also available.**