

# Pope 6" Wiped-Film Stills Parts List

### **MOLECULAR STILL VERSION:**

Part No. 40403-01 Six-Inch Molecular Still, complete with variable speed drive mechanism (wetted

parts 316 stainless steel), self supporting still stand, standard glass still body, glass internal condenser, 6000 ml glass graduated feed and degasser flask with stopper, 5000 ml glass distillate receiver flask, 5000 ml glass residue receiver flask, glass cold trap, 316 stainless steel wiper retainer, Teflon wiper blades, 120 VAC, 50/60 Hz. **IMPORTANT: Select heating system from options below.** 

Six-inch Molecular Still, same as Part No. 40403-01, except that glass jacketed

Part No. 40403-02 still body with removable fiberglass insulating mantle replaces standard glass still

body. For use with heat transfer fluids. WARNING: Glass jacket cannot be pressurized!

\*NOTE: Heat transfer fluid and recirculating heating system are not

included in price. If requested, Pope Scientific will quote and supply a recirculating heating system with oil, hoses, adapters, etc.

#### CONCENTRATOR/EVAPORATOR VERSION:

Part No. 40418-01 Six-Inch Evaporator, complete with variable speed drive mechanism (wetted

parts 316 stainless steel), self supporting still stand, standard glass body, funnel bottom adapter, glass external condenser with stopper, (dry ice trap optional), 6000 ml graduated feed and degasser flask, 5000 ml distillate receiver flask, 5000 ml concentrate receiver flask, 316 stainless steel wiper retainer, Teflon wiper blades, 120 VAC, 50/60 Hz. **IMPORTANT: Select heating** 

system from options below.

Six-inch Evaporator, same as Part No. 40418-01, except that glass jacketed Part No. 40418-02 still body with removable fiberglass insulating mantle replaces standard glass

still body with removable fiberglass insulating mantle replaces standard glass still body. For use with heat transfer fluids. WARNING: Glass jacket

cannot be pressurized! (\*See NOTE above)

### **HEATING SYSTEM OPTIONS:**

Part No. 40784-G2

Part No. 40787 Silicone Rubber Heater with fastener, built-in thermocouple and

insulating jacket. For temperatures up to 200°C. (240 VAC, 50/60 Hz, 2850 W).

Use controller No. 40854-CJ.

Part No. 40784-G1 Metal Band Heater Set with high temperature cordset, "J" thermocouple and

insulating jacket, installed. For temperatures up to 375°C.

(240 VAC, 50/60 Hz, 8400 W). Use controller No. 40737-CJ.

Metal Band Heater Set, same as above, except with two heating zones, upper and

lower. Includes 2 ea. cordsets and thermocouples. Provides optimal heat  $\ensuremath{\mathsf{I}}$ 

distribution. (240 VAC, 50/60 Hz, 4200 W per zone).

NOTE: Requires 2 ea. Part No. 40854-CJ controllers, below.

Part No. 40854-CJ Digital Temperature Controller with automatic tuning of proportional band, integral

time and derivative time parameters. Setpoint and process displays. **For use with Part Nos. 40787 or 40784-G2, above.** (Maximum output rating: 240 VAC, 50/60

Hz, 20A)

Part No. 40737-CJ Digital Temperature Controller, similar to Part No. 40854-CJ. For use with Part

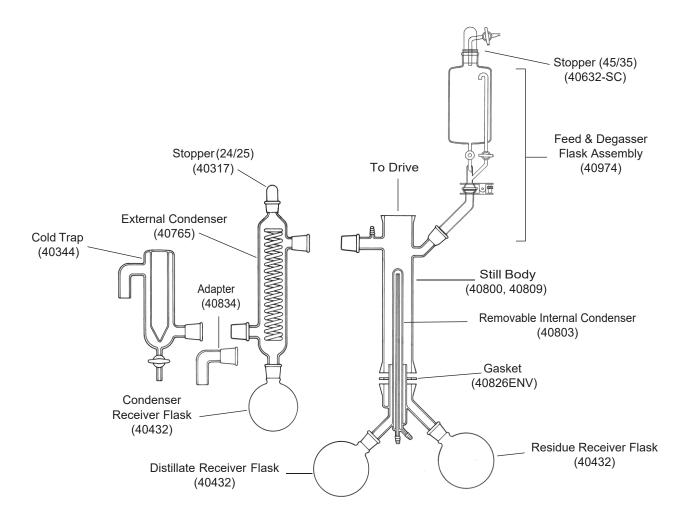
No. 40784-G1, above. (Maximum output rating: 240 VAC, 50/60 Hz, 35A) (Note:

provided with 40A fuse, 240 VAC, 1 ph, 50A plug)

### <u>IMPORTANT</u>

In addition to components listed herein, various custom modifications can be quoted. Complete turnkey pilot and processing plants are offered in a full range of sizes, and in alternate materials including Stainless Steel, Hastelloy, etc. Consult Pope Scientific. ALL 120 VOLT ITEMS ARE ALSO AVAILABLE IN 240 VOLT (220-240 VOLTS), 50/60 HZ, 1-PH VERSIONS. ADD SUFFIX "-240" TO END OF PART NUMBERS. CONTACT POPE REGARDING ALTERNATE POWER AND AREA CLASSIFICATION REQUIREMENTS.

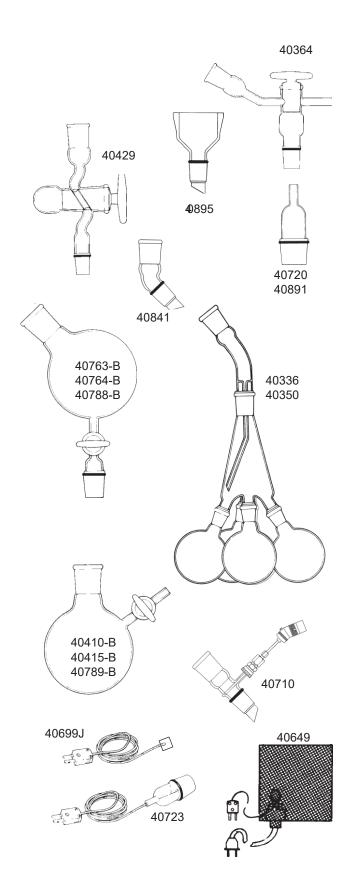
# 6" WIPED-FILM STILL STANDARD & OPTIONAL REPLACEMENT PARTS



PART NO.	DESCRIPTION
40800	6" Glass Still Body, without Internal Condenser, with 6" conical pipe flange at bottom
40809	6" Jacketed Glass Still Body, without Internal Condenser, with 6" conical pipe flange
	at bottom (Insulating Mantle, Part No. 40668, available for this body)
40803	Removable All Glass Internal Condenser and Outlets for 6" Still, with 6" Conical Pipe Flange
40826ENV	Teflon Gasket, Still Body to Internal Condenser
40974	6000 ml Graduated Feed & Degasser Flask, New Style, with Pinch Clamp and Inlet Adapter
	(Stopper not included) (used on Part Nos. 40403 and 40418)
40632-SC	Stopper for Feed Flask (with venting/liquid additions stopcock)
	(supplied with Part Nos. 40403, 40418)
40318	500 ml Receiver Flask for smaller batches. (4 Used on Accessory Part No. 40350)
40406	1000 ml Receiver Flask for smaller batches
40339	2000 ml Receiver Flask for smaller batches
40432	5000 ml Receiver Flask (2 Used on Part Nos. 40403 and 40418)
40344	Cold Trap (Used On Part No. 40403)
40765	External Condenser with 24/25 Stopper (Used on Part No. 40418)
40317	Stopper for External Condenser (24/25)
40834	Adapter, External Condenser to Vacuum System (Used On Part No. 40418)
40345	Segmented Teflon Wipers (Set of 32) (0 -250°C)
40366	Segmented Carbon Wipers (Set of 32) (Over 250°C)

NOTE: For parts not listed, or for special modifications, contact Pope Scientific, Inc.

### 6" WIPED-FILM STILL ACCESSORIES PARTS LIST



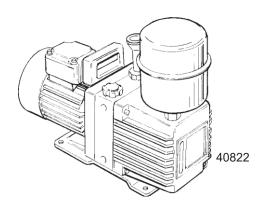
### **ACCESSORY GLASS COMPONENTS**

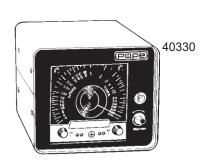
Part No.	Description	
40895	Funnel Bottom Adapter, 6" Conical to 24/25M. Allows use of Standard Receivers with 6" Still Body (no Internal Condenser) (incl. with Part No. 40418)	
40336	Multiple Flask Receiver, Rotatable, Incl. 4-200 ml Flasks	
40350	Multiple Flask Receiver, Rotatable, with 4-500 ml Flasks	
40364	Stopcock Adapter for Still Outlets, 45° Angle, with 6 mm 3-way Stopcock	
40429	mm Bore Stopcock Adapter for External Condenser, to permit isolation of Receiver Flask when Removing Condensate	
40788-B	1000 ml Receiver Flask with Vacuum Stopcock (6 mm bore) and 28/15 Ball Joint at Bottom – when used with Part Nos.40789-B or 40410-B, permits removal of distillate or residue without interrupting operation.	
40763-B	2000 ml Receiver Flask with 6 mm Vacuum Stopcock and 28/15 Ball Joint at Bottom - when used with Part Nos. 40410-B or 40415-B permits removal of distillate or residue without interrupting operation	
40764-B	5000 ml Receiver Flask with 8 mm Vacuum Stopcock	
40789-B	1000 ml Receiver Flask with 28/15 socket joint on top and 4mm vacuum take-off stopcock	
40410-B	2000 ml Receiver Flask with Vacuum Take-off Stopcock	
40415-B	5000 ml Receiver Flask with Vacuum Take-Off Stopcock	
40720	Adapter, Feed Pump, to Still Body - 24/25M Joint to 1/4"	
40891	OD Tubing (replaces Feed & Degasser Flask) Adapter, Feed Pump, 24/25M to 3/8" OD Tubing	
40841	45° Elbow, 24/25M to 24/25F	

#### **ACCESSORY HEATING SYSTEM COMPONENTS**

Part No.	Description		
40731-CJ	Digital Temperature Controller with setpoint and process displays. For use with silicone rubber heater or heat tracing tape below. (Latter requires addition of Part No. 40699-J thermocouple) (Maximum output rating 120 VAC, 50/60 Hz, 15 A)		
40724	Heat Controller for non-critical feed/degasser flask or heat tracing tape applications. Manual intervalometer adjustment, no temperature feedback or display. (Maximum output rating: 120 VAC, 50/60 Hz, 12 A)		
40726-S	Heat Tracing Tape for feed inlet or product outlet sections. Heavy braided glass yarn covering. Easily applied and removed. (120 VAC, 50/60 Hz, 415 W)		
40699J	Type J Thermocouple Assembly, surface type		
40710	Product Discharge J Thermocouple Assembly with 24/25 Adapter		
40723	Type J Thermocouple Assembly, with 24/25M joint. (Typically used with external condenser)		
40649	Silicone Rubber Heater and Type J Thermocouple for 6000 ml Feed and Degasser Flask (120 VAC, 50/60 Hz, 1000 W)		
40671	Insulating Jacket for 6000 ml Feed and Degasser Flask Silicone Rubber Heater (not illustrated)		

ALL 120 VOLT ITEMS ARE ALSO AVAILABLE IN 240 VOLT (220-240 VOLTS), 50/60 HZ, 1-PH VERSIONS. ADD SUFFIX "-240" TO END OF PART NUMBERS. CONTACT POPE REGARDING ALTERNATE POWER REQUIREMENTS.







### ACCESSORY VACUUM SYSTEM COMPONENTS

Part No.	Description		
40822	Mechanical Rotary Vane Vacuum Pump System for medium vacuum range (to 0.05 Torr), with stainless steel fittings for attachment to 6" Wiped-Film Still; 14.7 CFM free air displacement. Includes oil mist eliminator and vacuum tubing. 3/4 HP, 120 or 240 VAC, 50/60 Hz. (Additional specifications upon request)		
40823	Mechanical Rotary Vacuum Pump/Oil Diffusion Pump System for high vacuum range (to 0.001 Torr), with manual backing/roughing valve and stainless ster fittings for attachment to 6" Wiped-Film Still; 10 CFM free air displacement (mechanical pump), 135 liters/ second (diffusion pump). Includes oil mist eliminator and vacuum tubing. 3/4 HP, 120 or 240 VAC, 50/60 Hz. (Additional specifications upon request)		
40816	Manual bleed valve assembly for controlling and venting vacuum. Includes mounting on vacuum pump		
40626	Diffusion Pump Oil, 500 ml.		
40330	Vacuum gauge Pirani type, range 0.001 Torr to 1000 Torr (120 VAC, 50/60 Hz). Highly recommended for efficient processing		

### **MISCELLANEOUS ACCESSORIES**

Part No.	Description	
40780	Digital RPM Indicator for Still Drive (120 VAC, 50/60 Hz)	
40976-NS	Metering valve replacement stem for new style Feed & Degasser Flask	
40975	Inlet Adapter for 1 and 2-L Feed & Degasser Flask	
40975-EX	Inlet Adapter for 4 and 6-L Feed & Degasser Flask	
40977	Pinch Clamp for new style Feed & Degasser Flask	
40750	Six-Inch Still Replacement Parts Kit, including Gear Drive Belt, Spare Viton O-rings and Gasket	

ALL 120 VOLT ITEMS ARE ALSO AVAILABLE IN 240 VOLT (220-240 VOLTS), 50/60 HZ, 1-PH VERSIONS. ADD SUFFIX "-240" TO END OF PART NUMBERS. CONTACT POPE REGARDING ALTERNATE POWER REQUIREMENTS.



## **Replacement Parts**

2", 4" & 6" Wiped-Film Stills

Part No.	Description	Qty Used Per Still
40320	Teflon Wipers for 2" Still (Set of 3, includes springs)	1
40341	Teflon Wipers for 4" Still (Set of 12)	1
40345	Teflon Wipers for 6" Still (Set of 32)	1
40352	Carbon Wipers for 2" Still (Set of 3, includes springs)	1
40351	Carbon Wipers for 4" Still (Set of 18)	1
40366	Carbon Wipers for 6" Still (Set of 32)	1
40381-SET	Stainless steel springs for 2" wiper blades (Set of 9)	1 set of 9
40337	Stainless steel wiper blade retainer (2" Still)	1
40380	Stainless steel drive shaft (2" Still)	1
40745	Teflon bushing, 2" Still drive	1
40746	Flanged bronze bushing, 2" Still drive	1
40607	Drive belt for 2" Still (variable speed motor)	1
40797-NS	Drive belt for 4" and 6" Stills	1
40202-I	Conical Insert for 2" drive/body nut	1
40202	Flange Set - 2" Still	1
40204-B	Flange Set - 4" Still	1
40206	Flange Set - 6" Still	1
40976-NS	Metering valve plug assembly, new style feed flask	1
40571	Glassware clamps, noose type stainless steel, 8" long	Varies
40569	Glassware clamps, noose type stainless steel, 12" long	Varies
40970-4L	Support fork for 4-L feed/degasser flasks	Varies
40970-6L	Support fork for 6-L feed/degasser flasks	Varies
40572	Support ring for receiver flasks	Varies
40370	Rod lattice support clamp, 90°, for above	Varies
	O-RINGS AND SEALS (Viton*, unless otherwise indicated)	
40740	Rotary vacuum seal, Viton (2" Still drive shaft)	1
40741		
40382	Rotary vacuum seal, Viton (4" and 6" Still drive shaft)	
40391	O-ring, 2" glass Still body to drive housing	
40392	Quad ring, 4" glass Still body to drive housing	1
40382ENV	Quad ring, 6" glass Still body to drive housing	
40825ENV	Gasket, 2" glass Still body to internal condenser, Teflon	1
40826ENV	Gasket, 4" glass Still body to internal condenser, Teflon Gasket, 6" glass Still body to internal condenser, Teflon	1
40499	· · · · · · · · · · · · · · · · · · ·	1
40890	O-ring, internal 2" drive O-ring, internal 4" and 6" drive	
40383	O-ring, internal 4 and 6 drive O-ring, 2" Still oil cup (under drive shaft housing)	
40479	O-ring, 2" and 6" Still oil cup (under drive shaft housing)	1
40384	O-ring, 4 and 6 Still oil cup (tirider drive shalt housing) O-ring, 24/25 joint (feed and receiver flasks)	3
40385	,	1
40365	O-ring, 29/26 joint (2" Still body vapor arm)	1
40475	O-ring, 45/35 joint (4" Still body vapor arm)	
40470	O-ring, 71/40 joint (6" Still body vapor arm)  *O-rings available in other material, including Kalrez. Consult Pope.	
	O-migs available in other material, including Kairez. Consult Pope.	

NOTE: For major components of Stills, see Stills and Accessories parts lists. For unlisted parts, contact POPE SCIENTIFIC, INC.