SERFILCO®

TECHNICAL BULLETIN

SERFILCO SOLVENT DISTILLATION UNITS

DEC., 1980

The ever increasing cost of solvents, coupled with the high cost and increasing regulation of waste disposal, makes the consideration of recycling used solvents almost mandatory.

Since the basic function of a solvent is to dissovle something, then it is obvious that the solvent will eventually become saturated and have to be disposed of, along with the contaminant, unless it can be separated from the contaminant and reused. When the solvent and contaminant have different boiling points, distillation is a normal process to achieve this separation.

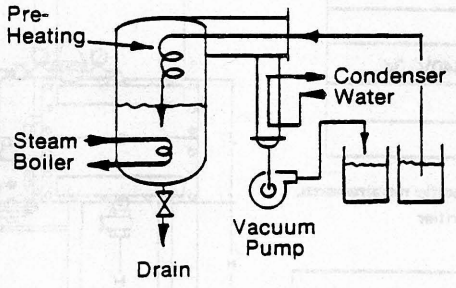
APPLICATIONS

Solvents with a boiling point of 250° to 390°F can be distilled in this rugged unit because it operates under approximately 26 In.Hg. vacuum to reduce the boiling point of the solvent. The boiler temperature is controlled between 212° and 275°F with 3 to 45 psi steam. This combination will boil off many commonly used solvents such as - jet fuel, kerosene, stoddard, 140 solvent, hi flash VM & P, mineral spirits, rule 66 mineral spirits, low aromatic mineral spirits, etc.

Knowing the properties of the contaminants is as important as knowing the properties of the solvent, when specifying the process steps and equipment for separation and recovery. To minimize manual cleaning of the boiler, solids should be settled or filtered out before distillation. Since even some dissolved contaminants may change from a liquid to a solid when the solvent is driven off, a convenient clean-out door is provided. The cleaning of heating surfaces is always an important routine maintenance job. Mounting the steam coils to the clean-out door so they can be removed from the boiler for easy cleaning on the bench is a feature of the Serfilco unit.

OPERATION

The vacuum pump is started and dirty solvent is drawn into the boiler until the level control shuts off. Steam heat and cooling water is applied. The solvent is vaporized and drawn into the condenser. The condensate is pumped to the clean solvent tank and the level control opens to allow make up with dirty solvent. A sight glass is provided to indicate when the boiler is empty or should be drained. The heavy end contaminants are manually drained as required. The steam coils are mounted on the clean-out door cover for easy removal and cleaning. Heavy solids are settled in the dirty solvent tank or filtered out first.



UNITS ARE AVAILABLE WITH CAPACITIES OF

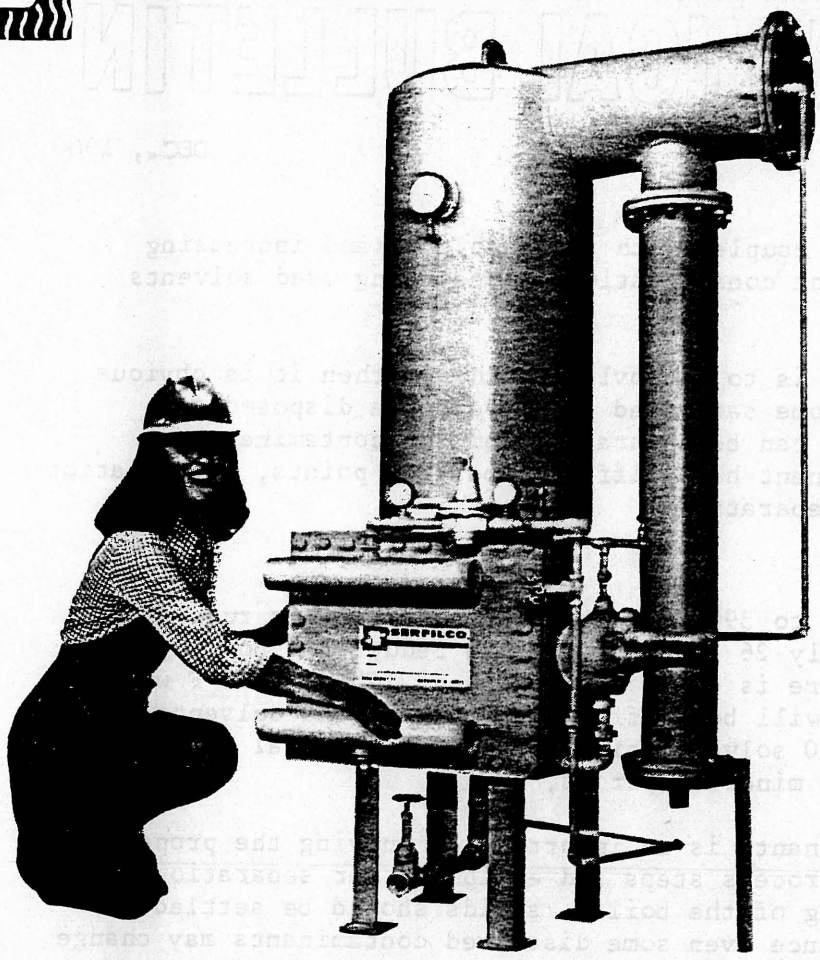
50, 200, 400 & 1,000 GPH

SERFILCO, LTD.

1234 Depot St.
Glenview, IL 60025

312/998-9300
Telex: 253699

SOLVENT DISTILLATION UNIT



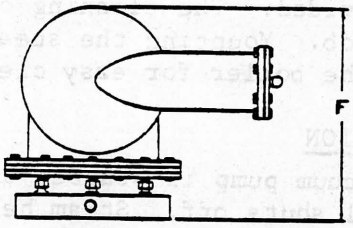
UNITS ARE AVAILABLE

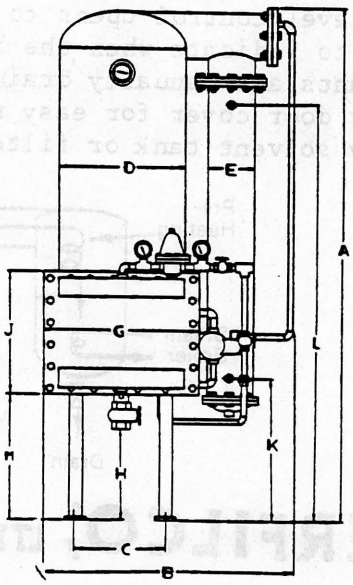
WITH CAPACITIES OF

50
200
400
1,000 GPH

SPECIFICATIONS DIMENSIONS

PRICE CODE NUMBER	2450	2451
MODEL NUMBER	PS-1000-20	PS-1000-40
Solvent Flow Rate *	200 GPH	400 GPH
Solvent Inlet Size	¾ inch	¾ inch
Solvent Outlet Size	1¼ inch	1½ inch
Steam Requirement	4½ BHP	7½ BHP
Steam Inlet Size	¾ inch	¾ inch
Steam Outlet Size	½ inch	½ inch
Condenser Water Requirement	3.5 GPM	7 GPM
Water Inlet Size	¾ inch	¾ inch
Water Outlet Size	¾ inch	¾ inch
Sludge Drain Size	2 inches	2 inches
Pump (Explosion Proof)	1 HP 220/440V 3ø	2 HP 220/440V 3ø
Dry Weight	1400 Lbs.	2400 Lbs.
Shipping Weight	1600 lbs.	2700 lbs.





***Both higher and lower flow rates are available. Please contact us with your specific requirements.**
50 GPH to 1000 and larger. OPTIONS: ASME Code Stamp, Prefilter/Clarifier

	DIMENSIONS											
Model	**A**	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**J**	**K**	**L**	**M**
PS-1000-20	86	41¾	14 ⅛	20	6	34	26	12	25	11 13/16	67 13/16	24
PS-1000-40	104	54	19¾	28	8	42	34	11	30	25¾	81¾	24

SERFILCO, LTD.
1234 Depot St.
Glenview, IL 60025
312/998-9300
Telex: 253699

SOLVENT RECOVERY UNIT

APPLICATION DATA SHEET

Company Name: _____ Date: _____

Address: _____

City/State/Zip: _____

Contact: _____ Phone: _____

Name of Solvent to be Reclaimed: _____

_____ Boiling Point: _____

Gallons per week to be Reclaimed: _____

Labor hours per week available to operate distillation unit: _____

Do you have plant steam: _____ Lbs. _____

Product(s) Manufactured at this Facility: _____

Process in Which Solvent is Used: _____

_____

Contaminated with: _____

_____

Present Disposal Method: _____

_____

Is more than one type of solvent mixed together; and if so, in what ratios:

_____

_____

Is there any water normally mixed in with the material: and if so, how much:

_____

What will end use of reclaimed material be: _____

Permissible water content: _____

Additional Remarks: _____

_____

_____

_____