FDS 분별증류시스템
FRACTIONAL DISTILLATION SYSTEM



용도
본 분별증류시스템은 Reboiler, Column, Reflux divider, Condenser, Cooler & Receiver 의 6 부분으로 구성되어 있습니다. 제약, 화학, 천연물질 및 식품산업등 다양한 분야에서 연구용으로 사용되고있습니다. 특히 주정알콜등 고가의 유기용매를 재생하는 용도 및 고순도 정제에 사용됩니다.

특징 및 장점
1. 진공증류 및 연속식 시스템 적용가능.(Option)
2. 국내 유일의 전자동 분별증류시스템 구현.(Option)
3. 소형의 Lab Scale에서 Industrial Scale 까지 설계 및 제작 설치.
4. 유리(Borosilicate 3.3 Glass)외 에도 Stainless Steel, 석영(Quartz) 및 특수합금 소재(Hastelloy)등 다양한 재질로 제작.
5. 사용자의 요구에 따라 주문 제작됩니다. (Customizing)
6. 방폭 시스템 및 HMI Control System을 적용한 제품도 제작됩니다.

Usage
This fractional distillation system consists of 6 parts: Reboiler, Column, Reflux divider, Condenser, Cooler & Receiver. It is used for research in various fields such as pharmaceutical, chemical, oriental medicine and food industry. In particular, it is used for regenerating expensive organic solvents such as alcohol and for high-purity purification.

Feature
1. Vacuum distillation and continuous system applicable.
2. Implementation of fully automatic fractional distillation system.
3. Design, build and install from Lab Scale to Industrial Scale.
4. The material is made of various materials such as glass (Borosilicate 3.3 Glass), stainless steel, quartz, and special alloy material (Hastelloy).
5. It is made to order according to your needs. (Customizing)
6. Products applied with explosion-proof systems and HMI Control Systems are also manufactured.

Specification

Parameter \ Type	FDS-01V-40PT	FDS-02V-40PT	FDS-03V-40PT	FDS-05V-40PT	FDS-10V-40PT	FDS-20V-40PT	FDS-50V-40PT
Boiler Capacity (L)	1	2	3	5	10	20	50
Theoretical Plate	Basically, it is designed with 40-NTP. The number of theoretical plates is changed according to customer demand.						
Packing Material	Quartz Raschig Ring or An Efficient Protruded SUS316 Dump-Packing						
Condenser Type	Double Coil & Jacket Type or Shell & Tube Type						
Heating Method	Heating Mantle or Thermal Oil Circulation Unit						
Heating Mode	Vapor Temp. Control / Boiling Liquid Temp. Control / thyristor Power Regulator						
Temp. Controller	2 Channel Programmable Temp. Controller (5.7" LCD Touch Monitor)						
Reflux Ratio	0 : 0 ~ 999 : 999 sec (Digital Timer Setting)						
Receiver (L)	1	2	3	5	10	20	50
Material	It is basically made of borosilicate 3.3 glass. However, it can also be made of Stainless Steel, Quartz or Hastelloy according to customer requirements.						
Multiple Collector *	It is used when the mixed solution is varied. (There are automatic type and manual type, please consult when requesting a quote.)						
Cooling Circulator *	1500 Kcal/hr , 0.45Kw		3000 Kcal/hr, 0.75Kw		4500 Kcal/hr, 1.15Kw		6000 Kcal/hr, 1.5Kw
Vacuum Control Sys. *	Vacuum Pump / Vacuum Control / Vacuum Cold Trap, etc. are required, and the configuration varies according to the required vacuum level. Please consult when requesting a quote.						

Items marked with (*) are optional. Please consult us when requesting a quote.