

Product Overview

Reaction Unit
Filter Reactor
Nutsche Filter
Thin Film Evaporator
Short Path Evaporator
Rotary Evaporator
Pressure Reactor
Quartz Glass Products

AG!
Asahi Glassplant Inc.



Blue
Label Thin Film Evaporator

Size: DN 60

- High Evaporation Efficiency
- Minimum Thermal Decomposition
- Gas and Vacuum Tight
- Uniform Thin Film
- Jacketed Evaporator for Easy Viewing
- Short Residence Time
- Perfect for Heat Sensitive Materials
- Uniform Rotating Wiper System
Up to 300 °C (Option)
- Greaseless Magnetic Sealed Bearing, Valves and Joints

Thin Film Evaporator (TFE)

- Evaporation Surface Area : 0.05 m² (DN 60), 0.1 m² (DN 100)
- Max. Temperature: +200 °C in jacket with PTFE wiper.
Option: +300 °C in jacket with PBI** wiper.
- Operating Pressure: +0.1 mbar to atm
- Operating Jacket Pressure: Up to +0.5 bar G (+0.05 MPa)
- Feed rate: 0.1 to 1.5 kg/h (DN 60), 0.3 to 3.0 kg/h (DN 100)
- Max. viscosity at operating temperature:
Up to 1,000 mPa.s (Custom-made)
- Max. Rotation Speed : 400 rpm
- Wetted Parts: Borosilicate 3.3, glass, PTFE or SS316.
- Stirrer Seal: Magnetic

** PBI = Polybenzimidazole

* This system does not include overhead stirrer, circulator and chiller.

* Specification: See Page 42



Main body (TFE)



External Condenser (TFE)

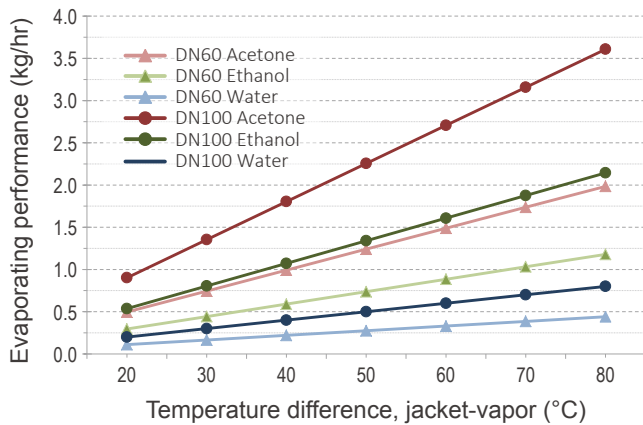


Internal Condenser (SPE)

Easy Installation and Removal
(TFE, SPE)



Evaporation Performance



Experimental condition
 • Pressure : Atmospheric pressure
 • Flow rate of heat transfer fluid : 18 L/min

Short Path Evaporator (SPE)

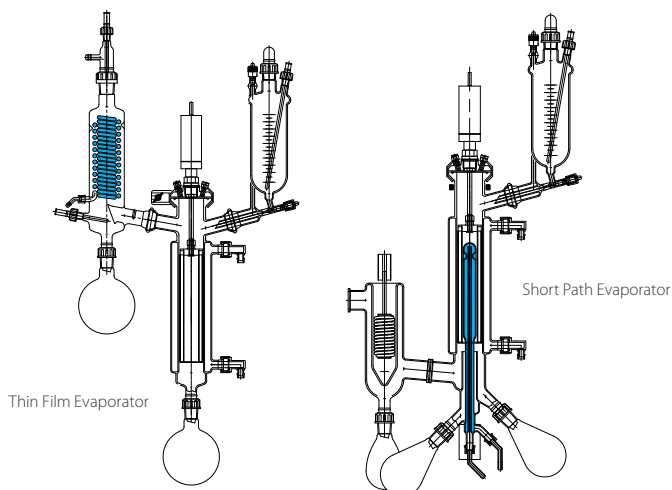
- Evaporation Surface Area: 0.05 m² (DN 60), 0.1 m² (DN 100)
- Max. Temperature: +200 °C in jacket with PTFE wiper.
Option: +300 °C in jacket with PBI** wiper.
- Operating Pressure: +0.001 mbar to atm
- Operating Jacket Pressure: Up to +0.5 bar G (+0.05 MPa)
- Feed rate: 0.1 to 1.5 kg/h (DN 60), 0.3 to 3.0 kg/h (DN 100)
- Max. viscosity at operating temperature: Up to 1,000 mPa.s (Custom-made)
- Max. Rotation Speed: 400 rpm
- Wetted Parts: Borosilicate 3.3, glass, PTFE or SS316.
- Stirrer Seal: Magnetic
- ** PBI = Polybenzimidazole
- * This system does not include overhead stirrer, circulator and chiller.

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Short Path Evaporator



Size: DN 60



Thin Film Evaporator

Short Path Evaporator

	Thin Film Evaporator	Short Path Evaporator
Design Pressure	0.1 mbar	0.001 mbar
Condenser	External Condenser	Internal Condenser

AG! ADVANTAGE

Together we can work to find a perfect solution that suit your application requirements.

Fully corrosion resistant models also available.
 Evaporation surface area : 0.012 m² (DN 45) to 1.5 m² (DN 450)



DN 45

Gold Label

DN 450

Gold Label

Please contact us about customized systems.

Reaction Unit

Filter Reactor

Nutsche Filter

Evaporator

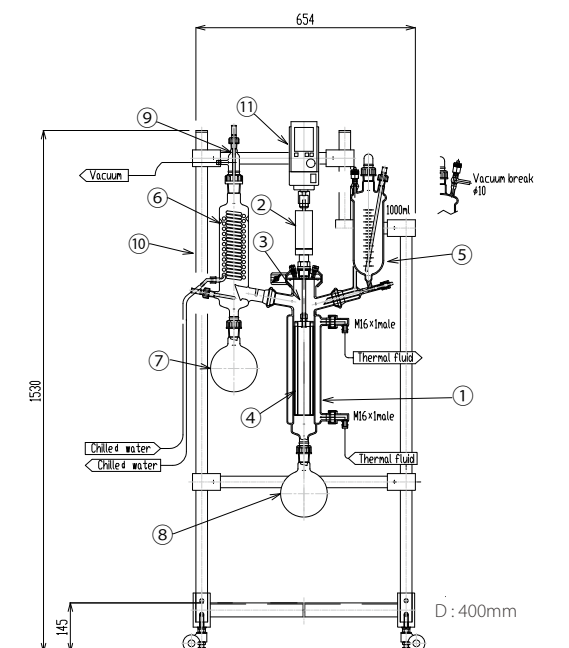
Other Apparatus

Quartz Glass Products

Product Information

Complete Package

Thin Film Evaporator



Jacketed Evaporator : DN 60

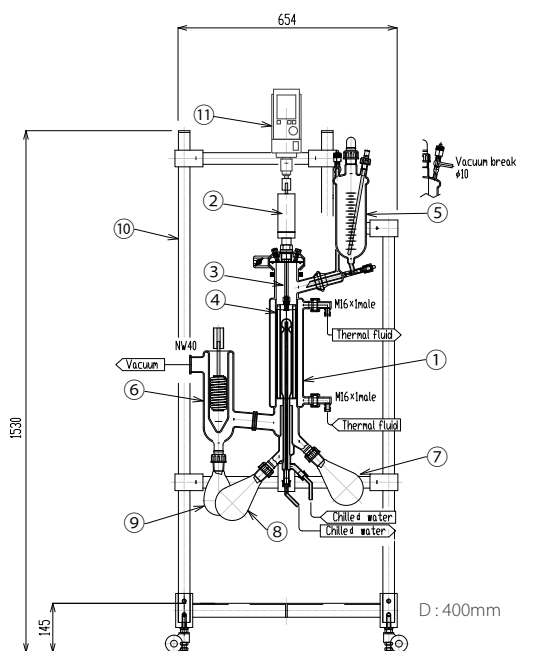
No.	Equipment	DN 60	DN 100
1	Jacketed Evaporator	ID 60 mm Evaporation Surface Area: 0.05 m ²	ID 100 mm Evaporation Surface Area: 0.1 m ²
2	Magnetic Seal with Cover	Torque: 1.1 Nm, Cover: SS316	
3	Stirrer Shaft	SS316	
4	Wiper	PTFE Wiper: +200 °C (Polybenzimidazole Wiper: +300 °C)	
5	Feed Vessel	Feed Vessel: 1000 mL Vent Valve: φ10 Thermometer Pocket, SQG 14/25, φ 8, 245(L) Cap, SQG 29/32 Needle Valve, NGTV-12L	Feed vessel: 2000 mL Vent valve: φ10 Thermometer Pocket, SQG 14/25, φ 8, 330(L) Cap, SQG 29/32 Needle Valve, NGTV-12L
6	External Condenser	Thermal Transfer Area: 0.1 m ² Thermometer Pocket: SQG 14/25, φ 8 Water Connectors x 2: φ 8	Thermal Transfer Area: 0.2 m ² Thermometer Pocket: SQG 14/25, φ 8 Water Connectors x 2: φ 8
7	Receiver for High Molecular Weight	1000 mL, Borosilicate glass 3.3	2000 mL, Borosilicate glass 3.3
8	Receiver for Low Molecular Weight	1000 mL, Borosilicate glass 3.3	2000 mL, Borosilicate glass 3.3
9	Adapter	Adapter: SQG 34/45, NW25 Thermometer Pocket: SQG 14/25	
10	Structure	W 654 x D 400 x H 1530 mm, SS + Epoxy coating	
11	Motor	Optional	

* Continuous feed configurations are also available. Please contact AGI.

* All O-rings are consumables parts.

* Overhead stirrer motor is not included.

Short Path Evaporator



Jacketed Evaporator : DN 60

No.	Equipment	DN 60	DN 100
1	Jacketed Evaporator	ID 60 mm Evaporation Surface Area: 0.05 m ²	ID 100 mm Evaporation Surface Area: 0.1 m ²
2	Magnetic Seal with Cover	Torque: 1.1 Nm, Cover: SS316	
3	Stirrer Shaft	SS316	
4	Wiper	PTFE Wiper : +200 °C (Polybenzimidazole Wiper: +300 °C)	
5	Feed Vessel	Feed vessel: 1000 mL Vent valve: φ10 Thermometer Pocket, SQG 14/25, φ 8, 245(L) Cap, SQG 29/32 Needle Valve, NGTV-12L	Feed vessel: 2000 mL Vent Valve: φ10 Thermometer Pocket, SQG 14/25, φ 8, 330(L) Cap, SQG 29/32 Needle Valve, NGTV-12L
6	Trap	DN 50, 200 H, NW 25, Borosilicate glass 3.3	DN 50, 200 H, NW 40, Borosilicate glass 3.3
7	Receiver for High Molecular Weight	500 mL, Borosilicate glass 3.3	1000 mL, Borosilicate glass 3.3
8	Receiver for Low Molecular Weight	500 mL, Borosilicate glass 3.3	1000 mL, Borosilicate glass 3.3
9	Receiver	300 mL, Borosilicate glass 3.3	500 mL, Borosilicate glass 3.3
10	Structure	W 654 x D 400 x H 1530 mm, SS + Epoxy coating	
11	Motor	Optional	

* Continuous feed configurations are also available. Please contact AGI.

* All O-rings are consumables parts.

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