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We are a young, professional and creative team;

We are a customer-centric and responsible team.

Our mission: make your research more accurate and efficient.

Our vision: Become the world's most competitive lab solution provider.

Our value: Sharing & win-win, customer success, be thankful, keep growing, innovation and responsible.

**We believe TOPTION will be your TOP OPTION!**

*Welcome !*



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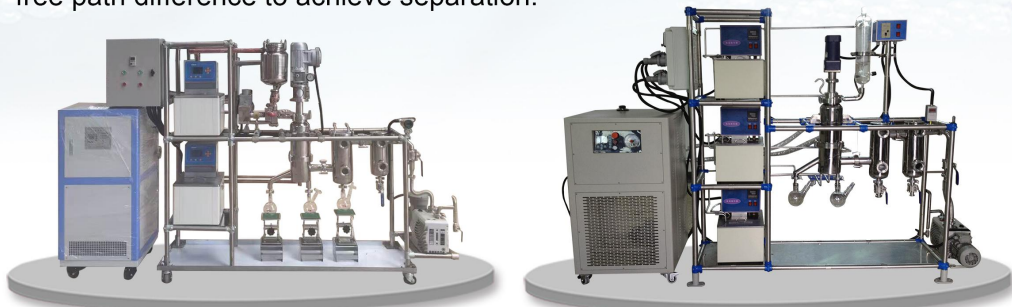


**LAB SOLUTION PROVIDER**

Short Path Molecular Distillation System

## Short Path Molecular Distillation System

Short Path (Molecular) Distillation system is a special liquid-liquid separation technology, which is different from the traditional distillation by boiling point difference separation principle, but by different substances molecular movement of the average free path difference to achieve separation.



### Technical specification

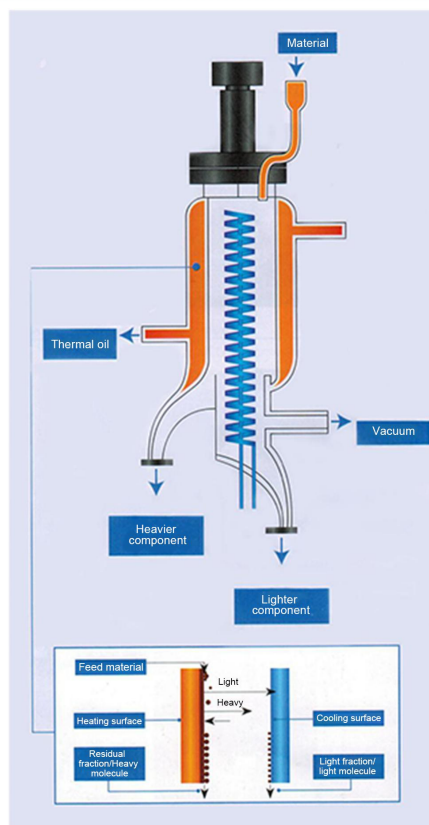
Model	Evaporator area (m <sup>2</sup> )	Condenser area (m <sup>2</sup> )	Capacity (L/h)
MDS-6A MDS-6B MDS-6C	0.06	0.10	1-3
MDS-10A MDS-10B MDS-10C	0.10	0.15	5-12
MDS-20A MDS-20B MDS-20C	0.20	0.40	10-25
MDS-30B MDS-30C	0.30	0.50	18-30
MDS-50B MDS-50C	0.50	2.00	20-60

#### Note:

"A" – Pressure differential feeding method.

"B" – High precision gear pump feeding mode.

"C" – High precision gear pump feeding & discharging.



A complete molecular distillation plant should include:

Short path evaporator	Heating system
Material charging system	Cooling system
Material collection unit	Vacuum system

### Features of TOPTION molecular Distillation

- Full jacketed layer insulation for all pipelines which the materials flow through. Ensure there will be no solidification which will affect material's separation.



- High precision gear pump feeding material (optional)

Material feeding & discharging both are continuously and stably. The materials output from gear pump is the distillation materials under current conditions, conducive to online quality tracking.

- Dual external cold trap design (optional)

Make this equipment has the function of molecular distillation & thin film evaporation at the same time. Though only 1 set equipment to complete the multistage effect of film degassing and molecular distillation separation.





- **Reliable quality vacuum pump**

Air inlet with check valve, vacuum pump oil does not suck-back. Long service life, ultimate vacuum is low.



- **Professional heating & cooling system**



## Molecular distillation complete case



## Application of molecular distillation

Applied industry	Examples of the species of refined products
Food	Monoglycerides, palm oil, tocopherol, fish oil, rice bran oil, fatty acids and their derivatives, dienoic acid, Vegetable oil, diglycerides, glutamate, cream, lactic acid, linseed oil, dimer acid, etc.
Pharmaceutical	Acyl chloride, amino acid ester, vitamin E, glucose derivative, terpene ester, natural or synthetic vitamin, beta-carotene, gingerol, capsicum pigment, etc.
Chemistry	Advanced alcohols, glycerides, herbicides, halogenated alkanes, pesticides, silicone oils, waxes, fatty acids, etc.
Plastic industry	Epoxy resin, epoxidated oil, isocyanate, plasticizer, stabilizer, polyether and polyether polyol, etc.
Petroleum industry	Base oil, bright oil, lubricating oil, vaseline, fir oil, residual tar, etc.
Cosmetic industry	Lanolin fatty acid, lanol, including algae, roots of plants, extract of capsicum, high fat ester, turmeric essential oil, dry ginger essential oil, etc.

