

**Kurzweg
Verdampfer**

**Short Path
Evaporator**

طراحی
ساخت
راه اندازی

اوپراتور

*Thin Film
Short Path
Wiped Film*



**MTSP
TECH**

We live process engineering
and special manufacturing

اوپراتور فیلم نازک - تکنولوژی MTSP :

ابزاریست برای تبخیر یا تغلیظ کردن مایع با نقطه جوش های متفاوت به کار می رود. این ماشین جز ماشین آلات پیشرفته و پر کاربرد در صنایع مختلف از جمله صنایع شیمیایی ، غذایی و دارویی و ... است.

اوپراتور Short Path ما مخصوص تولید مواد با خلوص بالا و تولید مواد بسیار حساس به حرارت و ترکیبات با وزن مولکولی بالا مناسب است.

– استاندارد طراحی روز دنیا ، قابل رقابت با برندهای درجه یک اروپایی و آمریکایی

– پشتیبانی پس از فروش ۱۰ ساله ، تامین لوازم مصرفی، آموزش ، تجربه ۱۰ سال کار با ماشین تین فیلم اوپراتور

– سفارشی سازی براساس نیاز مشتری – جنس ۳۰۴ ، ۳۱۶ ، ...

– رکودردار با ترین می ۱ سانت ، تامین ، راه اندازی ماشین تین فیلم اوپراتور در صنعت تصفیه روغن کارکرده (۲۰ ماشین)

Product Application For The Wiped Film Evaporator

The WFE is ideally suited to process hard-to-handle, heat-sensitive and viscous materials. These are just some of the many and varied products that are processed by WFEs.

**Chemicals**

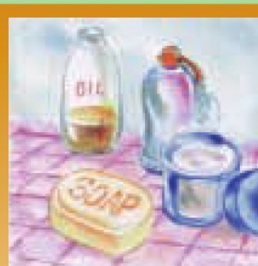
Acid chlorides, amino-acid, bisphenol, caprolactam, chlorinated hydrocarbons, cumene hydrogen peroxide, acetic acid, dimethyl sulfoxide, dioctyl phthalate, dyes, ethanolamines, glycols, insecticides, petroleum sulfonates, plasticizers, urea, solvents, acrylates, isocyanates, herbicides, EPDM silicone oils

**Polymers & Resins**

Epoxy resins, latex, synthetic rubber, polystyrene, phenolic resins, adhesives, resin co-polymers, silicone polymers, urethane pre-polymers, styrene monomer

**Pharmaceuticals**

Amino acids, alkaloids, ascorbic acid, biochemicals, penicillin, Vitamin E, Vitamin C, steroid derivatives

**Fats & Oils**

Cotton seed oil, dimer and trimer acids, edible oils, fatty acids, glycerides, glycerin, mineral oils, paraffin, rosin acids, tall oil, fatty amides, palm oil

**Food**

Tomato paste, fruit nectars, chicken stock, fish protein, vanillin, corn syrup, whey, fruit purees, lecithin, marigold extract, milk solids

**Other**

Coal tar products, dye-stuffs, fire retardants, rubber coatings, paint wash solvents, lube oils, pitch petroleum wax, pyrethrum, PTA, catalyst concentration (2-EH)

Advantages

Our short path evaporator offers following advantages:

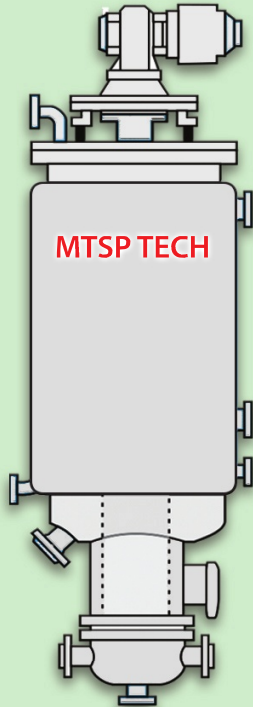
- Low residence time
- No liquid hold-up
- Very low pressure drop
- Suitable for extremely heat-sensitive products
- Suitable for evaporation of components with very high boiling points

Wiped Film Evaporator Design Styles

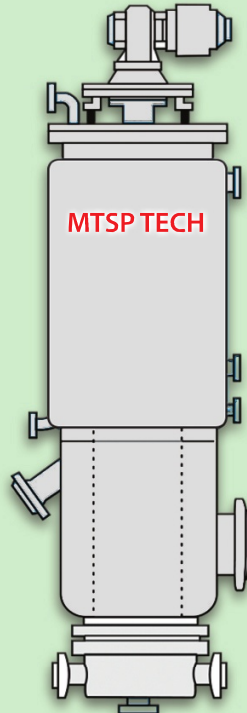
اوپراتور فیلم نازک (پاک کن دار)
مدل های طراحی و کاربرد

Wiped Film Evaporator

مواد حساس ، شیمیایی ، دارویی
غذایی ، بهداشتی، آزمایشگاهی
بازیافت روغن کارکرده

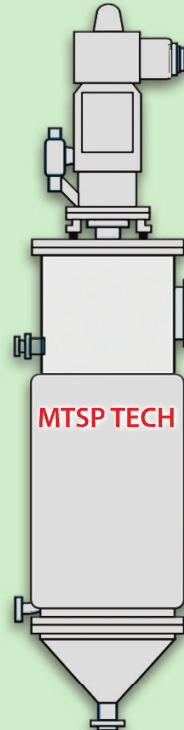


مواد حساس ، شیمیایی ، دارویی، غذایی
بهداشتی، آزمایشگاهی



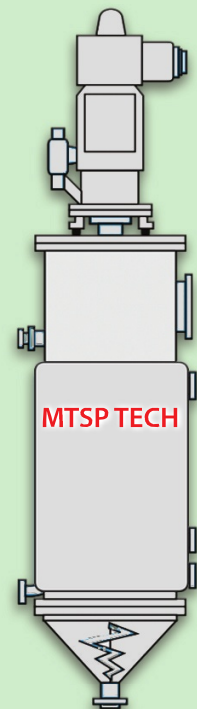
Thin Film Evaporator

شیمیایی ، دارویی، غذایی ، بهداشتی
آزمایشگاهی



Thin Film Evaporator

مواد با ویسکوزیته بالا و غلیظ



Our Short path evaporator is specifically suited to produce high purities and yields for extremely heat-sensitive substances and compounds with a high molecular weight

Our Wiped film evaporator is the ideal apparatus if you need a continuous processing of your heat-sensitive, viscous and/or fouling products

Standard Vacuum Co-Current Design

Applications:

General chemicals and pharmaceuticals, solvent recovery, waste streams, food and oil re-refining.

Operations:

Stripping, concentration, dehydrating of moderately viscous and heat sensitive materials.

High Vacuum Co-Current Design

Applications:

High purity chemicals, vitamin E, resins, waxes, plasticizers, and high boilers.

Operations:

Stripping, concentration, deodorization, separation and purification of moderately viscous and heat sensitive materials requiring high vacuum operations.

Top Vapor Outlet Counter-Current Design

Applications:

- General chemicals and pharmaceuticals, solvent recovery, waste streams, food
- Used as reboiler for fractionation columns

Operations:

- Distillation, concentration, dehydrating of delicate materials requiring complete removal of volatile phase to less than 1% remaining in product residues

High Viscosity Counter-Current Design

Applications:

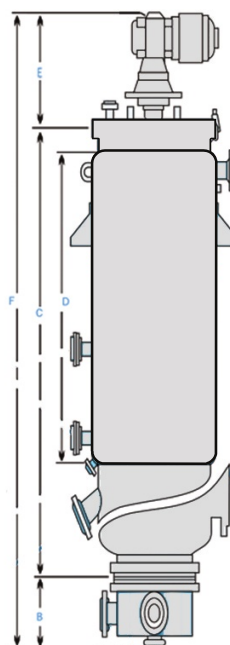
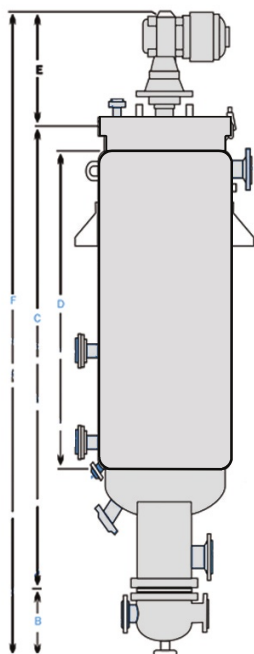
High viscosity or hard-to-handle polymers, general chemical, coating, waste streams, and food.

Operations:

- Concentrations of moderate to very highly viscous products

Specification for Alloy Units

Evap. Surface No. Area	Internal Volume Area
Sq.m	Sq.m
0.1	0.34
0.4	0.65
0.4	1.77
0.8	1.11
0.8	2.55
1.2	1.55
1.2	3.25
2.3	3.5
2.3	11.25
4.75	7.0
4.75	16.0
7.2	10.5
7.2	20
9.5	14
9.5	25.5
16.2	24.6
16.2	41.8
21.5	32.5



OPERATING CONDITIONS			
Operating Basis	*Continuous	*Batch	
*Delete as appropriate		No. hours	
Operating Temperature (°C)	Max Operating Temperature (°C)		
Operating Pressure (Bar)			

UTILITIES AVAILABLE				
	Type	Quality	Pressure (Bar)	Temperature (°C)
Heating Medium	Steam/Hot Oil*			
Cooling Medium	Water/Refrigerant*			
Power	Phase	Hertz		Volts V

EVAPORATOR INFORMATION				
Type required	Wiped Film with	External condenser <input type="checkbox"/>	Internal condenser <input type="checkbox"/>	
Location	*Indoor/Outdoor			
Classification	Zone		Group	
Available Floor Space	Width (m)		Height (m)	

ADDITIONAL INFORMATION / MISCELLANEOUS
e.g. Health Hazards, corrosive nature etc. (attach MSDS sheets if available), speciality items/equipment, design criteria, further instrumentation, piping etc. (Please add additional sheets as required)

MATERIAL OF CONSTRUCTION			
Wetted Parts:	Stainless Steel	SS304 <input type="checkbox"/>	SS316 <input type="checkbox"/>
	Hastalloy	C276 <input type="checkbox"/>	C22 <input type="checkbox"/>
	MSGI	<input type="checkbox"/>	
Others (Please Specify)			
Nonwetted Parts:	Carbon Steel	<input type="checkbox"/>	
	Stainless Steel	SS304 <input type="checkbox"/>	SS316 <input type="checkbox"/>
	Others (Please Specify)		

بهاران پالایش سبز پارسیان
BAHARAN PALAYESH SABZ PARSIAN

مدیریت : مهندس علیرضا ابوطالبیان ۰۹۱۲۷۱۳۵۵۲۵
تلفن دفتر مهندسی : ۰۳۸۳۲۲۶۲۲۴۳ - ۰۲۱۹۱۰۱۲۲۰۲
نمبر (فکس) ۰۲۱۸۹۷۷۴۹۳۹

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CONTACT DETAILS	
Name:	Designation:
E-mail:	Mobile No.:

COMPANY INFORMATION	
Company:	
Address:	
State:	Zip Code:
Tel.:	Fax:

APPLICATION / OBJECTIVE	

PERFORMANCE SPECIFICATIONS				
	M.Wt	Feed	Top Product	Bottom Product
Composition (List Each Component, Molecular Weight (M. Wt) & Weight % of Total)	1			
	2			
	3			
	4			
	5			
Flow Rate (Kg/hr) - Max/Min				
Temperature (°C)				

PHYSICAL PROPERTIES			
	Feed	Top Product	Bottom Product
Specific Gravity			
Viscosity (Poise)			
Specific Heat (KJ/Kg °C)			
Latent Heat of Vaporisation (kJ/kg)			
Thermal Conductivity (W/m °C)			
Melting Point (°C)			
Decomposition Temperature (°C)			
Temperature of Vaporisation for above Data (give temp. and/or pressure Conditions at two points)			