

Global Hemp Solutions

1000L Low Temperature Ethanol Extraction System

Product	Model	Unit	Qty	Capacity	Unit Price (USD)	Note
Low Temperature Ethanol Extraction Machine	HST1000	set	1	1000Liters	\$1,400,000.00	FOB Shanghai

1. Customer requirements & design instructions

- A. Raw materials: Hemp, 40mesh
- B. Solvent: Ethanol of 95% (food grade)
- C. Feeding device: Automatic feeding system

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- D. Extraction temperature:-70C
- E. Filtration and De-color
- F. Evaporation temperature:≤50℃
- G. Electric Low-temperature steam generator:2000L
- H. Evaporation capacity:First recovery 1000L/h,Ethanol of 95%;Second recovery 100L/h80% ethanol
- I. Material:SUS304
- J. Power supply:480V 60Hz 3PH
- K. Excluding installation costs
- L. Installation site:USA

2. Make -up of machineries

- A. Feeding device
- B. Liquid Nitrogen deep-cooling
- C. Extraction
- D. Filtration
- E. De-color
- F. First recovery
- G. Second recovery
- H. Vacuum
- I. Electric heater
- J. Water tower

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- K. Electric control
- L. Platform/pipeline/cable
- M. Spar parts

3. The function of each part

- ◆ Feeding device:automatic feeding system save labor costs.
- ◆ Liquid Nitrogen deep-cooling:cool 2000L 95% alcohol from normal temperature 20C to -75 C, cycle refrigeration;Control liquid nitrogen.
- ◆ Extraction:extract CBD/THC from biomass,the extraction temperature is -70C.In this way,the fat and wax will be precipitated.
- ◆ Filtration:remove the impurity from extracts,such as fat,wax and other impurity.
- ◆ De-color:remove other colors from the extract
- ◆ First recovery:evaporate most of ethanol in the whole system.
- ◆ Second recovery:Evaporate the rest ethanol,in this way can prevents the extract from sticking too thick and sticking to the evaporator.
- ◆ Vacuum:Provide a vacuum environment for the whole system.
- ◆ Electric heater:provide steam to evaporate ethanol in the whole system.
- ◆ Water tower:cool the water for cooling the ethanol.
- ◆ Electric control
- ◆ Platform/pipeline/cable
- ◆ Spar parts

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4. Machineries list

Unit Name	Design Notes	Equipment Name	Model	Type	Brand	Material	Quantity	Total power	Unit power	Carbon steel	Head	Spare part
Feeding device		Hopper and feeder	1m3				1	1.1	1.1			
		F.C.	1.1				1					
Liquid Nitrogen deep-cooling		Solvent storage tank	3000L	Insulated	SINOBEST	304	1				4333	290
		Circulation heat-exchanging pump	Q=5m3/h H=30	Magnetic	YONGYU	304	1	4	4			
		Solvent pre-cooling tank	2000L	Insulated	SINOBEST	304	1					
		Liquid Nitrogen tank					1					80000
	Cool 1000L 95% alcohol from normal temperature 20 ° C to -75 ° C, cycle refrigeration	Deep-cold Exchanger	18.4m2	Braid	Poland	316L	1					

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	Control liquid nitrogen	Deep-cold hand-valve	DN25	Deep-cold	SAMSON	316L	1					
		On-line Thermometer		Deep-cold	SAMSON	316L	1					2850
		Circulation deep-cooling pump	Q=5m3/hH=18m	Canned		304	1	1.5	1.5			
Extraction		Tank extractor	1000L	Air control discharge+agitator		304	1	3	3		3950	48560
		F.C.	3				1					
Filtration		Filter	400			304	1					
		Extracts storage tank	2000L	Vacuum+jacket+agitator		304	1	3	3		8200	15584
De-color		Pump	Q=5m3/h H=32	Magnetic		304	1	4	4			
		Carbon feeder				304	1				100	220
		Mix tank	2000L	Vacuum+jacket+agitator+insulated		304	1	3	3		9870	15584
		Separator tank	100L	Air control discharge			1				461	1866
		Fine filter	400			304	1					

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		Fitered storage tank	2000L	Vacuum+insulated		304	1				6657	920
First recovery	1000L/h95% ethanol	Evapoating tank	3000L	vacuum+shower		304	1					
		Vacuum meter				304	1					
		Thermometer				304	1					
		Cycling evaporation pump	Q=50m3/h H=30m	Magnetic		304	2	22	11			
		F.C.	11				2					
		Heat exchanger	10 m²			304	2					
		Condenser	50 m²			304	1					
		Recovery tank	1000L	vacuum vessel		304	1					
Second recovery	100L/h80% ethanol	Ball evaporator	1100L	Vacuum+jacket+agitator		304	2	15	7.5			
		Thermometer				304	2					
		Vacuum meter					2					
		Separator of preventing overflow	10L			304	2					
		F.C.	7.5				2					

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		Condenser	6m2			304	2						
		Recovery tank	300L	vacuum vessel		304	2						
Vacuum		Vacuum pump	64m3/h			304	1	2.2	2.2				
		Auto-valve	DN40			304	1						
		Buffer tank	100L	vacuum vessel	SINOBEST	304	1						
		Circulation water tank	100L			304	1						
		Condenser	2m2			304	1						
		Plate exchanger	2m2			304	1						
Electric heater		Electric Low-temperature steam generator	2000L	vacuum vessel		304	1	300	300				
		Vacuum meter				304	1						
		On-line level meter				304	1						
		On-line Thermometer				304	1						

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Water tower		Circulation water-cooling pump	Q=50m3/h H=30m			304	1	11	11			
		Water tower	50m3/h				1	1.5	1.5			
Electric control		Transformer	300KVA				1					
		Transformer	80KVA				1					
		Control cabinet					1					
		Local-switch					10					
		sum=						371.3				
Platform/pipeline/cable		Extractor Platform				304						
		Evaporator Platform				304						
		Valve, pipeline and connectors	Quick connect			304						
		Cable and protector										
		Package										
		Loading										
Spar parts		Mechanic sealing	For pump				1		piece			

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	Mechanic sealing	For tank				3		piece			
	Soft pipe fitted with steel silk	φ38				3		meter			
	Hoop	φ38			304	10		piece			
	Hoop	φ51			304	2		piece			
	Hoop	φ76			304	2		piece			
	Pipe Glass	φ38				3		piece			
	Pipe Glass	φ51				2		piece			
	Pipe Glass	φ76				1		piece			
	Window glass	φ165				4		piece			
	Electric heating pipe	25kw				10		piece			
	Deep-cold seals							piece			
	gasket seal	φ38			Silicone Rubber	15		piece			
	gasket seal	φ76			Silicone Rubber	2		piece			
	gasket seal	φ51			Silicone Rubber	10		piece			

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5. Facilities and equipment must be needed

The Buyer must buy and construct the following machineries and facilities to let the whole machineries work.

- 1 Cutting or grinding devices for the raw material.
- 2 Washing water supply.
- 3 Electrical supply.
- 4 Liquid nitrogen

6. Trade terms

◆ Payment Term:

50% prepayment; the balance paid before shipping.

◆ Delivery Time:

75 days after prepayment received;

◆ Quality guarantee:

One years after shipment excluding the wearing and tearing parts;

◆ Spare parts:

Supply enough spare parts to cover one-year use;

◆ Validity of the quotation:

This quotation is valid for one month;

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V. Our company

Global Hemp Solutions is your all inclusive post-harvest processing and extraction equipment provider. We have partnerships with some of the world's largest and best manufacturers. We not only provide you with the best equipment to help make you successful, we are there every step of the way even after the installation of the equipment. We value long term relationships and are truly here to serve you.



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All prices and shipping times subject to change. Please contact us for updated lead times and pricing.



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