NES Company Inc. Process Vacuum Skids and Tailor-Made Solutions

NES Company Inc. boasts over 20 years of experience in the vacuum world serving plants and facilities in Food, Energy, Chemical, Petrochemical, Pharmaceutical, Medical Health Services, Composites, Automotive, Aerospace, Sugar, Papermaking, Cheesemaking, and much more!



NES Company Inc. delivers the most reliable, efficient, and safe engineered-toorder solutions available in the market.



*Installation support is available.

Our engineered skids span across technologies such as:

- Liquid Ring Compressors
- Air & Steam Ejectors
- Vacuum Boosters
- Roots Type Blowers
- Liquid Ring Vacuum Pumps
 - Flat Pate
 - Conical Lobe
 - Single Stage
 - Two-Stage
- Oil-Flooded Rotary Vane Vacuum
 Pumps
- Dry Screw Vacuum Pumps
- Two-Stage Rotary Vane Vacuum Pumps

		APPL	ICATION	-BASE	D PRC	DUCT SELECTIC	ON G	UIDE			
Typical Applications	LRVP	Ejector	Compressor	Hybrid	Dry Screw	Typical Applications	LRVP	Ejector	Compressor	Hybrid	Dry Screw
CH	IEMICAL	& PETRO	HEMICAL	•	•	WATER TREATMENT					
Reactor Vacuum	Х	х		х	х	Vacuum Filters	Х				
Vacuum Distillation	х	х		х	х	Digester Gas Recirculation			Х		
Evaporator Vacuum	х	х		х	х			STEEL		•	
VCM Recovery	х		х			Degassing		Х		х	
Vacuum Filtration	х		х			Vacuum Filtration	Х				
Explosive & Corrosive Gas Compression	x		x			FOOD & BEVERAGE			1		
Solvent Recovery	Х				х	Cookers	Х				
Drying	х		х			Bottling	Х				
Extrusion	х					Sterilizing	х				х
	P	ETROLEUN	1			Deodorizing	Х	х		х	
Vacuum Distillation	Х	х		х		Bleaching	Х	х			
Vent (Fuel) Gas Compression	x		x			Drying	x	x			
Dewaxing Filters	x		X			Evaporating	х	х		х	x
Crude Stabilization	X					Distilling	Х	X		20	
	PHA	RMACEUT	CAL	K O		Rendering	X	10			
Drying	X	1 22		X	х	Freeze-Drying				1	Х
Reactor Vacuum	x		1.3	x	х	Vacuum Pans	X				
Distillation	X	3/		x	х	Vacuum Filters	X				
Evaporation	х	1		x	x	Milking	Х	-		1	
Crude Stabilization	х					Eviscerators	Х	1 10	1. 1. 19		
	EL	ECTRONIC	S	100		Gas Compression	12.3		Х		
Chucking (Process Vacuum)	X				x	Packaging	X	A			
Deaeration	x			x				GENERAL		1	
		MINING				Central Vacuum	Х				Х
Vacuum Filtration	х					Extruding	х				
Methane Drainage	x			1		Sterilizers	x	1			x
Glass Forming	x					Drying	x				
	I	1	1	1	1	Chucking	x				
						Packaging	x				
						Glass Forming	x	+			

Documentation:

Bare Pumps are tested with Pneurop 6612/1984, BS 1571-Part 2, Nash Orifice method and other standards, available with the package.

Majority of NES Pumps are made from API Approved foundry.

Configurations	System Metallurgy		
Simplex	Cast Iron		
Duplex	Stainless Steel 304		
Triplex	Stainless Steel 316		
Quadruplex	Duplex Steel		
	Carbon Steel		
	Bronze		



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Coupling Configuration	Liquid Ring System Configuration	Mechanical Seal Variations		
V-Belt	Once-Through	Single Component		
Dir <mark>ect C</mark> oupling	Partial Recovery	Single Cartridge		
G <mark>ear D</mark> riven	Full Recirculation	Dual Cartridge w/ Seal Pot		
Variable Frequency Drive	Hybrid Skid			





NES Company Inc. Hybrid Custom Skids include systems that combine vacuum equipment such as that pictured above, in a vacuum pump – air ejector configuration and vacuum booster-dry screw configuration. **6G Certified Welding** is guaranteed on all systems, such as that shown below.



Electricals encompass TEFC, all NEMA and IEC, IP54, IP55, in 230-460V/110-120V, 1/3 Phase 50/60Hz, with or without VFD.

 Control panels of NEMA 4X to 12X according to the needs of each site of installation.

Preferred Manufacturers Include: Baldor,WEG,Marathon,Lesson and others.





From 20-60000 CFM, 3-29.9" Hg Vacuum and from 5-100 PSI Compression.

We offer both process vacuum systems and engineered solutions including but not limited to:

Process Vacuum Systems	Dry Screw Process Vacuum Systems available as skid		
Solvent Recovery Systems	Distillation		
Boosted Liquid Ring Systems	Evaporation		
Hybrid Jet Liquid Ring Systems	Reaction		
Oil-Sealed Liquid Ring systems	Drying		
Dehydration Systems	Pervaporation		
Gas Phase MSDU	Refrigeration		
Liquid Phase MSDU	Degassing		
Membrane Dehydration Systems	Molecular Distillation		
Flash Evaporation Systems	Concentration		
Methanol Recovery Systems	Freeze-Drying		
Ethanol Dehydration	Crystallization		
Isopropyl Alcohol Dehydration	Filtration		
Methanol Dehydration	Vacuum Pressure Impregnation (VPI)		
Soil Vapor Extraction	Adsorption		
Vacuum Deaeration	Absorption		
Vacuum Degassing	Desorption		
Vacuum Deposition	Deodorization		
Vacuum Distillation	Chemical Process		
Vacuum Drying	Pharmaceutical Process		
Vacuum Evacuation	Petrochemical Process		
Vacuum Extrusion	Food Process		
Vacuum Filtration	Vapor Recovery Unit (VRU)		
Vacuum Flash Cooling	Coating		
Vacuum Impregnation	Vacuum Casting		
Vacuum Priming	Vacuum Furnace		
Vacuum Sterilization	Central Vacuum		

Enclosures constructed for any environmental control situation, including but not limited to:

Sound enclosures
Barrier walls
Thermal enclosures
Generator and compressor enclosures



System Intake and Discharge are ANSI Class 150/300 Flanged Connections. Instrumentation and all fluid elements are US-made.

Sealing fluids for liquid ring vacuum pumps vary greatly and include but are not limited to:

Water	Oils	Solvents		
	Synthetic	Sulfuric Acid		
	Mineral	Methanol		

NES Company Inc. offers technical support in the form of:

Startup Assistance
Genuine Spare Parts
Annual Maintenance
Preventative and Corrective Maintenance
Troubleshooting assistance
Fiberscope Inspection On-Site

Recommended spare parts list:

Repair Kits
Impellers
Cones / Port Plates
Fluid Parts
Mechanical Seals
Bearing Sets

