

ISO9001:2008

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Alternate Energy Systems, Inc.

A Company devoted to Your Energy Needs

Pricelist December 2009

Vertical Water Bath Vaporizers

Steam Vaporizers

Vertical Steam LPG Vaporizers

Model Numbers:	VSV-200	VSV-1000
	VSV-300	VSV-1500
	VSV-400	VSV-2000
	VSV-800	VSV-2500
		VSV-3000

Vertical Water Bath Vaporizers

Model Numbers:	VWB-400	VWB-2000
	VWB-800	VWB-3000
	VWB-1200	VWB-4000
	VWB-1600	VWB-5000
		VWB-6000

This price list supersedes the price list of July 2008 and all previous price lists. Prices shown in this list are believed to be accurate at the time of printing. They are given for standard equipment, standard options, and standard product configurations. All sales are subject to the terms and conditions as shown on page 16 of this price list. Please contact the factory or your nearest authorized AES distributor for a price quote and current delivery times. **Prices and product configurations are subject to change without notice.**

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Vertical Circulating Water Bath Vaporizers

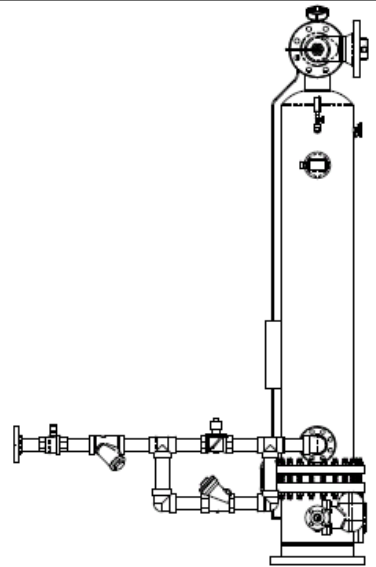
Alternate Energy Systems offers a complete line of circulating hot water vaporizers in capacities from 200 gallons per hour to 3000 gallons per hour. The steam tube is of multi-pass design to transfer the maximum heat to the liquid. The tube bundle and all propane piping conform to Section VIII, Division I of the latest edition of the ASME Boiler and Pressure Vessel Code. The pressure vessel carries the ASME "U" stamp and is National Board registered.

The prices shown below include dual liquid carryover protection through an ultrasonic liquid level transmitter in the pressure vessel, and "smart" liquid carryover protection with Rosemount pressure transmitter and temperature transmitter in the vapor outlet; and liquid inlet valve (solenoid valve). Temperature gauges in water inlet and outlet, and in pressure vessel shell and vapor outlet are standard.

Vaporizer design, wiring, controls, and electrical components and their installation comply with the latest editions of NFPA #58 and NFPA #70.

All safety devices of the vaporizer, including the dual liquid carryover protection, are monitored by a programmable logic controller (Allen-Bradley MicroLogix), which is connected to a color LCD display with Touch Screen Operator Interface. The operator interface provides start/stop control for the vaporizer; it displays the system status, and any failure conditions that may occur, in plain English (with date/time stamp). The electrical enclosure for the PLC and the operator interface are to be installed in a remote, non-classified location. A small explosion-proof enclosure, mounted to the vaporizer, provides local start/stop and alarm reset functions.

Standard lead time on all models is 6 weeks. Actual lead times depend on factory workload and may vary.



Model Number	Nominal Capacity (Propane up to 30/70 Propane/Butane)				Water Flow (185°F / 85°C)		Heat Exchanger Dimensions		Shipping Weight		Price in US-\$
	gph	MMBTU/h	kg/h	MMkcal/h	gpm	l/min	D x H [in]	D x H [mm]	lbs	kg	
VWB- 400	200	18.4	400	46	23	85	Consult Factory				\$ 25,946.00
VWB- 800	400	37	800	93	46	170					\$ 29,221.00
VWB-1200	600	55	1200	139	69	255					\$ 32,759.00
VWB-1600	800	74	1600	185	92	340					\$ 35,850.00
VWB-2000	1000	92	2000	232	115	425					\$ 39,963.00
VWB-3000	1500	138	3000	348	173	638					\$ 50,330.00
VWB-4000	2000	184	4000	464	230	850					\$ 56,719.00
VWB-5000	2500	230	5000	580	288	1063					\$ 60,165.00
VWB-6000	3000	276	6000	696	345	1275					\$ 70,064.00

Water Flow Requirements are based on 185°F (85°C) water temperature and 40°F (22°C) inlet/outlet temperature drop.
Weights and dimensions are approximate. Dimensions are for heat exchanger shell only. Trim and accessories are not included in dimensions.
Specifications are subject to change without notice. Call factory or distributor for price quotation and actual lead times.

Standard Options and Accessories	VWB-400	VWB-800 VWB-1200	VWB-1600 VWB-2000	VWB-3000 VWB-4000	VWB-5000 VWB-6000
Skid Mounting	36"x48" \$1,577.00	36"x48" \$1,577.00	48"x48" \$1,801.00	48"x48" \$1,801.00	48"x48" \$1,801.00
Enclosure (walk-in Maintenance House); includes skid mounting, personnel door, overhead lighting, alarm beacon, and control panel installation in enclosure.	36"x96"x100" \$14,861.00	36"x96"x100" \$14,861.00	48"x96"x100" \$16,469.00	48"x96"x100" \$16,469.00	48"x96"x100" \$16,469.00
Chinese Pressure Vessel Approval (SQL)	\$2,048.00	\$2,616.00	\$3,047.00	\$4,012.00	\$4,821.00
Ethernet Adapter for System Control Panel.	Standard on all VWB-models. Siemens S7-1200 PLC or Allen-Bradley MicroLogix-1100, both with integrated Ethernet Interface and high-resolution (800x480) color LCD display with touch screen operator interface.				
Remote Access, Siemens	Siemens S7-1200 with 6-inch (320x240) Siemens Touch Panel with built-in Web Server for Monitoring and Control through standard web browser; no special software required. \$ 2,792.00				
Remote Access, Allen-Bradley	Factory Talk View ME Station; Software with single license for remote access to systems with Allen-Bradley PLC. \$ 3,575.00				
Deduct for Standard Controls	-\$5,124.00 no PLC or Operator Interface; no "smart" Liquid Carryover Protection; standard Start/Stop Station only.				

Vertical Steam Vaporizers

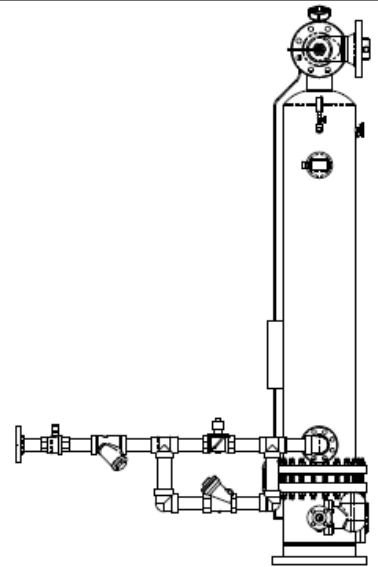
Alternate Energy Systems offers a complete line of vertical steam vaporizers in capacities from 200 gallons per hour to 3000 gallons per hour. The steam tube is of multi-pass design to transfer the maximum heat to the liquid. The tube bundle and all propane piping conform to Section VIII, Division I of the latest edition of the ASME Boiler and Pressure Vessel Code. The pressure vessel carries the ASME "U" stamp and is National Board registered.

The prices shown below include steam temperature regulator; dual liquid carryover protection through ultrasonic liquid level transmitter in the pressure vessel, and "smart" liquid carryover protection with Rosemount pressure transmitter and temperature transmitter in the vapor outlet; liquid inlet valve (solenoid valve); steam trap; and steam back check valve. Temperature gauges in steam inlet and outlet, and in pressure vessel shell and vapor outlet are standard.

Vaporizer design, wiring, controls, and electrical components and their installation comply with the latest editions of NFPA #58 and NFPA #70.

All safety devices of the vaporizer, including the dual liquid carryover protection, are monitored by a programmable logic controller (Allen-Bradley MicroLogix), which is connected to a color LCD display with Touch Screen Operator Interface. The operator interface provides start/stop control for the vaporizer; it displays the system status, and any failure conditions that may occur, in plain English (with date/time stamp). The electrical enclosure for the PLC and the operator interface are to be installed in a remote, non-classified location. A small explosion-proof enclosure, mounted to the vaporizer, provides local start/stop and alarm reset functions.

Standard lead time on all models is 6 weeks. Actual lead times depend on factory workload and may vary.



Model Number	Nominal Capacity (Propane up to 30/70 Propane/Butane)				Steam Consumption (max 400°F / 204°C)		Heat Exchanger Dimensions		Shipping Weight		Price in US-\$
	gph	MMBTU/h	kg/h	MMkcal/h	lbs/hr	kg/hr	D x H [in]	D x H [mm]	lbs	kg	
VSV- 200	200	18.4	400	46	200	91					\$ 28,938.00
VSV- 400	400	37	800	93	400	182					\$ 32,212.00
VSV- 600	600	55	1200	139	600	272					\$ 36,496.00
VSV- 800	800	74	1600	185	800	363					\$ 39,587.00
VSV-1000	1000	92	2000	232	1000	454					\$ 45,570.00
VSV-1500	1500	138	3000	348	1500	681					\$ 55,938.00
VSV-2000	2000	184	4000	464	2000	908					\$ 64,197.00
VSV-2500	2500	230	5000	580	2500	1135					\$ 67,641.00
VSV-3000	3000	276	6000	696	3000	1362					\$ 77,541.00

Consult
Factory

Steam Consumption is directly proportional to momentary load (example: if vaporizer is used at 50% nominal capacity, it consumes only 50% of max. steam consumption).
Weights and dimensions are approximate. Dimensions are for heat exchanger shell only. Trim and accessories are not included in dimensions.
Specifications are subject to change without notice. Call factory or distributor for price quotation and actual lead times.

Standard Options and Accessories	VSV-200	VSV-400 VSV-600	VSV-800 VSV-1000	VSV-1500 VSV-2000	VSV-2500 VSV-3000
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Terms and Conditions, Warranty Information

The following are the standard terms and conditions of Alternate Energy Systems, Inc. for **domestic** customers. Actual terms and conditions for a specific order may have adjusted language and may be attached to the acknowledgement of the purchase order. Contact Alternate Energy Systems, Inc. for terms and conditions for export orders.

Acceptance:

Where these terms and conditions are incorporated in a proposal submitted by Alternate Energy Systems, Inc. ("Seller"), that proposal, together with these terms and conditions, expresses the Seller's entire undertaking and responsibility when the Purchaser's written order is transmitted to the Seller within thirty (30) days from the proposal date, and when the Purchaser's order is accepted by the Seller at its offices. Any previous quotations, agreements, conversations, or understandings, are superseded hereby.

For all other orders, these terms and conditions shall govern the contract between the Purchaser and the Seller. Any deviation from these terms and conditions must be agreed upon by the Seller, in writing. Specifically, the fact that Seller provides product in response to an order issued by the Purchaser, carrying deviating terms and conditions, does not automatically indicate that the Seller has accepted the Purchaser's terms and conditions.

Limited Warranty:

Seller guarantees that all products of its manufacture, sold pursuant hereto, shall be free of defects in workmanship and material, normal wear and tear excepted, for the standard period of one year from date of shipment from Seller. Certain products may carry shorter or longer warranty periods, in effect for these particular products at the time of shipment from the Seller. Commercial items, and other components, such as controls, electric motors, drives, etc., utilized in these manufactured products, are not guaranteed by Seller. Instead, they are covered by, and are subject to, their respective manufacturers' guarantees only. Complete products represented by, distributed by, or purchased and resold in any other manner by, Seller, are not guaranteed by Seller, but will be subject to their respective manufacturer's guarantee.

In the event of defects developing within the Seller's applicable guarantee period under normal and proper use, the Seller will only be obligated to furnish, F. O. B. point of manufacture or the Seller's plant, at its option, without charge, parts required to replace materials found defective; or, at Seller's option, replacement of defective item. Seller or its suppliers shall not be held liable for any further costs or expense, or for indirect or consequential damages, including removal or reinstallation cost, and lost profits. Deterioration or wear caused by chemicals, abrasive action, or excessive heat shall not constitute defects under warranty, unless such conditions are expressly provided for by the Seller, in writing. Products or parts that have been subject to accidental damage, misuse, unauthorized disassembly or alterations, improper installation, lack of proper lubrication, or lack of other service requirements established by the manufacturer, will not be covered by warranty. THE WARRANTY STATED HEREIN IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS, STATUTORY, OR IMPLIED; INCLUDING, WITHOUT LIMITATION, THAT OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

Taxes:

Unless otherwise specifically noted in a proposal, prices quoted by seller do not include any applicable city, county, state or federal taxes. Any of these taxes to which a transaction is subject, are to be borne by the Purchaser, even if collection is required by the Seller.

Applicable Codes:

Seller or any manufacturer it represents, shall not be liable for any expense involved in meeting any federal, state or local codes. Federal codes, such as those represented in OSHA, refer to the employer (Purchaser) and not to the supplier (Seller). They cannot be delegated. However, the Seller will endeavor to help the Purchaser comply with these codes.

Component Equipment:

Seller's sales proposals are based on supplying its chosen make of motors, controls, drives and miscellaneous incidental equipment of the type required. If the Purchaser specifies a particular brand of one of these devices, the Seller reserves the right to charge any additional price involved, and its estimated shipping date is subject to such delays as may be required to obtain any non-stock item.

Shipping:

Seller will use all reasonable care in shipping the equipment and will endeavor to make shipment within the time estimated. However, it assumes no responsibility for loss of, or damage to, the equipment after shipment from its plant, or for unavoidable delays, such as those caused by fire, strikes, carriers, or other causes beyond the Seller's control. Unless instructed otherwise, all shipments will be insured at the buyer's expense and at the net invoice value of the goods.

Erection and Installation:

Seller assumes no responsibility for improper operation of equipment due to faulty erection or installation, when the equipment is erected by the Purchaser or his designates.

Cancellation:

All orders placed with, and accepted by, Seller are firm and not subject to cancellation, except by mutual consent. They are cancelable then only on terms that will indemnify the Seller against any losses incurred.

Claims:

Claims for shortages or damage to merchandise should be made to the transportation company making delivery. Should any piece of equipment prove defective, it will be repaired or replaced under the applicable warranty provided herein. Under no circumstances should any items be returned to Seller or the manufacturer from which Seller procured the item, without prior written Return Goods Authorization from Seller.

If Goods are returned without obtaining Return Goods Authorization, Seller and its associated manufacturers will not be responsible for the cost of repairs made in the field, if they are made without the written agreement of, and specific written instructions from, Seller and the affected manufacturer, if any.

Payment Terms:

Full net payment must reach Seller's office by the 30th day after invoice date. The following finance charges will apply for later payment, unless other agreements exist for that sale only:

The account is subject to a finance charge for late payment of the lower of (A) the maximum allowable rate, or (B) 1½ % per month (Annual Percentage Rate: 18%) on the total past due balance at any time that the past due balance includes any charge remaining unpaid 30 days after the date on which it was billed. There shall be no finance charge under a "Consumer Credit Transaction" as defined under the Federal Truth in Lending Law.

Governing Law:

This agreement has been executed in, and shall be governed by, the laws of the State of Georgia.

Security Agreement and Security Interest:

Purchaser agrees that Seller shall have and retain a security interest in the material furnished pursuant under this Agreement and, if full payment of all sums due is not received by Seller in accordance with the payment terms set forth herein and on the face hereof, Seller shall have the right to enter Purchaser's premises, and any other place where the material may be located, and repossess the material. This right of repossession shall be in addition to, and in no way in limitation of, any rights or remedies Seller may have under law or this Agreement by reason of Purchaser's failure to pay.

Purchaser's Acceptance of above Conditions:

All orders shall be subject to the terms and conditions described above, and to no others, whatsoever. When attached to the Seller's written quotation, this document contains the entire agreement between the parties, and there will be no oral or written understandings, terms or conditions, and Purchaser will not have relied upon any conditions or representation not contained therein. No waiver, alteration or modification of the terms and conditions on this and the other side hereof shall be binding unless in writing and signed by an executive officer or by a duly authorized representative of the Seller.

THE PURCHASER'S RECEIPT OF THE INVOICE SHALL CONSTITUTE AN ACCEPTANCE BY THE PURCHASER OF ALL THE TERMS AND CONDITIONS CONTAINED DESCRIBED ABOVE, AND ANY ATTACHMENT HEREOF OTHER THAN ANY TERMS OR CONDITIONS TO WHICH THE PURCHASER SHALL PROMPTLY TAKE EXCEPTION BY SPECIFIED WRITTEN OBJECTION.

Version 12/99 (05/04)