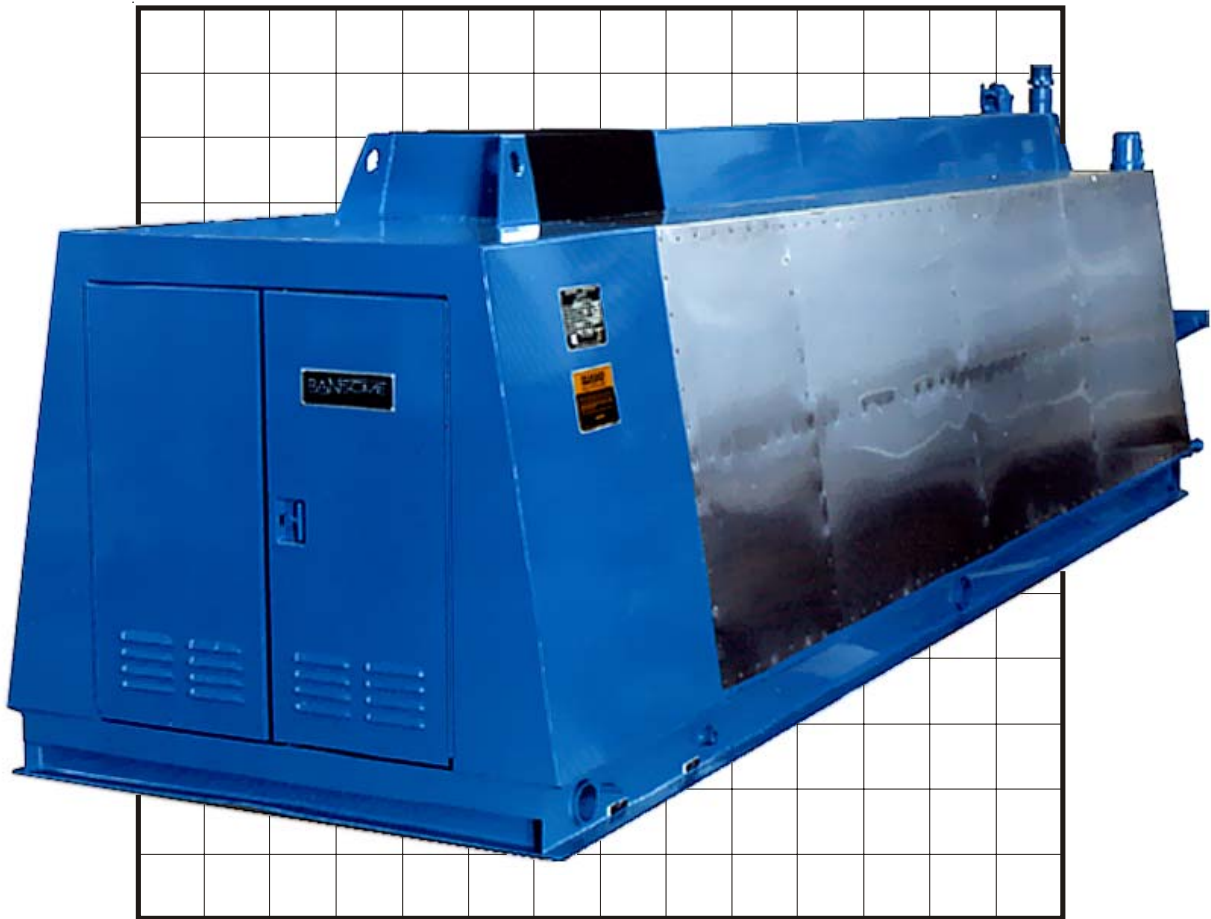


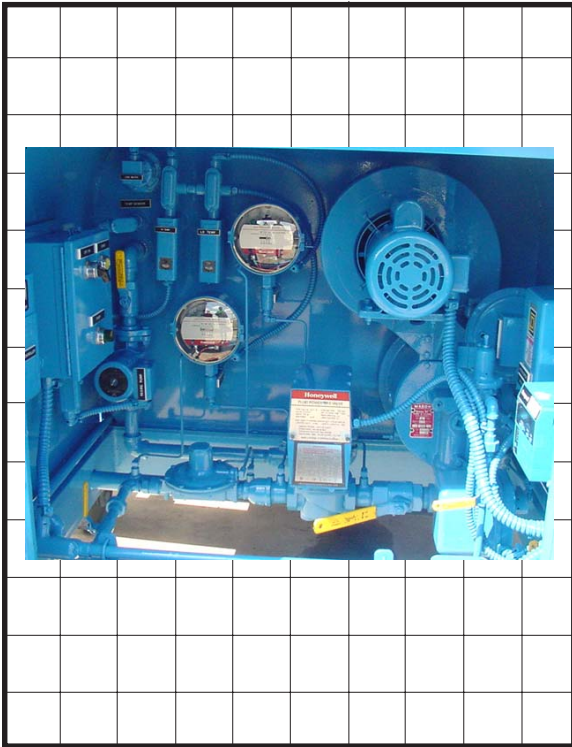
# RANSOME

MANUFACTURING

*LP-Gas Equipment Distribution and Manufacturing*

## ID Series Water-Bath LP-Gas Vaporizers





**Factory  
Mutual  
System**

## The ID Series Vaporizer

The industries most complete line of large-capacity LP-Gas Vaporizers combine safety and reliability. Ransome ID Series Vaporizers range in size from 500 to 10,000 gallons per hour propane capacity to produce the precise amount of vapor for your industrial or commercial LP-Gas requirement.

Ransome ID Series Vaporizers are ideally suited for lumber kilns, aggregate and gravel dryers, heat treating furnaces, industrial boilers and heating equipment, stand-by fuel systems, peak shaving plants, food drying and processing plants, and any operation requiring an uninterrupted, reliable supply of LP-Gas vapor. All models are fully automatic, designed for unattended use in all climates.

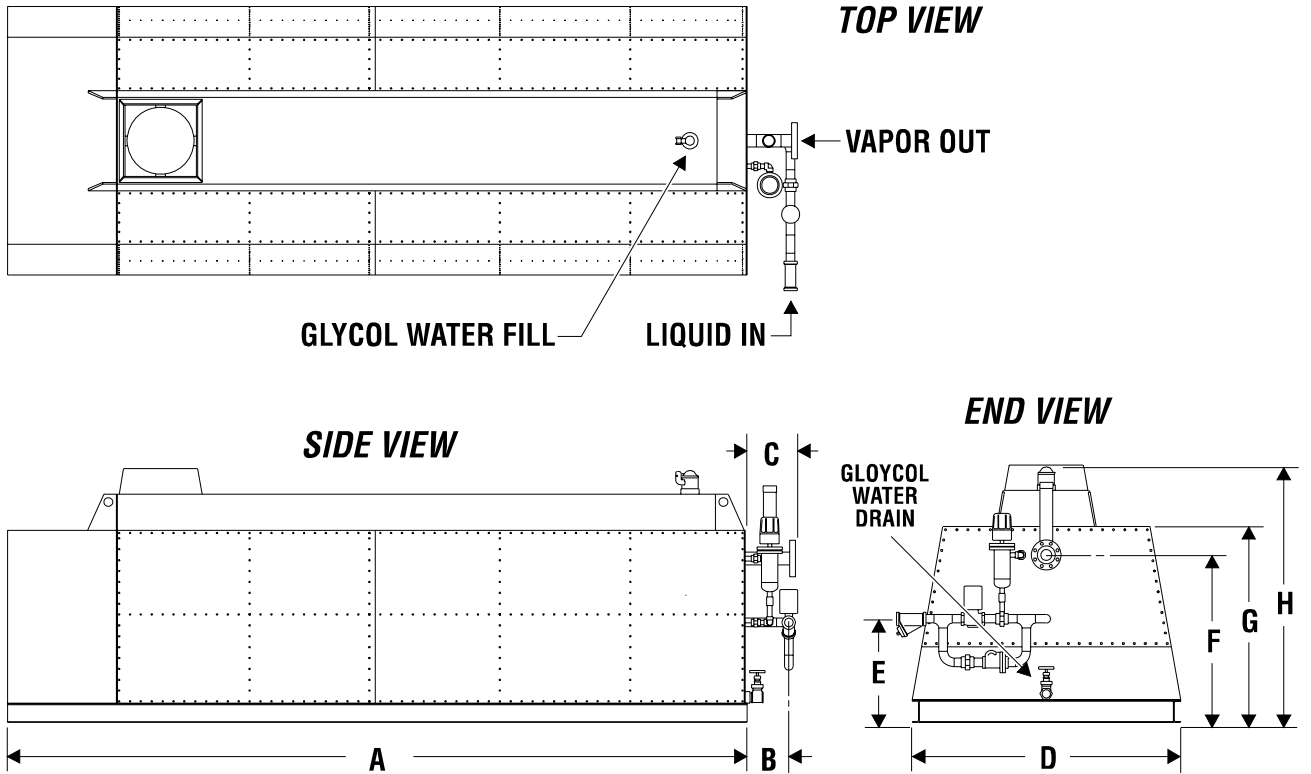
### Why an ID Vaporizer?

LP-Gas is stored as a liquid and used as a vapor. To change it into a vapor, heat must be added at the rate of: 785 BTU's for each gallon of propane, 808 BTU's for each gallon of butane. The liquid will then boil, changing to vapor at the rate of: 36.4 cubic feet for each gallon of propane, 31.3 cubic feet for each gallon of butane.

LP-Gas liquid is supplied to the inlet of the ID Vaporizer from a suitable source. The liquid enters a header connected to a series of heat exchanger tubes which run through a warm water bath. This heats the liquid and converts it into vapor. The vapor is collected in a header at the top of the tubes, where it is drawn off to supply the needs of the application. The water is kept warm by a power burner mounted in a large immersion tube passing through the bath.

## Features

1. Efficient propane combustion and consistent performance is maintained, since the power burner is substantially independent of weather conditions. Air is delivered to the combustion zone through the burner by a heavy-duty fan and is discharged through a diffuser specially designed to provide a firm flame anchor and stable, high-efficiency combustion. The resultant flame stability provides quiet operation, free from vibration, pulsation or flashback.
2. A low, attractive silhouette is maintained in all sizes, since the power burner requires only a short stack and weather cap at the flue outlet. The neat rectangular housing is covered with stainless steel and blends well with any architectural setting.
3. A continuous supply of dry, warm vapor is assured by providing additional heat exchange area over the amount required for rated capacity. The large water bath acts as a massive heat sink, eliminating the need to shut down while servicing power burner or controls.
4. All critical components are protected from outside weather conditions to assure maximum reliability. These units are completely insulated for an economical operation.
5. All models are built in accordance with Factory Mutual safety requirements.
6. Standard units feature safety interlocks which initiate automatic shut down sequence of power burner and activate dry alarm contacts and light in the event of excessive or insufficient burner gas pressure, excessive bath temperature, low bath level or flame failure.
7. Integral liquid level control system prevents LP-Gas liquid from entering vapor line.
8. Units are shipped ready for use, requiring only electrical power supply and connection of liquid and vapor lines.

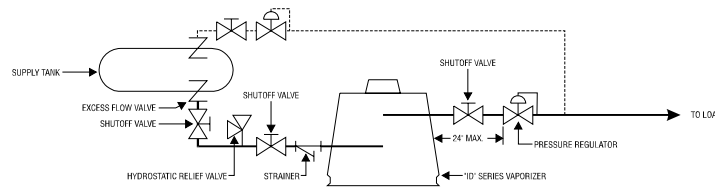


MODEL	DIMENSIONS, IN.								Approximate Shipping Weight LB.
	A	B	C	D	E	F	G	H	
ID500	147	12	15	48	26.5	38.5	44.25	59	4500
ID750	145	12	15	48	21.75	38.5	44.25	59	5800
ID1000	181	12	15	54	21.75	38.5	45.25	59	6450
ID1500	190	12	15	58	24.5	42	49.5	63	9200
ID2000	243	12	15	66	26.5	44	52	68	15000
ID2500	243	12	15	74	27.5	45	53	68	17000
ID3000	251	12	18	82	31	48.75	57.25	73	19500
ID4000	292	12	18	94	39.25	57	68.25	86	24000
ID5000	332	12	18	100	42.5	60.5	68.5	87	28000
ID6000	372	12	18	102	44.5	68.5	77.75	94	32000

MODEL	DIMENSIONS, CM.								Approximate Shipping Weight KG.
	A	B	C	D	E	F	G	H	
ID500	346	28	36	122	67	98	112	150	2041
ID750	368	28	36	122	55	98	112	150	2631
ID1000	455	28	36	137	55	98	115	150	2925
ID1500	483	28	36	147	62	107	126	160	4173
ID2000	589	28	36	168	67	112	132	173	6804
ID2500	589	28	36	188	70	114	135	173	7711
ID3000	658	31	46	208	79	124	145	185	8845
ID4000	742	31	46	239	100	145	173	218	10886
ID5000	841	31	46	254	108	154	174	221	12701
ID6000	945	31	46	259	113	174	198	239	14515

**NOTE:** Ransome reserves the right to change or alter this equipment at any time without notice to customer. All sizes are approximate, **NOT** to be used for engineering purposes.

# Principal Features and Operating Characteristics



## NOTES:

1. Equipment, piping and installation must be in accordance with provisions of NFPA 58 and all applicable state, provincial and local codes.
2. Liquid pump may be required to provide sufficient pressure to inlet of vaporizer during conditions of low tank pressure.
3. Outlet pressure regulator must be mounted at or above centerline of vaporizer outlet and as close as practical.
4. Do not install dripleg or other liquid trap upstream of outlet pressure regulator.
5. Regulator outlet pressure must be adjusted to a pressure below the vapor pressure of the saturated LP-Gas at lowest operating temperature or vapor may reliquify in downstream piping.
6. Liquid piping system must allow for occasional reverse flow toward supply tank to prevent excessive pressure during operation.

## Selection Chart

If your Peak Load Requirements are up to (1)				Approximate Water Capacity		Ransome Model
GAL/Hr Propane	KG/Hr	Thousands of CF/Hr	Millions of BTU/HR	Gallon	Liter	
500	960	18.3	45.8	425	1609	<b>ID500</b>
750	1440	27.5	68.8	425	1609	<b>ID750</b>
1000	1920	36.6	91.7	625	2366	<b>ID1000</b>
1500	2880	54.9	138	750	2839	<b>ID1500</b>
2000	3840	73.3	183	1340	5073	<b>ID2000</b>
2500	4800	91.6	229	1400	5300	<b>ID2500</b>
3000	5760	109.9	275	1900	7193	<b>ID3000</b>
4000	7680	146.6	367	2840	10571	<b>ID4000</b>
5000	9600	183.2	458	3360	12719	<b>ID5000</b>
6000	11520	219.8	550	4720	17867	<b>ID6000</b>

(1) Units may be paralleled to achieve greater capacities.

NOTE: For usage with other liquified gases, consult factory sizing information. (i.e. C3H6, NH3, SO2, C12)

## Standard Specifications

Standard units are built to Factory Mutual specifications, factory tested and calibrated, ready for use. Capacities are based on liquid inlet temperature of 20 degrees F and vapor outlet temperature of 100 degrees F, without use of pump, using HD-5 spec. **propane** (butane capacity available upon request).

## Warranty

Ransome Manufacturing, 3495 South Maple Avenue, Fresno, California, warrants to all parties all equipment manufactured and sold by it to be free from defects in material or workmanship under normal use and service. when installed and used in accordance with all applicable state and local codes, regulations and laws or in accordance with National Fire Protection Pamphlet 58. Ransome Manufacturing agrees to repair or replace any equipment which its examination reveals to have been defective due to faulty workmanship or material, if returned to factory, transportation charges prepaid. Deviations from recommended applications, system design, installation and service practices, as well as deterioration or wear due to foreign materials or contamination present in LP-Gas or air shall be considered as abuse and render this warranty void.

This warranty applies for a period of one year from date of installation, but not more than eighteen months after shipment from factory.

This warranty is expressly in lieu of all other warranties expressed or implied, and of all obligations or liabilities on its part for damages including but not limited to consequential damages, following the use or misuse of equipment sold by it. No agent is authorized to assume any liability for Ransome Manufacturing, except as set forth above.

**RANSOME**  
MANUFACTURING

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