

## ABOVEGROUND TANKS WITH **ATMOSPHERIC** VAPORIZER

Storage tanks according to Lapesa standard models, with atmospheric vaporizer.

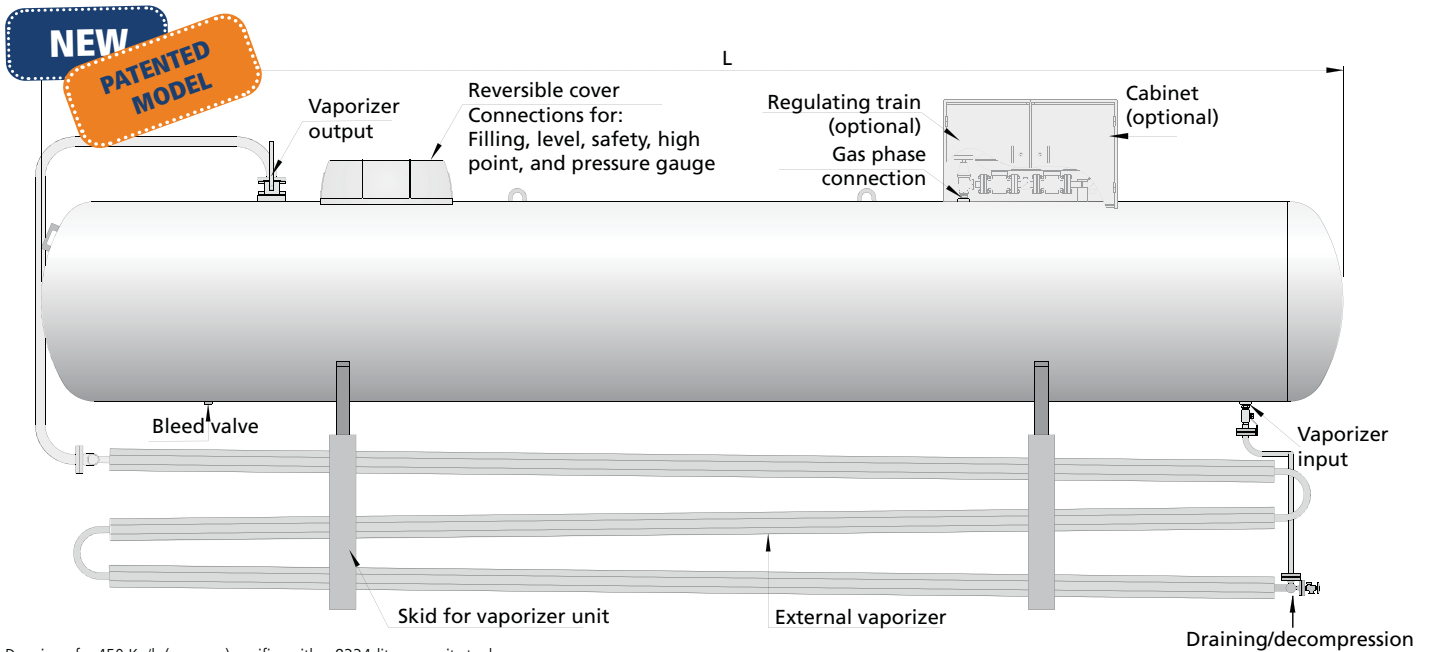
### CHARACTERISTICS

- Propane tank that incorporates external vaporizer.
- This system increases the natural vaporization capacity of tanks.
- Vaporization is obtained by heat exchange with the ambient.
- Includes all the advantages of a feed-back system.

### ADVANTAGES WITH RESPECT TO FORCED VAPORIZATION

- Savings:
  - Simple and economical installation.
  - Maintenance free.
  - No additional consumption (electricity, gas, etc.)
- Safety:
  - No additional pieces which could break down.
  - No electrical material used, neither boilers with flames.
- Installation time is greatly reduced.
- Environment-friendly: energy consumption 100% renewable.





Drawing of a 450 Kg/h (propane) gasifier with a 8334-litre capacity tank.

**ATMOSPHERIC VAPORIZER**

Model	Nominal vaporization (kg/h) <sup>(1)</sup>	Approx. length (mm)	Approx. height (mm)
VA50	50	3.000	250
VA150	150	7.400	400
VA300	300	7.400	750
VA450	450	7.400	1.000

(1) Nominal vaporization corresponds to the nominal working conditions:  
 - Service pressure 1,5 bar  
 - Ambient temperature 10° C  
 - LPG: 80% propane, 20% butane

**VAPORIZATION DATA**

**EXTERNAL VAPORIZER MODEL VA 50 (Propane flow rate kg/hr)**

		Ambient temperature (°C)						
		Eventual temperatures						
		-10	-5	0	5	10	15	20
Service pressure (barg)	1	18	28	39	50	62	73	85
	1,25	12	22	33	44	55	67	79
	1,5	7	16	27	38	49	60	72
	1,75	1	10	21	31	42	54	66
	2	-	7	17	27	38	50	61

**EXTERNAL VAPORIZER MODEL 150 (Propane flow rate kg/hr)**

		Ambient temperature (°C)						
		Eventual temperatures						
		-10	-5	0	5	10	15	20
Service pressure (barg)	1	58	91	125	161	197	234	272
	1,25	39	71	105	140	177	214	251
	1,5	21	52	85	120	156	193	231
	1,75	4	33	66	100	136	172	210
	2	-	21	53	87	122	159	196

**EXTERNAL VAPORIZER MODEL VA 300 (Propane flow rate kg/hr)**

		Ambient temperature (°C)						
		Eventual temperatures						
		-10	-5	0	5	10	15	20
Service pressure (barg)	1	115	181	250	321	394	468	544
	1,25	78	142	210	281	353	427	503
	1,5	42	104	171	241	312	386	462
	1,75	9	67	132	200	272	345	420
	2	-	43	106	173	244	317	392

**EXTERNAL VAPORIZER MODEL VA 450 (Propane flow rate kg/hr)**

		Ambient temperature (°C)						
		Eventual temperatures						
		-10	-5	0	5	10	15	20
Service pressure (barg)	1	173	272	375	482	591	702	816
	1,25	117	214	316	421	530	641	754
	1,5	63	156	256	361	469	579	692
	1,75	13	100	197	300	407	517	630
	2	-	64	159	260	366	476	588

**SOME FACTORS MAY MODIFY THE VAPORIZATION CAPACITY:**

- Continuous consumption (see table with correction coefficients to be applied in continuous operation)
- Adverse environmental conditions (low temperature and high humidity)
- Installations that prevent an adequate ventilation
- Different LPG mixture than the nominal one

To minimize these effects, different solutions can be applied (please consult)

**CORRECTION COEFFICIENTS<sup>(2)</sup> FOR CONTINUOUS OPERATION:**

Hours/day	Efficiency Fh
≤4	1
8	0,8
16	0,5
24	0,4

(2) Multiply the vaporization values of the tables by the correction coefficient

**NOTE**

Depending on the tank and vaporizer sizes, the unit can be sent completely mounted, including the piping between both elements. Otherwise, the elements will be mounted on site.