



#### LOW AND HIGH PRESSURE VAPORIZER

We are at the forefront of cryogenic technology capable of manufacturing higher capacity vaporizer that varies from 50 Nm3 / hr. To 5000 Nm3 / hr.

## COMPANY'S

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#### **REGISTERED ADDRESS:**

No.143 Sidco Women Industrial Estate, Thirumullaivoil, Kattur Village, Chennai-600062, Tamil Nadu, India



## About Us

CGI experts have over 15 years of experience in the design and manufacturing of vaporizers. We are specialists in the manufacturing Low and High-pressure vaporizer for the following cryogenic applications:

# Cryogen India

Manufacture of cyogenic Tanks Vaporizar & Allied Equipments



#### When Do you need A Vaporizer?

If the demand of gas needed (also know as flow rate) is higher then the output of a liquid cylinder the pressure and flow rate will drop. Adding a vaporizer to the liquid cylinder increase the flow rate of the liquid cylinder while keeping the same pressure. Meaning the flow rate and pressure stays constant.

#### **OUR PRODUCT**

- Cryogenic Storage Tank
- Skid Mounted Horizontal Tank
- Dewar Cylinder
- Cryogenic Low & High
  Pressure Vaporizer
- Skid Mounted Vaporizer
- Vaccum Insulated Pipe Lines
- Cryogenic Mobile Tank
- Cryogenic Atmospheric Tank



It's our pleasure to inform you that our CGI Cryogenius India LLP Chennai, Tamil Nadu started manufacturing of cryogenic vaporizer for various applications.

### **ADVANTAGES**

- Customized Low & High -Pressure and Pressure -Building Models
- Fins Designed For Maximum Surface Area
- Wide- Gap Design For Superior Air Flow
- Simple Assembly
- Expandable, Modular Design
- Custom Accessories Availability



Our Responsibility & <u>We offer cryogenic skid Mounted Vaporizer</u> Quality <u>for the following liquefied gases:</u>

Entrepreneurship: we seek opprtunities - they are everywhere

- Humility:we value intellectual modesty and detest flase pride and arrogance
- Learning: nurturing active curiosity- to question, share and improve
- Respect for individual: we will treat others with dignity, sensitivity and honor
- Maintaining the quality with certified welder for low & high pressure

- Liquid nitrogen (LIN)
- Liquid argon (LAR)
- Liquid Oxygen (LOX)
- Liquid carbon dioxide (LCO2)
- Liquid natural gas (LNG)
- Liquid nitrous oxide (LN20)



## LOW & HIGH PRESSURE VAPORIZER SPECIFICATION



# **About Quality**

CGI Will consistently provide products and services that meet or exceed the requirements and expectations of our customers. We will actively improving quality through programs that enable each employee to do their job right at the first timeand every time. WE CREATE NEW PRODUCT AND SERVICES SATISFYING CUSTOMER IS THE BEST STARATEGY.

#### **Specification :**

- o Type: Ambient Air Heated
- o Configuration: Vertical mounted four leg sturdy design
- o Service: Product Vaporizer made up to aluminum fins and tubes
- o Fluid: LIN/LOX/LAR/LCO2
- o Design Temperature: (-) 196 C to + 65 C
- o Ambient Condition: 30 Deg C @ 70% RH
- o Outlet Temp. gas: 10°C below ambient.
- o Cleaning Duty: Oxygen based on request
- o Capacity of vaporizer: 50-5000 Nm3/Hr
- o Manufacturing Code: ASME Sec VIII Div I, Latest Edition 2019
- o Duty Cycle: 8-10 Hours of Continuous Operation before De-Icing.
- o Defrosting Time: 2 3Hrs.
- o Maximum Operating Pressure: 36 Kg/Cm2
- o Design Pressure: 40 Kg/Cm2
- o Hydraulic Test Pressure: 44 Kg/Cm2
- o Inlet: 1" SORF 150 # SS; Outlet : 1-1/2" SORF 150# SS
- o Manifolding by: DC-TIG Welding
- o Material Of Construction: Fins : Aluminum A 6063 T5 Bends : Aluminum A 6063 Structural & Frame : Aluminum A 6063 – T6 End Connection : SS 304 .

Technical Specification												
Medium Flow rate Model 50 - 800 Nm3/Hr												
MODEL NUMBER	Units	CGI50LP40	CGI100LP40	CGI150LP40	CGI200LP40	CGI250LP40	CGI300LP40	CGI400LP40	CGI500LP40	CGI600LP40	CGI750LP40	CGI800LP40
Flow Rate	Nm3/12-Hrs	50	100	150	200	250	300	400	500	600	750	800
Operaing Pressure	Bar	36	36	36	36	36	36	36	36	36	36	36
Design Pressure	Bar Psi	40 580	40 580	40 580	40 580	40 580	40 580	40 580	40 580	40 580	40 580	40 580
Test Pressure	Bar Psi	44 638	44 638	44 638	44 638	44 638	44 638	44 638	44 638	44 638	44 638	44 638
Inlet Connection Outlet Connection	ANSI 300 # ANSI 300 #	1/2" SORF 1" SORF	1/2" SORF 1" SORF	1/2" SORF 1" SORF	1" SORF 1" SORF	1" SORF 1" SORF	1" SORF 1-1/2" SORF	1" SORF 1-1/2" SORF	1" SORF 1-1/2" SORF	1" SORF 1-1/2" SORF	1" SORF 2" SORF	1" SORF 2" SORF
Length Width	mm mm	550 550	550 900	800 900	800 1100	900 1300	900 1500	1100 1500	1300 1500	1300 1900	1500 1900	1700 1900
Height Nominal Weight	mm Kgs Lbs	2500 55 121,2542442	100	2500 150 330,6933933	2500 190 418.8782982	2500 250 551.1556555	2500 280 617.2943341	2500 360 793.6641439	2500 440 970.0339536	2500 550 1212.542442	630	2500 700 1543.235835
Anchor Bolt Size Wind Speed Number of Extrusions	mm km/Hr	M12x400 lg. 130	M12x400 lg. 130	130	M12x400 lg. 130 20	M12x400 lg. 130	M12x400 lg. 130		M12x400 lg. 130 48	M12x400 lg. 130 60	M12x400 lg. 130 70	M12x400 lg. 130
Length of Extrusions	Mos m	6 2	10 2	16 2		28 2	32 2	2	2	2		80 2

High flow rate Heavy duty model 1000 - 5000 Nm3/hr												
MODEL NUMBER	Units	CGI1000LP40	CGI1250LP40	CGI1500LP40	CGI2000LP40	CGI2200LP40	CGI2500LP40	CGI3000LP40	CGI3500LP40	CGI4000LP40	CGI4500LP40	CGI5000LP40
Flow Rate	Nm3/12-Hr	1000	1250	1500	2000	2200	2500	3000	3500	4000	4500	5000
	SCFH	35387	44234	53080	70774	77851	88467	106161	123854	141548	159241	176935
Operaing Pressure	Bar	36	36	36	36	36	36	36	36	36	36	36
Design Pressure	Bar	40	40	40	40	40	40	40	40	40	40	40
Test Pressure	Bar	44	44	44	44	44	44	44	44	44	44	44
Inlet Connection	ANSI 300 #	1-1/2" SORF										
Outlet Connection	ANSI 300 #	3" SORF										
Length	mm	1800	1800	1800	1850	2150	2150	2200	2200	2200	2450	2450
Width	mm	2600	1800	1800	2150	2200	2500	2500	2500	2500	2500	2500
Height	mm	2500	4800	5500	5500	5500	5500	6500	6900	7500	7000	8000
Nominal Weight	Kas	980	1150	1300	1800	2000	2200	2600	3050	3500	4050	4350
	Kgs Lbs	2161	2535	2866	3968	4409	4850	5732	6724	7716	8929	9590
Anchor Bolt Size	mm	M18x400 lg.	M18x400 la.	M18x400 lg.	M18x400 lg.	M18x400 lg.	M18x400 la.	M18x400 lg.	M18x400 la.	M18x400 lg.	M18x400 lg.	M18x400 lg.
Wind Speed	km/Hr	160	160	160	160	160	160	160	160	160	160	160
Number of Extrusions	Nos	120	64	64	80	100	100	120	120	120	144	144
Length of Extrusions	m	2	4.3	4.8	4.8	4.3	4.8	5	6	7	6.5	7.3

### **LOW PRESSURE VAPORIZERS - 638 PSI**

#### HIGH FLOW / HEAVY DUTY MODEL 1000 - 5000 NM3/HR BASED ON REQUEST



Designed tofunction with cryogenic tanks.our line of high and low-pressure vaporizers is the perfect fit for operations requiring the conversion of cryogenic liquids to gas. we offer a full range of models with, but not limited to, over 20 differnt sizes to suit your various needs as well as custom applications. our vaporizers are manufactured with economy and efficiency in mind. our lowpressure, ambient, cryogenic vaporizer line is designed for a maximum pressure of 600

vaporizer line is designed for a maximum pressure of 600 PSI> Our standard high pressure line is built with a stainless steel lining and is designed for a maximum allowable pressure of 6,000 PSI.Monel lined models are also available.the pressurebuilding vaporizers are designed for a 600 PSI maximum.