



크라이오 에이치앤아이(주)

Cryo H&I

# GENCRYO SERIES



GENCRYO



Cryo Vacuum Pump

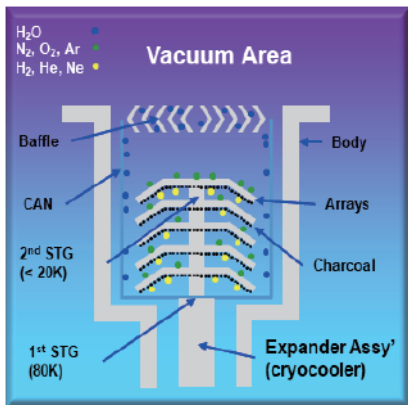
- ✓ Companion Service
  - ✓ Cost Competitiveness
  - ✓ Best Quality
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Long history - independent technology from 1976  
 One & Only Cryopump manufacturer in Korea

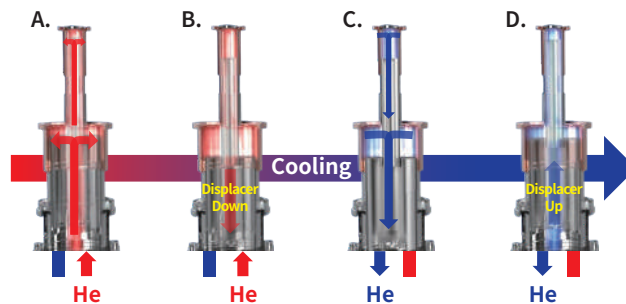
# The Future of Cryogenic Technology

## High performance/High vacuum Cryopump utilizing Cryogenic technology

Cryo H&I is a company specializing in cryogenic technology that develops and produces Cryocooler, produces GM Cryocooler and Cryo Vacuum Pump using them, and is the first company in Korea to apply cryogenic technology using Helium to a high vacuum pump.



< Cryopump Internal Schematic >



< GM Cryocooler Cooling Cycle >



< Multi Cryopumping System >

Cryogenic technology is currently being applied to high-tech industries such as Environment · Energy · Deefense · Bio · Quantum computers and basic science technology, including the semiconductor display industry and is an essential core technology for advanced technology R&D.

“CRYO H&I Cryogenic R&D Center continues to develop cryopumps optimized for semiconductor / display processing equipment based on its long-standing know-how, and is preparing to develop various products in connection with the aerospace, fuel cell and bio industries using cryogenic technology.”

## 1. Automatic Regen type Cryopump (GEN Smart Series)

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Among our cryo operating systems, the Auto Regen system operates based on GEN Series Controller, and it is possible to combine and configure one compressor and multiple cryopumps. In addition, the Control Pad helps with Regen quickly and conveniently.

Depending on the regeneration method, Full-Regen and Quick-Regen methods can be implemented to suit the customer's situation.

Full-Regen means a typical complete regen process, and Quick-Regen is a useful way to speed up regen while only progressing the fast emission of process gas.

In order to maintain the optimal temperature, our Cryopump's motor is automatically shifted within a certain range depending on the temperature condition, and the system allows you to change the motor RPM to meet the needs of customers, improving vibration characteristics and durability based on this.

## 2. Implementation of systems optimized for customer conditions

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We will do our best to provide technical consulting based on our long-standing know-how in order to reduce electrical consumption, optimize space utilization in a narrow space, and implement maximum pumping capability within a given customer environment.

(Various vacuum simulations are provided)

## 3. Provides a variety of compatible services

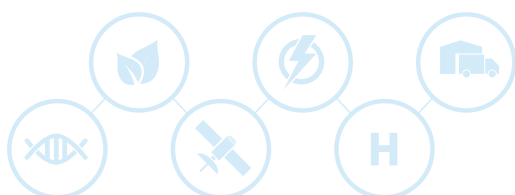
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We prepared to be replaced 1:1 with the same-class third-party pump, and other customized sizes can be implemented to meet the customer's needs

## 4. Real-time maintenance

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We provide the best service to our customers with stable reliability, real-time response and reasonable cost



# GENCRYO Partner



## Cryopump Application

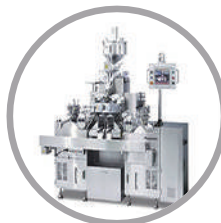
Cryopump is used in various fields such as semiconductor/display/aerospace.



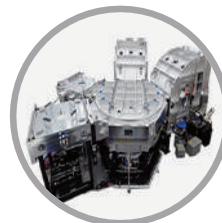
Nuclear Fusion



Particle Accelerator



Encapsulation



Sputtering



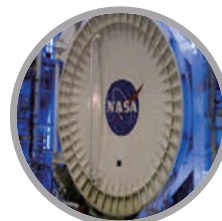
Surface Analysis



Vacuum Coating



Ion Implantation



Space Chamber

# Certificate & Patent

As of 2024, a total of 42 patent is registered and applied are under continuous patent applications to preoccupy core technologies in the cryogenic future.



< ISO Certificate >

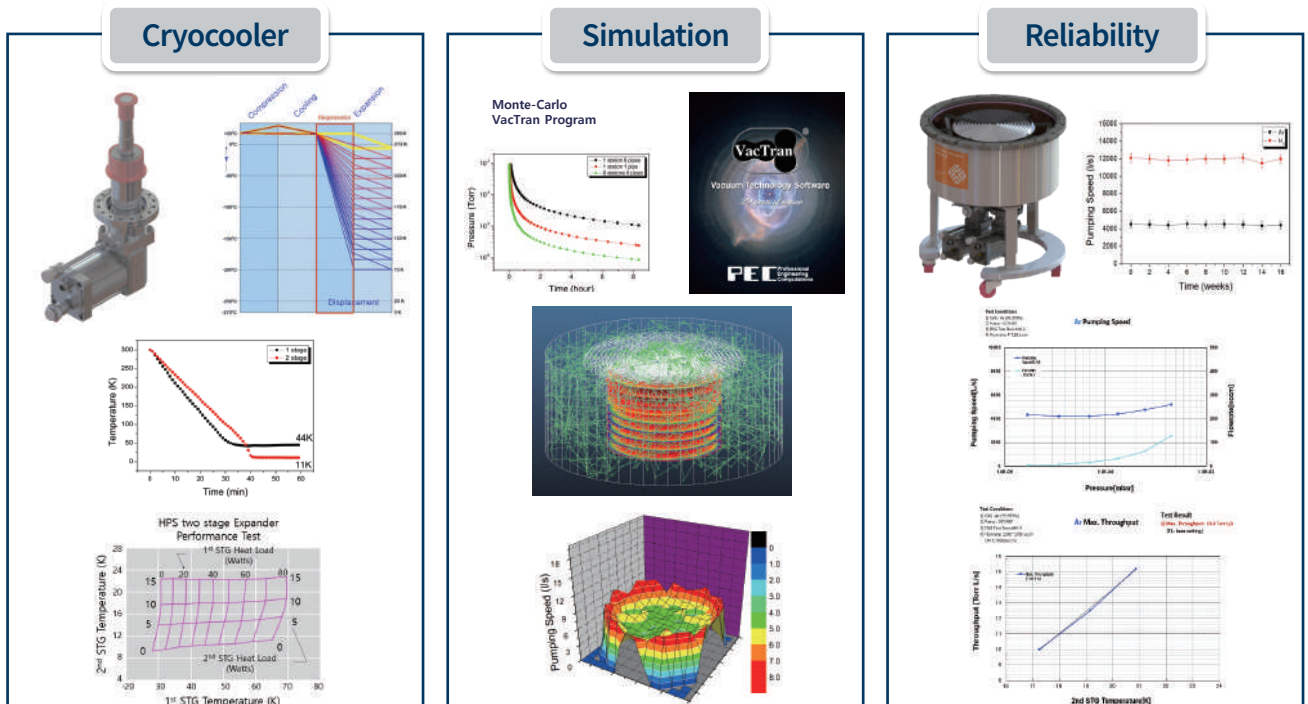


< CE CoC Certificate >



# Development

Cryo H&I Cryogenic R&D Center is upgrading Cryopump optimized for semiconductor display process equipment and developing various applications in energy, medical, bio, superconducting, environment and aerospace using cryogenic technology.

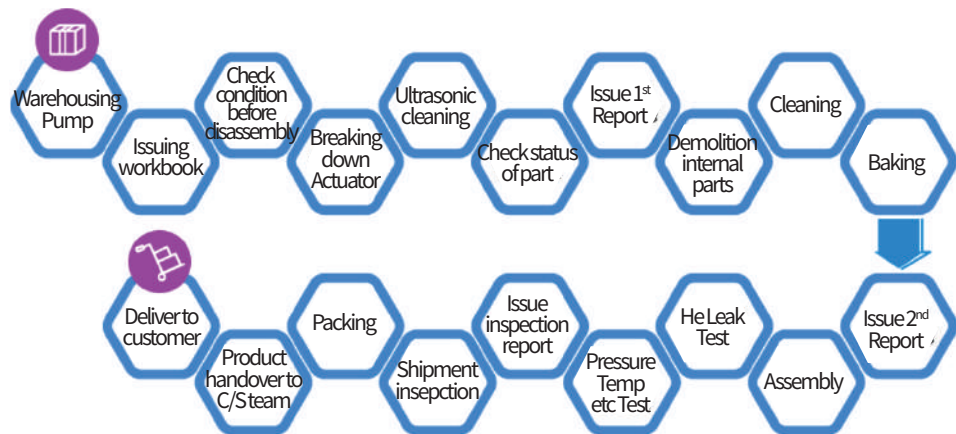


# Overhaul Process

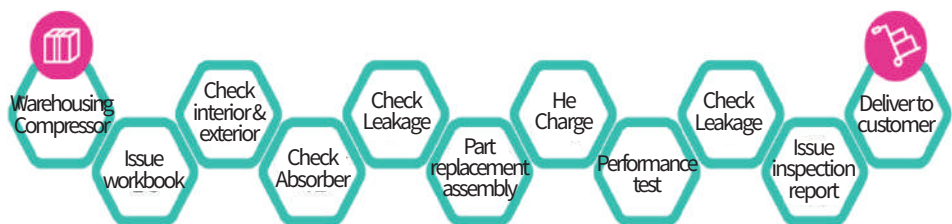
With long-standing manufacturer know-how and dedicated repair lines, 100% self-repair is carried out in accordance with genuine, quantitative/ISO standard regulations.



## Cryopump Overhaul



## Compressor Overhaul



# GEN Standard Series

※ Specifications subject to change without notice

## GEN20SH



Standard Specification		
Pumping Speed	N <sub>2</sub> (ℓ/s)	1,700
	H <sub>2</sub> (ℓ/s)	3,200
	Ar (ℓ/s)	1,400
	Water (ℓ/s)	4,000
Pumping Capacity	Ar (Std.ℓ)	1,500
	H <sub>2</sub> (Std.ℓ)	15
Max. Throughput	Ar (Torr · ℓ/s)	9
	H <sub>2</sub> (Torr · ℓ/s)	-
Base Pressure	(Torr)	< 10 <sup>-09</sup>
Cooldown Time	Minute	60
Weight	kg	21
Inner Dia.	mm	200
Inlet Flange	ISO/JIS	

\* All GENCRYO pumps required the following components: Compressor, Helium hoses, electrical cables, heater cables, and power distribution box.

## GEN25SH



Standard Specification		
Pumping Speed	N <sub>2</sub> (ℓ/s)	2,500
	H <sub>2</sub> (ℓ/s)	3,900
	Ar (ℓ/s)	2,000
	Water (ℓ/s)	7,000
Pumping Capacity	Ar (Std.ℓ)	1,700
	H <sub>2</sub> (Std.ℓ)	20
Max. Throughput	Ar (Torr · ℓ/s)	10
	H <sub>2</sub> (Torr · ℓ/s)	-
Base Pressure	(Torr)	< 10 <sup>-09</sup>
Cooldown Time	Minute	75
Weight	kg	25
Inner Dia.	mm	250
Inlet Flange	ISO/JIS	

\* All GENCRYO pumps required the following components: Compressor, Helium hoses, electrical cables, heater cables, and power distribution box.

## GEN32SH



Standard Specification		
Pumping Speed	N <sub>2</sub> (ℓ/s)	4,000
	H <sub>2</sub> (ℓ/s)	8,000
	Ar (ℓ/s)	3,600
	Water (ℓ/s)	11,000
Pumping Capacity	Ar (Std.ℓ)	3,000
	H <sub>2</sub> (Std.ℓ)	38
Max. Throughput	Ar (Torr · ℓ/s)	13
	H <sub>2</sub> (Torr · ℓ/s)	-
Base Pressure	(Torr)	< 10 <sup>-09</sup>
Cooldown Time	Minute	80
Weight	kg	40
Inner Dia.	mm	320
Inlet Flange	ISO	

\* All GENCRYO pumps required the following components: Compressor, Helium hoses, electrical cables, heater cables, and power distribution box.

## GEN40PH



Standard Specification		
Pumping Speed	N <sub>2</sub> (ℓ/s)	5,000
	H <sub>2</sub> (ℓ/s)	10,000
	Ar (ℓ/s)	4,500
	Water (ℓ/s)	16,000
Pumping Capacity	Ar (Std.ℓ)	5,000
	H <sub>2</sub> (Std.ℓ)	44
Max. Throughput	Ar (Torr · ℓ/s)	13
	H <sub>2</sub> (Torr · ℓ/s)	-
Base Pressure	(Torr)	< 10 <sup>-09</sup>
Cooldown Time	Minute	130
Weight	kg	60
Inner Dia.	mm	400
Inlet Flange	ISO(B)/JIS	

\* All GENCRYO pumps required the following components:  
Compressor, Helium hoses, electrical cables, heater cables, and power distribution box.

## GEN50PH



Standard Specification		
Pumping Speed	N <sub>2</sub> (ℓ/s)	10,000
	H <sub>2</sub> (ℓ/s)	19,000
	Ar (ℓ/s)	8,400
	Water (ℓ/s)	30,000
Pumping Capacity	Ar (Std.ℓ)	6,000
	H <sub>2</sub> (Std.ℓ)	46
Max. Throughput	Ar (Torr · ℓ/s)	18
	H <sub>2</sub> (Torr · ℓ/s)	-
Base Pressure	(Torr)	< 10 <sup>-09</sup>
Cooldown Time	Minute	150
Weight	kg	105
Inner Dia.	mm	500
Inlet Flange	ISO(B)/JIS	

\* All GENCRYO pumps required the following components:  
Compressor, Helium hoses, electrical cables, heater cables, and power distribution box.

## GEN55SH



Standard Specification		
Pumping Speed	N <sub>2</sub> (ℓ/s)	14,000
	H <sub>2</sub> (ℓ/s)	22,000
	Ar (ℓ/s)	10,000
	Water (ℓ/s)	36,000
Pumping Capacity	Ar (Std.ℓ)	4,500
	H <sub>2</sub> (Std.ℓ)	50
Max. Throughput	Ar (Torr · ℓ/s)	16
	H <sub>2</sub> (Torr · ℓ/s)	-
Base Pressure	(Torr)	< 10 <sup>-09</sup>
Cooldown Time	Minute	190
Weight	kg	115
Inner Dia.	mm	550
Inlet Flange	ISO(B)/JIS	

\* All GENCRYO pumps required the following components:  
Compressor, Helium hoses, electrical cables, heater cables, and power distribution box.

## GEN15S



Standard Specification		
Pumping Speed	N <sub>2</sub> (ℓ/s)	660
	H <sub>2</sub> (ℓ/s)	1,300
	Ar (ℓ/s)	550
	Water (ℓ/s)	2,200
Pumping Capacity	Ar (Std.ℓ)	860
	H <sub>2</sub> (Std.ℓ)	10
Max. Throughput	Ar (Torr · ℓ/s)	6
	H <sub>2</sub> (Torr · ℓ/s)	-
Base Pressure	(Torr)	< 10 <sup>-09</sup>
Cooldown Time	Minute	80
Weight	kg	11
Inner Dia.	mm	150
Inlet Flange	ISO/CF	

\* All GENCRYO pumps required the following components: Compressor, Helium hoses, electrical cables, heater cables, and power distribution box.

## GEN20S



Standard Specification		
Pumping Speed	N <sub>2</sub> (ℓ/s)	1,700
	H <sub>2</sub> (ℓ/s)	3,200
	Ar (ℓ/s)	1,400
	Water (ℓ/s)	4,000
Pumping Capacity	Ar (Std.ℓ)	2,500
	H <sub>2</sub> (Std.ℓ)	18
Max. Throughput	Ar (Torr · ℓ/s)	9
	H <sub>2</sub> (Torr · ℓ/s)	-
Base Pressure	(Torr)	< 10 <sup>-09</sup>
Cooldown Time	Minute	60
Weight	kg	25
Inner Dia.	mm	200
Inlet Flange	ISO/JIS	

\* All GENCRYO pumps required the following components: Compressor, Helium hoses, electrical cables, heater cables, and power distribution box.

## GEN25S



Standard Specification		
Pumping Speed	N <sub>2</sub> (ℓ/s)	2,500
	H <sub>2</sub> (ℓ/s)	3,900
	Ar (ℓ/s)	2,000
	Water (ℓ/s)	7,000
Pumping Capacity	Ar (Std.ℓ)	2,500
	H <sub>2</sub> (Std.ℓ)	20
Max. Throughput	Ar (Torr · ℓ/s)	10
	H <sub>2</sub> (Torr · ℓ/s)	-
Base Pressure	(Torr)	< 10 <sup>-09</sup>
Cooldown Time	Minute	60
Weight	kg	30
Inner Dia.	mm	250
Inlet Flange	ISO/JIS	

\* All GENCRYO pumps required the following components: Compressor, Helium hoses, electrical cables, heater cables, and power distribution box.

## GEN30S



Standard Specification		
Pumping Speed	N <sub>2</sub> (ℓ/s)	4,000
	H <sub>2</sub> (ℓ/s)	7,000
	Ar (ℓ/s)	3,500
	Water (ℓ/s)	10,000
Pumping Capacity	Ar (Std.ℓ)	4,000
	H <sub>2</sub> (Std.ℓ)	30
Max. Throughput	Ar (Torr · ℓ/s)	10
	H <sub>2</sub> (Torr · ℓ/s)	-
Base Pressure	(Torr)	< 10 <sup>-09</sup>
Cooldown Time	Minute	75
Weight	kg	33
Inner Dia.	mm	300
Inlet Flange	ISO/JIS	

\* All GENCRYO pumps required the following components:  
Compressor, Helium hoses, electrical cables, heater cables, and power distribution box.

## GEN40P



Standard Specification		
Pumping Speed	N <sub>2</sub> (ℓ/s)	6,000
	H <sub>2</sub> (ℓ/s)	12,000
	Ar (ℓ/s)	5,400
	Water (ℓ/s)	18,000
Pumping Capacity	Ar (Std.ℓ)	5,000
	H <sub>2</sub> (Std.ℓ)	44
Max. Throughput	Ar (Torr · ℓ/s)	13
	H <sub>2</sub> (Torr · ℓ/s)	-
Base Pressure	(Torr)	< 10 <sup>-09</sup>
Cooldown Time	Minute	130
Weight	kg	60
Inner Dia.	mm	400
Inlet Flange	ISO(B)/JIS	

\* All GENCRYO pumps required the following components:  
Compressor, Helium hoses, electrical cables, heater cables, and power distribution box.

## GEN50P



Standard Specification		
Pumping Speed	N <sub>2</sub> (ℓ/s)	12,000
	H <sub>2</sub> (ℓ/s)	20,000
	Ar (ℓ/s)	10,000
	Water (ℓ/s)	29,000
Pumping Capacity	Ar (Std.ℓ)	6,000
	H <sub>2</sub> (Std.ℓ)	46
Max. Throughput	Ar (Torr · ℓ/s)	18
	H <sub>2</sub> (Torr · ℓ/s)	-
Base Pressure	(Torr)	< 10 <sup>-09</sup>
Cooldown Time	Minute	150
Weight	kg	95
Inner Dia.	mm	500
Inlet Flange	ISO(B)/JIS	

\* All GENCRYO pumps required the following components:  
Compressor, Helium hoses, electrical cables, heater cables, and power distribution box.

# GEN55P



Standard Specification		
Pumping Speed	N <sub>2</sub> (ℓ/s)	17,000
	H <sub>2</sub> (ℓ/s)	25,000
	Ar (ℓ/s)	14,000
	Water (ℓ/s)	40,000
Pumping Capacity	Ar (Std.ℓ)	7,500
	H <sub>2</sub> (Std.ℓ)	80
Max. Throughput	Ar (Torr · ℓ/s)	28
	H <sub>2</sub> (Torr · ℓ/s)	-
Base Pressure	(Torr)	< 10 <sup>-09</sup>
Cooldown Time	Minute	160
Weight	kg	120
Inner Dia.	mm	550
Inlet Flange	ISO(B)/JIS	

\* All GENCRYO pumps required the following components:  
Compressor, Helium hoses, electrical cables, heater cables, and power distribution box.

# GEN Smart Series

※ Specifications subject to change without notice

## GEN20SHG



Standard Specification		
Pumping Speed	N <sub>2</sub> (ℓ/s)	1,700
	H <sub>2</sub> (ℓ/s)	3,200
	Ar (ℓ/s)	1,400
	Water (ℓ/s)	4,000
Pumping Capacity	Ar (Std.ℓ)	1,500
	H <sub>2</sub> (Std.ℓ)	15
Max. Throughput	Ar (Torr · ℓ/s)	9
	H <sub>2</sub> (Torr · ℓ/s)	-
Base Pressure	(Torr)	< 10 <sup>-09</sup>
Cooldown Time	Minute	60
Weight	kg	30
Inner Dia.	mm	200
Inlet Flange	CF/ISO	

\* All GENCRYO pumps required the following components:  
Compressor, Helium hoses, electrical cables, heater cables, and power distribution box.

## GEN25SHG



Standard Specification		
Pumping Speed	N <sub>2</sub> (ℓ/s)	2,500
	H <sub>2</sub> (ℓ/s)	7,400
	Ar (ℓ/s)	2,000
	Water (ℓ/s)	7,000
Pumping Capacity	Ar (Std.ℓ)	2,500
	H <sub>2</sub> (Std.ℓ)	32
Max. Throughput	Ar (Torr · ℓ/s)	10
	H <sub>2</sub> (Torr · ℓ/s)	-
Base Pressure	(Torr)	< 10 <sup>-09</sup>
Cooldown Time	Minute	75
Weight	kg	30
Inner Dia.	mm	250
Inlet Flange	ISO	

\* All GENCRYO pumps required the following components:  
Compressor, Helium hoses, electrical cables, heater cables, and power distribution box.

## GEN32PHG



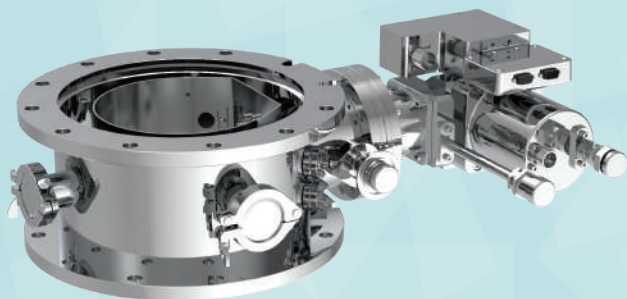
Standard Specification		
Pumping Speed	N <sub>2</sub> (ℓ/s)	3,600
	H <sub>2</sub> (ℓ/s)	15,000
	Ar (ℓ/s)	3,000
	Water (ℓ/s)	11,000
Pumping Capacity	Ar (Std.ℓ)	3,000
	H <sub>2</sub> (Std.ℓ)	50
Max. Throughput	Ar (Torr · ℓ/s)	13
	H <sub>2</sub> (Torr · ℓ/s)	-
Base Pressure	(Torr)	< 10 <sup>-09</sup>
Cooldown Time	Minute	110
Weight	kg	40
Inner Dia.	mm	320
Inlet Flange	ISO	

\* All GENCRYO pumps required the following components:  
Compressor, Helium hoses, electrical cables, heater cables, and power distribution box.

# GEN Trap Series

※ Specifications subject to change without notice

## GENW25IL



Standard Specification		
Pumping Speed	Water (ℓ/s)	7,000
Cooldown Time (130K)	Minute	30 or less (under isolation condition)
Weight	kg	38
Inlet Flange Size	mm	250
Mounting Flange	-	JIS / ISO
Feature	(Hybrid) products used with high vacuum pumps (TMPs) etc. In-line pump There are two mounting flanges on the chamber side and the high vacuum pump side	

\* All GENCRYO pumps required the following components:  
Compressor, Helium hoses, electrical cables, heater cables, and power distribution box.

# GEN Comp. Series

※ Specifications subject to change without notice

## GC022



Standard Specification		
H x W x D	mm	473 x 531 x 512
Weight	kg	90
Phase		1
Frequency	Hz	50/60
Voltage	VAC	220±10%
Operating Current	Amps	8 ~ 12
Coolant Gas		Helium
Purity	%	99.999 Min.
Dew Point	°C	-63
Charge Pressure @ 20°C	Psig	210
Cooling Water @ 20°C	ℓ/min	3.8
Cooling Water Temp.	°C	10 ~ 27
Cooling water heat radiation	kW	2.6
Supply and Return fitting		3/8" - 18 NTP
Power Consumption	kW	2.4
Noise	dB	Max. 70

## GC05(P) Series



Standard Specification		
H x W x D	mm	780 x 530 x 533
Weight	kg	125
Phase		3
Frequency	Hz	50/60
Voltage	VAC	220±10%
Operating Current	Amps	18 ~ 22
Coolant Gas		Helium
Purity	%	99.999 Min.
Dew Point	°C	-63
Charge Pressure @ 20°C	Psig	250
Cooling Water @ 20°C	ℓ/min	7.6
Cooling Water Temp.	°C	10 ~ 27
Cooling water heat radiation	kW	7.6
Supply and Return fitting		3/8" - 18 NTP
Power Consumption	kW	7
Noise	dB	Max. 60

## GC06(P) Series



Standard Specification		
H x W x D	mm	780 x 530 x 533
Weight	kg	125
Phase		3
Frequency	Hz	50/60
Voltage	VAC	220±10%
Operating Current	Amps	18 ~ 22
Coolant Gas		Helium
Purity	%	99.999 Min.
Dew Point	°C	-63
Charge Pressure @ 20°C	Psig	250
Cooling Water @ 20°C	ℓ/min	7.6
Cooling Water Temp.	°C	10 ~ 27
Cooling water heat radiation	kW	7.6
Supply and Return fitting		3/8" - 18 NTP
Power Consumption	kW	7
Noise	dB	Max. 60

## GC66P Series



Standard Specification		
H x W x D	mm	1575 x 610 x 579
Weight	kg	200
Phase		3
Frequency	Hz	50/60
Voltage	VAC	220±10%
Operating Current	Amps	40
Coolant Gas		Helium
Purity	%	99.999 Min.
Dew Point	°C	-63
Charge Pressure @ 20°C	Psig	250
Cooling Water @ 20°C	ℓ/min	7.6
Cooling Water Temp.	°C	10 ~ 27
Cooling water heat radiation	kW	7.6
Supply and Return fitting		3/8" - 18 NTP
Power Consumption	kW	12
Noise	dB	Max. 70

※ There are product lineup by horsepower. For more information, please contact Cryo H&I sales team  
 ※ Only the representative model is listed. For other compressors, please contact Cryo H&I sales team

# Optional Parts

## Digital temperature monitor



### Standard Specification

The monitor can check the current state from the outside by measuring the temperature inside the pump, and must be connected when using the pump, and the temperature value is monitored digitally.

Functions include RS-232C, RS-485C, High & Low Set Point, Contact Signal. (2 Channel, 4 Channel)

## Flexible helium hose



### Standard Specification

It is a part connected between the pump and the compressor and is used as a set (2) of high-pressure hose and low-pressure hose, and the length is 3m, 6m, 9m, 12m, and 15m standard. If requested by the customer, the length can be more than that, and other special sizes can be selected as options.

For more information, please contact Cryo H&I

## Manifold for multi-system operation



### Standard Specification

When a compressor and several pumps are operated in multiple units, it is a part that connects the compressor and the helium hose or between the pump and the helium hose.

Since it has various shapes and combinations, it is recommended to consult with the engineer in charge of Cryo H&I to select an appropriate manifold.

## Purge gas heater



### Standard Specification

Cryopump can shorten the regeneration time by more than 30% on average by increasing the temperature of the gas injected during regeneration to activate the movement of molecules inside the pump.

# GEN Standard Series Specifications

Model	GEN15S		GEN20S		GEN25S		GEN30S		GEN40P		GEN50P		GEN55P	
	N <sub>2</sub> (ℓ/s)	660	1,700	2,500	4,000	6,000	12,000	17,000	6,000	12,000	20,000	25,000	14,000	40,000
Pumping Speed	H <sub>2</sub> (ℓ/s)	1,300	3,200	3,900	7,000	12,000	20,000	25,000	12,000	20,000	30,000	35,000	25,000	40,000
	Ar (ℓ/s)	550	1,400	2,000	3,500	5,400	10,000	14,000	5,400	10,000	15,000	20,000	14,000	25,000
	Water (ℓ/s)	2,200	4,000	7,000	10,000	18,000	29,000	40,000	18,000	29,000	40,000	50,000	40,000	70,000
Pumping Capacity	Ar (std.ℓ)	860	2,500	2,500	4,000	5,000	6,000	7,500	5,000	6,000	6,000	6,000	7,500	80
	H <sub>2</sub> (std.ℓ)	10	18	20	30	44	46	80	44	46	46	46	80	80
Max. Throughput	Ar (Torr · ℓ/s)	6	9	10	10	13	18	28	13	18	18	28	28	28
	H <sub>2</sub> (Torr · ℓ/s)	-	-	-	-	-	-	-	-	-	-	-	-	-
Base Pressure	(Torr)	<10 <sup>-09</sup>	<10 <sup>-09</sup>	<10 <sup>-09</sup>	<10 <sup>-09</sup>	<10 <sup>-09</sup>	<10 <sup>-09</sup>	<10 <sup>-09</sup>	<10 <sup>-09</sup>	<10 <sup>-09</sup>	<10 <sup>-09</sup>	<10 <sup>-09</sup>	<10 <sup>-09</sup>	<10 <sup>-09</sup>
Cooldown Time	Minute	80	60	60	75	130	150	160	130	150	150	160	160	160
Weight	kg	11	25	30	33	60	95	120	60	95	95	120	120	120
Inner Dia.	mm	150	200	250	300	400	500	550	400	500	500	550	550	550
Inlet Flange		ISO/CF	ISO/JIS	ISO/JIS	ISO/JIS	ISO(B)/JIS	ISO(B)/JIS	ISO(B)/JIS	ISO(B)/JIS	ISO(B)/JIS	ISO(B)/JIS	ISO(B)/JIS	ISO(B)/JIS	ISO(B)/JIS

Model	GEN20SH		GEN25SH		GEN32SH		GEN40PH		GEN50PH		GEN55SH	
	N <sub>2</sub> (ℓ/s)	1,700	2,500	4,000	5,000	8,000	10,000	14,000	10,000	19,000	22,000	22,000
Pumping Speed	H <sub>2</sub> (ℓ/s)	3,200	3,900	8,000	10,000	19,000	22,000	22,000	19,000	22,000	22,000	22,000
	Ar (ℓ/s)	1,400	2,000	3,600	4,500	8,400	10,000	10,000	8,400	10,000	10,000	10,000
	Water (ℓ/s)	4,000	7,000	11,000	16,000	30,000	36,000	36,000	30,000	36,000	36,000	36,000
Pumping Capacity	Ar (std.ℓ)	1,500	1,700	3,000	5,000	6,000	6,000	4,500	6,000	6,000	4,500	4,500
	H <sub>2</sub> (std.ℓ)	15	20	38	44	46	50	50	46	50	50	50
Max. Throughput	Ar (Torr · ℓ/s)	9	10	13	13	18	16	16	18	16	16	16
	H <sub>2</sub> (Torr · ℓ/s)	-	-	-	-	-	-	-	-	-	-	-
Base Pressure	(Torr)	<10 <sup>-09</sup>	<10 <sup>-09</sup>	<10 <sup>-09</sup>	<10 <sup>-09</sup>	<10 <sup>-09</sup>	<10 <sup>-09</sup>	<10 <sup>-09</sup>	<10 <sup>-09</sup>	<10 <sup>-09</sup>	<10 <sup>-09</sup>	<10 <sup>-09</sup>
Cooldown Time	Minute	60	75	80	130	150	190	190	150	150	190	190
Weight	kg	21	25	40	60	105	115	115	105	105	115	115
Inner Dia.	mm	200	250	320	400	500	550	550	500	500	550	550
Inlet Flange		ISO/JIS	ISO/JIS	ISO	ISO(B)/JIS	ISO(B)/JIS	ISO(B)/JIS	ISO(B)/JIS	ISO(B)/JIS	ISO(B)/JIS	ISO(B)/JIS	ISO(B)/JIS

# GEN Smart Series Specifications

Model	GEN20SHG	GEN25SHG	GEN32SHG
Pumping Speed	N <sub>2</sub> (ℓ/s)	1,700	3,600
	H <sub>2</sub> (ℓ/s)	3,200	15,000
	Ar (ℓ/s)	1,400	3,000
Pumping Capacity	Water (ℓ/s)	4,000	11,000
	Ar (std.ℓ)	1,500	3,000
Max. Throughput	H <sub>2</sub> (std.ℓ)	15	50
	Ar (Torr · ℓ/s)	9	13
Base Pressure	H <sub>2</sub> (Torr · ℓ/s)	-	-
	Torr	<10 <sup>-09</sup>	<10 <sup>-09</sup>
Cooldown Time	Minute	60	110
Weight	kg	30	40
Inner Dia.	mm	200	320
Inlet Flange	CF/ISO	ISO	ISO

※ Please contact Cryo H&I sales team for additional models

# GEN Comp Series Specifications

Model	GC022	GC05(P) Series	GC06(P) Series	GC66P Series
H x W x D	473 x 531 x 512	780 x 530 x 533	780 x 530 x 533	1575 x 610 x 579
kg	90	125	125	200
Phase	1	3	3	3
Frequency	50/60	50/60	50/60	50/60
Voltage	220±10%	220±10%	220±10%	220±10%
Operating Current	8 ~ 12	18 ~ 22	18 ~ 22	40
Coolant Gas	Helium	Helium	Helium	Helium
Purity	99.999 Min.	99.999 Min.	99.999 Min.	99.999 Min.
Dew Point	-63	-63	-63	-63
Charge Pressure @20°C	210	250	250	250
Cooling Water @20°C	ℓ/min	7.6	7.6	7.6
Cooling Water Temp.	°C	10 ~ 27	10 ~ 27	10 ~ 27
Cooling Water heat radiation	kW	2.6	7.6	7.6
Supply and Return fitting	3/8" - 18 NTP	3/8" - 18 NTP	3/8" - 18 NTP	3/8" - 18 NTP
Power Consumption	kW	2.4	7	12
Noise	dB	Max. 70	Max. 60	Max. 70

※ There are product lineup by horsepower. For more information, please contact Cryo H&I sales team  
 ※ Only the representative model is listed. For other compressors, please contact Cryo H&I sales team



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