

## MARATHON® CP-20 CRYOPUMP



The versatile Marathon® CP-20 Cryopump was specifically designed to meet the needs of large vacuum applications. Its innovative design assures that users achieve the highest performance possible with minimal capital investment.

The CP-20 is driven by the highly-efficient F-70 compressor. Like all Freedom® series compressors, the F-70 provides refined oil and gas management to the cryopump and offers a unique 30,000-hour service interval.

Additionally, the optional Marathon Cryopump Controller (MCC) enables fully automatic operation of the cryopump using commands from a host computer using standard cryopump protocol. The result is greatly reduced

downtime between production cycles, improved process times and better overall efficiency of the user's process. Most importantly, by utilizing the MCC system, users can achieve rapid "cold-to-cold" times.

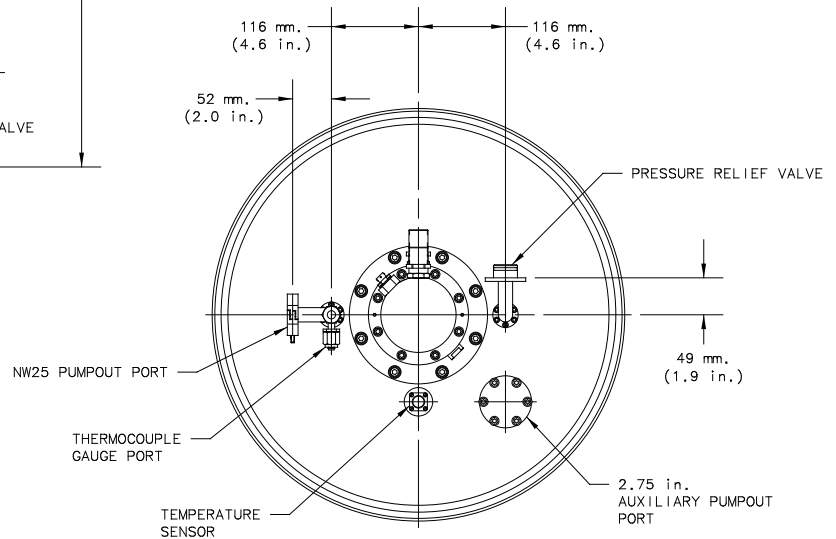
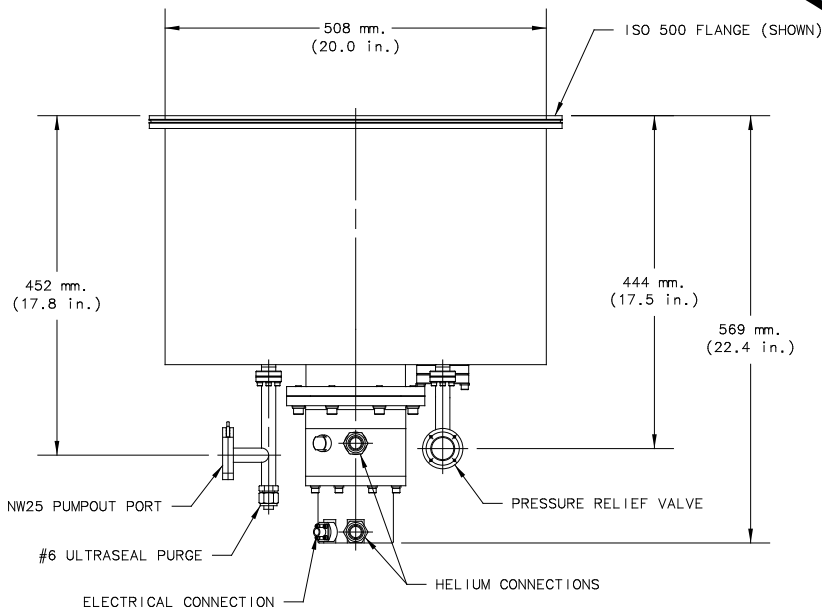
The CP-20's compact and robust design fits easily onto new and existing systems. The ability to service the CP-20 "in-situ" saves the user maintenance costs and downtime, and does not require removing a large cryopump or breaking chamber vacuum for return or replacement. The result is maximum uptime and minimum cost of ownership. Like all SHI Cryogenics Group products, it is supported by a worldwide sales and support network.

### Features

- Patented, pneumatically-driven cold head with limited moving parts for reliable operation and on-site, "in-situ" maintenance
- High capacity for longer operation
- High crossover pressure and pumping speeds for faster pumpdowns
- Drop-in replacement for existing systems
- Option for fully automatic operation and fast regeneration (i.e. superior "cold-to cold" time)

### Specifications

<b>Pumping Speeds:</b>	Air	9,700 L/sec	<b>Crossover Rating:</b>	400 torr-liters		
	Water	29,100 L/sec		<b>Cooldown:</b>	190 minutes	
	Argon	8,300 L/sec			<b>Inlet Flange:</b>	ANSI 20 inch or ISO 500 mm
	Hydrogen	14,000 L/sec				<b>Weight:</b>
<b>Throughput:</b>	Argon	11.3 torr-liters/sec (900 sccm)				
	<b>Capacity:</b>	Argon	6,000 standard liters			
	Hydrogen	33 standard liters (optional configuration for 44 standard liters)				



## For Information in: Asia

**Sumitomo Heavy Industries, Ltd.**  
ThinkPark Tower  
Cryogenics Division, Sales Department  
1-1, Osaki 2-Chome, Shinagawa-Ku  
Tokyo 141-6025, Japan  
Phone: +81-3-6737-2550  
Fax: +81-3-6866-5114  
E-mail: cryo@shi.co.jp

**Sumitomo Heavy Industries (Shanghai), Ltd.**  
Room 1301, Xingdi Business Building  
1698 Yishan Road, Minhang District  
Shanghai 201103, P.R. China  
Phone: +86-21-3462-7660  
Fax: +86-21-3462-7661  
E-mail: Jin-Lin\_Gao@shi.co.jp

**SHI Cryogenics of Korea Co., Ltd.**  
Room 619-620, Venture Valley  
#958 Goseck-Dong, Kwonsun-Gu  
Suwon-City, Gyeonggi-Do, South Korea  
Phone: +82-31-278-3050  
Fax: +82-31-278-3053  
E-mail: Won\_Bum\_Lee@shi.co.jp

## Europe

**Sumitomo (SHI) Cryogenics of Europe, Ltd.**  
3 Hamilton Close, Houndmills Industrial Estate  
Basingstoke, Hampshire RG21 6YT  
United Kingdom  
Phone: +44 (0) 1256 853333  
Fax: +44 (0) 1256 471507  
E-mail: uksales@shicryogenics.com

**Sumitomo (SHI) Cryogenics of Europe, GmbH**  
Daimlerweg 5a  
Darmstadt D-64293, Germany  
Phone: +49 (0) 6151 860 610  
Fax: +49 (0) 6151 800 252  
E-mail: contact@sumitomocryo.de

**World Wide Web:** [www.shicryogenics.com](http://www.shicryogenics.com)

## United States

**Sumitomo (SHI) Cryogenics of America, Inc.**  
1833 Vultee Street  
Allentown, PA 18103  
Phone: +1 610-791-6700  
Fax: +1 610-791-0440  
E-mail: sales@shicryogenics.com

**Sumitomo (SHI) Cryogenics of America, Inc.**  
456 Oakmead Parkway  
Sunnyvale, CA 94085  
Phone: +1 408-736-4406  
Fax: +1 408-736-7325

**Sumitomo (SHI) Cryogenics of America, Inc.**  
1500-C Higgins Road  
Elk Grove Village, IL 60007  
Phone: +1 847-290-5801  
Fax: +1 847-290-1984

© SHI Cryogenics Group 10/09