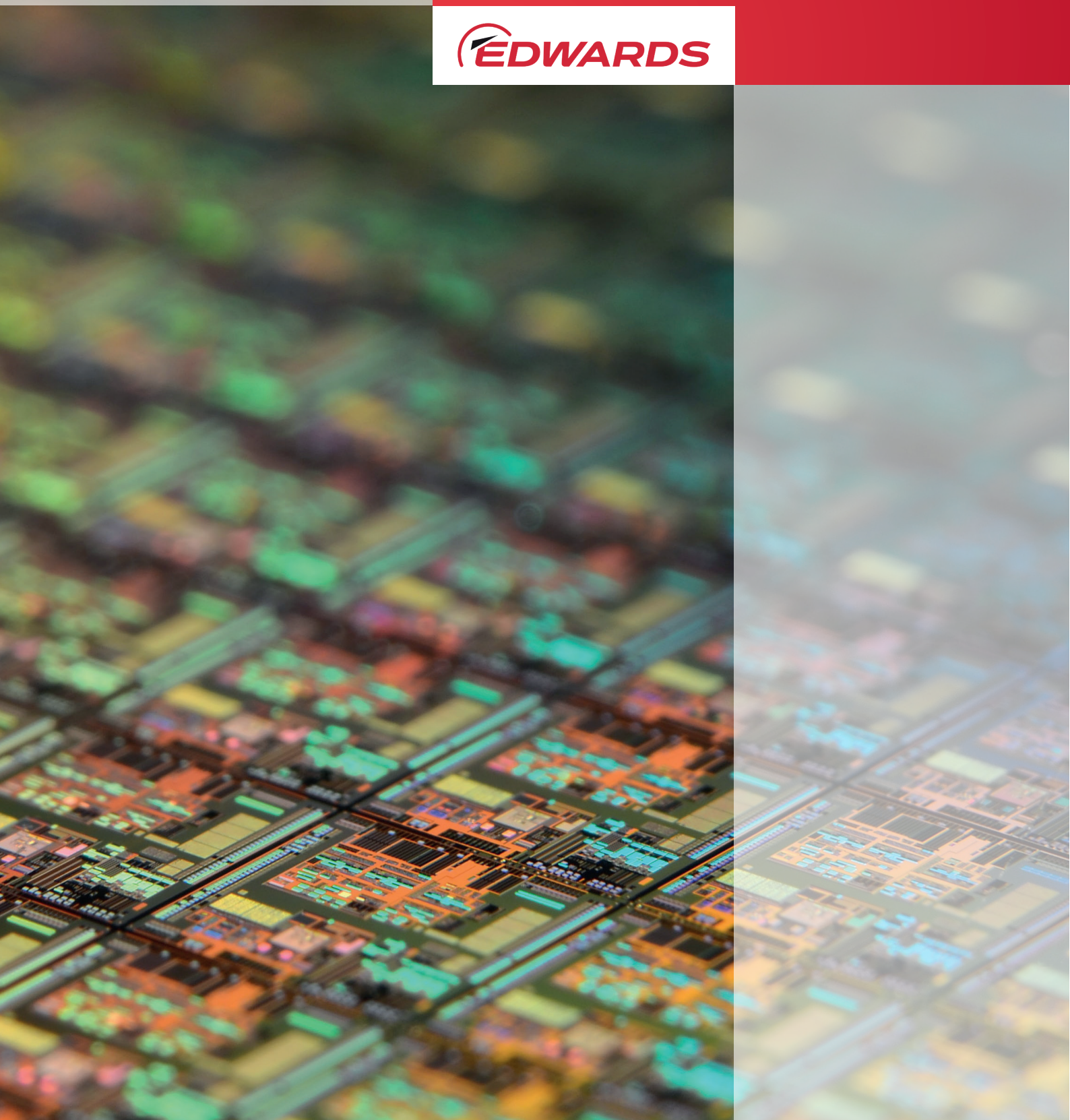
edwardsvacuum.com

CTI-CRYOGENICS® REFRIGERATION SYSTEM

MODEL 22, 350, 1020, 1050 (CRYODYNE®)

EDWARDS



CTI-CRYOGENICS®
REFRIGERATION SYSTEM

MODEL 22, 350, 1020, 1050 (CRYODYNE®)

CTI offers a family of single and two stage, closed-cycle refrigeration systems based on the Gifford-McMahon thermodynamic Cycle. They provide usable heat lift from <10K to >80K for a variety of commercial and research applications. CTI has the most thoroughly proven closed-cycle helium refrigeration systems on the market today.

CTI Refrigeration systems consist of a refrigeration assembly, compressor assembly and customized installation kit, which includes flexible interconnecting Helium lines and refrigerator cable ranging from the standard 10-foot separation length up to 300-foot length.

Applications and Markets

R&D
Superconductor Cooling
Cryopumps
Optical Systems
Materials Research
Spectroscopy
Radio Astronomy
NMR Systems

FEATURES & BENEFITS

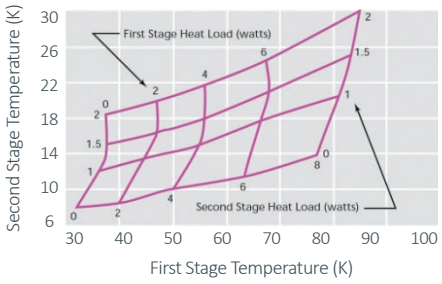
- **The most thoroughly proven closed-cycle helium refrigeration systems on the market**
- **Ultra pure helium gas as the refrigerant which is environmentally safe and nonflammable**
- **Long life**

Model 22 Cryodyne® Refrigeration System

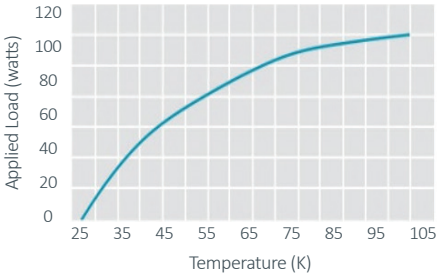
The Model 22 is available in both single and two stage for applications that require a compact cryocooler.

The single stage M-22 is designed to provide up to 11 watts of heat lift at 77K for cooling of high temperature superconductors, detectors and optical devices. The two stage M-22 is designed to provide useable heat lift under 10K and up to 1 watt at 20K and 8 watts at 77K simultaneously.

Model 22 Two Stage Cryodyne® Refrigerator Typical Performance (60Hz)



Model 22 Single Stage Cryodyne® Refrigerator Typical Performance (60Hz)

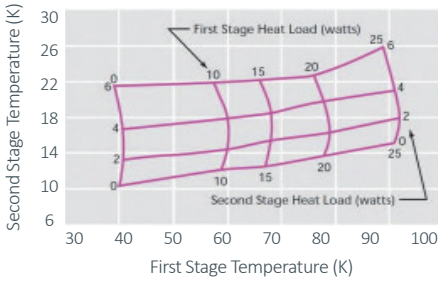


Model 350 Cryodyne® Refrigeration System

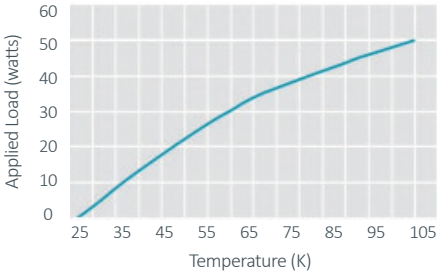
The Model 350 is available in both single and two stage configurations.

The two stage M-22 is designed to provide up to 11 watts of heat lift at 77K for cooling of high temperature superconductors, detectors and optical devices. The two stage M-22 is designed to provide useable heat lift under 10K and up to 1 watt at 20K and 8 watts at 77K simultaneously.

Model 350 Two Stage Cryodyne® Refrigerator Typical Performance (60Hz)



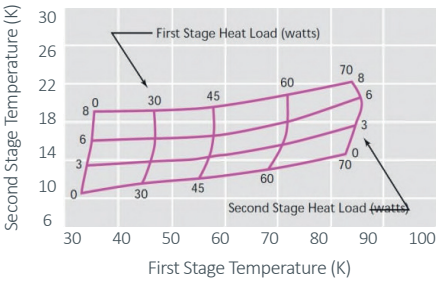
Model 350 Single Stage Cryodyne® Refrigerator Typical Performance (60Hz)



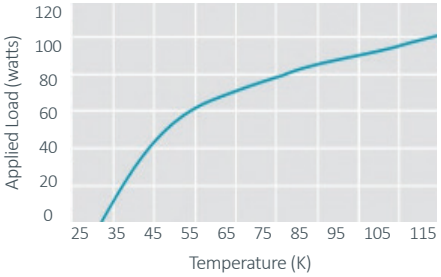
Model 1050 Cryodyne® Refrigeration System

The Model 1050 is available in both single and two stage configurations to meet a variety of high capacity cooling applications. The M-1050 is ideal for a number of high temperature semiconductor applications that require cooling from 20K to 80K. The M-1050 single stage system will provide 80 watts of heat lift at 77K. The M-1050 two stage system will provide 7 watts of heat lift at 20K and 65 watts at 77K simultaneously.

Model 1050 Two Stage Cryodyne® Refrigerator Typical Performance (60Hz)



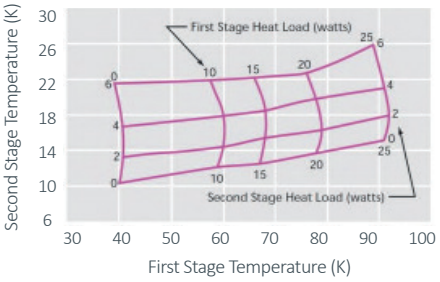
Model 1050 Single Stage Cryodyne® Refrigerator Typical Performance (60Hz)



Model 1020 Cryodyne® Refrigeration System

The Model 1020 is available in a two stage configuration only. Single stage performance is available from the M-1050. The M-1020 was designed for high capacity applications such as MRI magnet shield cooling and large cryopumps. The M-1020 will provide 12 watts of heat lift at 20K and 35 watts at 77K simultaneously.

Model 1020 Two Stage Cryodyne® Refrigerator Typical Performance (60Hz)



CTI APPLICATIONS EXPERTISE

The CTI applications team listens carefully to customer perspectives and partners with them to address their issues. Leveraging our leadership in modern cryopump technology, we deliver the right solution, whether off the shelf or custom engineered. We are committed to helping you meet your process and manufacturing objectives.

edwardsvacuum.com

Edwards Ltd, registered in England and Wales No. 6124750, registered office: Innovation Drive, Burgess Hill, West Sussex, RH15 9TW, UK.

GLOBAL CONTACTS

EMEA	
UK	+44 (0) 1444 253 000
	(local rate) 0845 921 2223
Belgium	+32 2 300 0730
France	+33 1 4121 1256
Germany	0800 000 1456
Italy	+ 39 02 48 4471
Israel	+ 972 8 681 0633

ASIA PACIFIC	
China	+86 400 111 9618
India	+91 20 4075 2222
Japan	+81 47 458 8836
Korea	+82 31 716 7070
Singapore	+65 6546 8408
Taiwan	+886 3758 1000

AMERICAS	
USA	+1 800 848 9800
Brazil	+55 11 3952 5000