



CTI Cryogenics® On-Board® IS-2000V Compressor

CTI-CRYOGENICS®

IS-2000V Offers Lower Cost of Ownership:

- Highest energy efficiency
Variable speed increases cooling capacity, reduces energy costs by at least 20%
- Single compressor solution
One IS-2000V will support up to 10 cryopumps
- Smaller footprint
Stacked design halves compressor footprint in your facility
- Lower thermal load
Cooling water load is reduced by approximately 40%
- Fault-tolerant operation
Designed to minimize operational downtime and send alerts

On-Board® IS Benefits

- Proven reliability and operational life
- Increased tool availability for higher productivity
- Intelligent cryopumping solution to maximize pump efficiency
- Optimal helium management and power savings
- Global rapid response teams

The most energy efficient compressor in the industry.

The On-Board® IS-2000V Compressor meets process engineers' demands for improved performance, greater energy efficiency, lower energy costs and design flexibility. Not only does it support up to 10 cryopumps in *half* the footprint of other compressors, the IS-2000V provides the highest energy efficiency in the industry.

The IS-2000V lowers cost of ownership with greater efficiency, higher cryopump capacity, and optimal helium management.

Brooks has developed the answer to industry demands for greater efficiency and sustainable operations¹. The IS-2000V reduces energy consumption by more than 20% and also reduces the thermal load on facility cooling water by 40%.

This compressor offers design refinements resulting in adaptable helium output and fault-tolerant operation. Variable speed operation enables dramatic power savings while the compressor runs at more efficient and higher pressures to optimize the helium output.

The IS-2000V supports new and existing On-Board® IS Cryopump applications. It leverages proven On-Board® IS technology: intelligent system controls, cryopump solution integration, robust electronics and software. Like the rest of the product line, it enables multiple pump configurations with the most efficient and cost-effective helium management solution.

¹The IS-2000V aligns with the energy reduction objectives associated with SEMI Standard S23 (Guide for Conservation of Energy, Utilities and Materials Used by Semiconductor Manufacturing Equipment), and is compliant with the RoHS (Restriction of Hazardous Substances) directive.



On-Board® IS-2000V Compressor

Crypumps consume up to 22% of a tool's energy during process and up to 50% when idle. The IS-2000V substantially reduces these values, lowering the cost of ownership over the life of your tool.

Compressor Specifications

Dimensions

518 mm w x 686 mm d x 1481 mm h
(20.4" w x 27.0" d x 58.3" h)

Weight

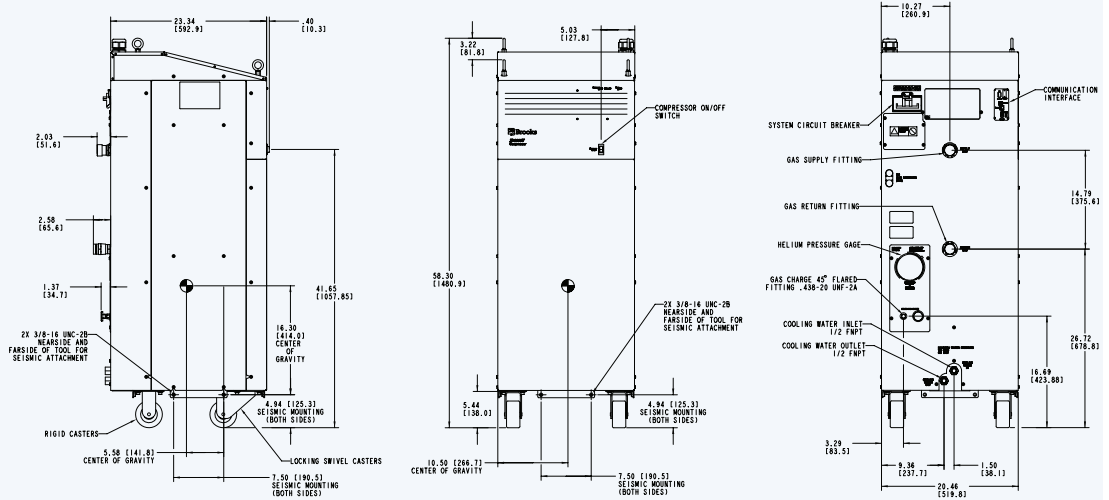
Low-Voltage Model 250 kg (550 lbs)
High-Voltage Model 261 kg (575 lbs)

**Operating Voltage
(3-phase, 50 Hz or 60 Hz)**

Low-Voltage Model 180-253 VAC
High-Voltage Model 342-528 VAC

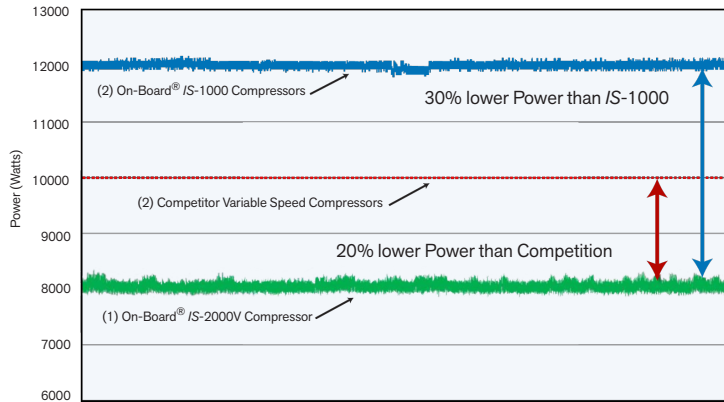
Input power

13.5 KW
Cooling water 3.0 to 4.0 GPM



20% Power Savings Over Competition

Demonstrated Energy Reduction by Large End-user
On-Board® IS-2000V Compressor Power Consumption
Applied Materials ENDURA2 (8 Cryopump Configuration)



*IS-2000V not currently qualified on Applied Material Endura2 System
The IS-2000V offers 30% lower power consumption than the IS-1000 and 20% over competing compressors.

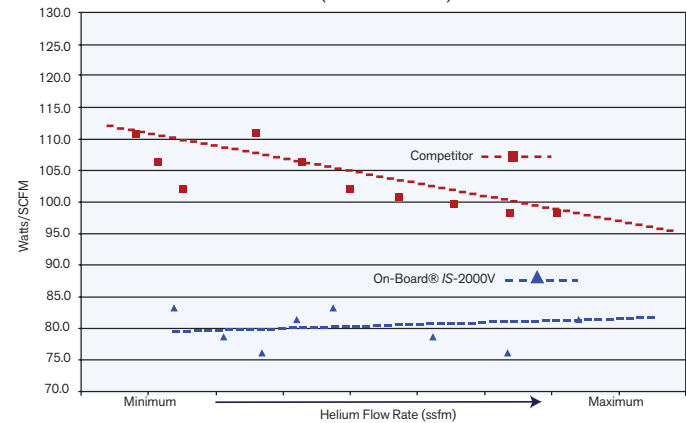
50% Reduction In Footprint



The IS-2000V supports up to 10 cryopumps in half the footprint.

Variable Speed Compressor Increases Efficiency

On-Board® IS-2000V vs (2) Competitor Compressors
Watts/SCFM
(480 VAC 60 Hz)



By providing variable speeds, the IS-2000V greatly reduces energy consumption.

Brooks Applications Expertise

The Brooks 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.

For more information, please contact your local Brooks Automation sales representative or visit www.brooks.com.

