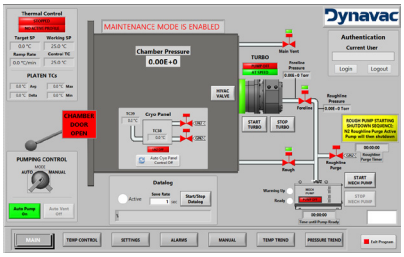


SmallSAT Thermal Vacuum Systems

Dynavac's SmallSat Thermal Vacuum Systems are designed for reliable, cost-effective testing in the small satellite market, where rigorous testing ensures mission success. With over 40 years of experience, Dynavac offers turnkey systems that help ensure device survivability through extreme flight conditions, providing confidence in flawless technology performance from launch to orbit.

- **Vacuum Chambers:** Dynavac's renowned craftsmanship sets the highest quality standards for chamber construction, protecting your investment for years to come.
- **Robust Pumping Systems:** Our systems provide the most efficient and cost effective solutions for high vacuum pumping. Various combinations of mechanical pumps, turbopumps, and cryopumps ensure pressures down to 1 x 10^{-6} Torr.
- **Thermal Control:** With two options for thermal control, you can replicate low-earth orbit to the extreme temperatures of deep space. In combination with our shroud and platen designs, we provide an effective method for conditioning test articles.





- **Unmatched Quality and Performance:** Every system is backed by the Dynavac brand of quality and customer commitment, ensuring support when you need it.
- **Intuitive User-Interface:** Our advanced user interface is designed to enhance the functionality and efficiency of our systems. The control system features automatic system pumpdown, recipe profiles, precise thermal plate temperature readings, interactive schematic with vacuum gauging to monitor chamber pressures, temperature and pressure trend graphs, ensuring you have all the data you need at your fingertips.

System Models

Model	Size	Interior Dimensions w x d x h (mm)	Working Volume w/platen only w x d x h (mm)	Working Volume w/platen & shroud w x d x h (mm)
1200	1 cu. ft. (28L)	12" x 12" x 12" (304 x 304 x 304)	10" x 10" x 8" (254 x 254 x 203)	N/A
2400	8 cu. ft. (227L)	24" x 24" x 24" (609 x 609 x 609)	24" x 24" x 20" (609 x 609 x 508)	20" x 20" x 18" (508 x 508 x 457)
3600	27 cu. ft. (765L)	36" x 36" x 36" (914 x 914 x 914)	36" x 36" x 30" (914 x 914 x 762)	27" x 30" x 28" (685 x 762 x 711)

Creating the environment for your mission success

From Dynavac, the most respected name in space simulation systems

Engineered & Manufactured in the USA

www.dynavac.com



SPECIFICATIONS

Thermal Control Options

Liquid nitrogen with electric heaters (LN2 Models)	▪ -180°C to 150°C
Closed loop chiller (MR-1 Models):	▪ -70°C to 80°C
Closed loop chiller upgrade (MR-2 Models)	▪ -70°C to 150°C

Vacuum Chamber
- Stainless steel construction, hinged door with 4” viewport, supported on mobile frame

Pumping System
- Base Pressure: 1 x 10^{-6} Torr
- Pumps: dry mechanical roughing pump and turbomolecular pump (optional cryopump)
- Optional scavenger panel available for faster pump-down



Platen
- Aluminum construction with mounting holes

Shroud
- Aluminum construction, optically dense enclosure, interior painted with solar absorbing paint

Spare Ports
- (2) ISO100
- CF 2.75”
- Additional ports upon request

System Control
- Automatic system pumpdown
- Thermal control with recipe profiles
- Thermal plate temperature readings
- System and personnel safety interlocks
- Interactive schematic with vacuum gauging to monitor chamber pressures
- Instrumentation housed within system framework
- Temperature & pressure trend graphs

Options and Upgrades
- Cryogenic Shroud
- Scavenger panel
- Telescoping platen rails
- TC-channel data acquisition system
- Door viewport
- Installation, startup and training
- Annual maintenance contracts

Why Choose Dynavac?

With over 40 years of experience and a reputation for excellence, Dynavac thermal vacuum systems are trusted by aerospace organizations worldwide. Our commitment to innovation and quality ensures that you receive the best testing solutions for your spacecraft.

Dynavac
40 Years of Innovation

110 Industrial Park Road, Hingham, MA 02043
Tel: 781-740-8600 | sales@dynavac.com
www.dynavac.com

SMALLSAT-TVAC/9-2026/2.0