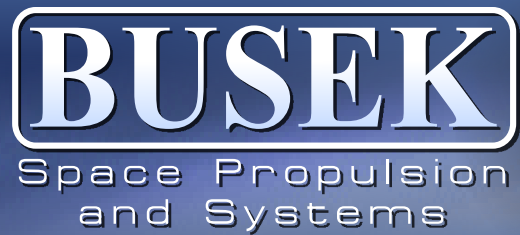


Busek Hall Thruster demonstrates 20kW Dual Mode Operation



Press Release

Natick, Massachusetts—March 13, 2007—

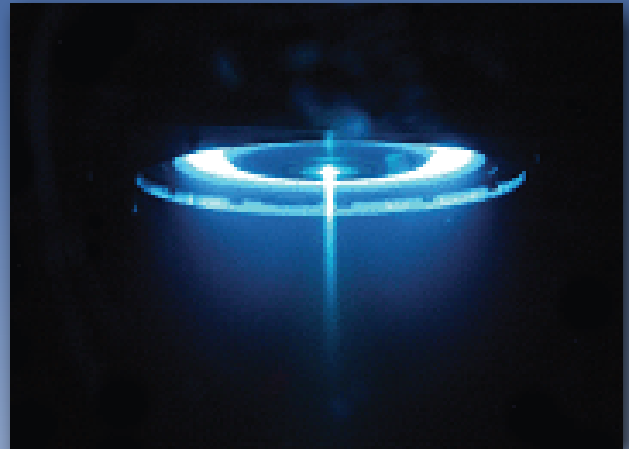
Busek Co. Inc. of Natick, Massachusetts, demonstrated the dual mode operating capability of a 20kW Hall Effect Thruster (BHT-20K) in a 12-ft diameter vacuum facility (12V) at USAF-Arnold Engineering Development Center (AEDC). Test participants included Busek, AEDC, the Aerospace Testing Alliance (ATA), NASA MSFC, and the University of Tennessee Space Institute (UTSI).

The laboratory model Hall Thruster was built for a Small Business Innovation Research (SBIR) program funded by AFRL. In testing at AEDC, the thruster was operated at steady-state discharge power levels in excess of 20kW in both high specific impulse (40A, 500V) and high thrust (100A, 200V) modes.

This test and a series of associated experiments quantified the plasma propulsion testing capabilities of 12V. At 20kW and a discharge current of 100A, the measured background pressure was 8.0×10^{-7} Torr, indicating a pumping speed over 4 million liters per second.

The test successfully demonstrated the dual mode capability of the BHT-20K Thruster and the testing capability of AEDC's 12V facility.

"This test was an excellent demonstration of the Busek Thruster operation and the 12V facility," said AEDC Test Manager Lance Baxter, "but it wouldn't have been possible without the Industry-Government-Academia team that came together to support it."



Busek's 20kW Hall Effect Thruster BHT-20K operating at 20kW output power in AEDC's 12V Vacuum Test Facility.
Photograph courtesy of AEDC

Busek Co. Inc. specializes in providing complete electric space propulsion systems including but not limited to a wide range of thrusters, propellant management systems, power processing units and digital control interface units. Busek provides analytical, computational, experimental and product services to government and industry.