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ACCO

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COTS Propulsion Systems Complete Classified Mission



VACCO® Industries has initiated production of Commercial Off the Shelf (COTS) Integrated Propulsion Systems (IPS) in their Advanced Products manufacturing facility near Los Angeles. "These systems are unique in that they are specifically designed to meet DoD and NASA requirements" stated Joe Cardin, VACCO's Chief Technology Officer. IPS systems from VACCO's pilot production program recently completed missions on three classified SmallSats. VACCO is now incorporating lessons-learned and moving their flight-proven IPS design into continuous production using a Flow Cell manufacturing model to supplement their traditional Job Shop model. "Our customers are looking for high performance, low risk systems that are affordable and quickly deliverable, we aim to satisfy this need" said Cleve Samson, Manager of Sales & Marketing at VACCO. IPS is ideal since it produces high thrust (approximately 4N) in a self-contained, bolt-on assembly. The design includes an integral electronic controller that facilitates both command & control and health monitoring via a digital interface. Integration with the host spacecraft amounts to simply bolting it on and plugging it in. This vastly simplifies and accelerates SmallSat final assembly. In addition to as-built traceability and Acceptance Test Data for each unit, VACCO plans to provide a complete data set, including an Equipment Specification along with design qualification/compliance data.

"VACCO continues to invest in IPS system design, development, and industrialization to support production at a market-driven cadence" said Steve Jones, Vice President, VACCO Space Business Unit. "We plan to scale production to the needs of the industry" he went on to say. This approach not only reduces cost but also slashes lead time as well as technical/schedule risk. Every key step in the production process completed before the order is even placed, reduces the risk of production issues while increasing customer confidence. IPS design enhancements and standard options will be on-ramped into the production design over time.





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VACCO Industries, Inc. has been producing critical fluid control systems and components for Spacecraft, Launch Vehicles and Submarines since 1954. The first space component was delivered to JPL in 1962. Over the last twenty years, this knowledge and experience has been applied to the design and production of over forty Micro Propulsion Systems, including three IPS.

For more information, please email space-west@vacco.com

ABOUT VACCO Industries

VACCO Industries, part of the Filtration Solutions Group of ESCO Technologies Inc. (NYSE:ESE), St. Louis, is a leading designer and manufacturer of specialty valves, filters and advanced fluid control products. For more than 65 years, VACCO® specializes in design and production of engineered fluid controls for defense, space, aircraft and commercial markets. Proven Valves, Regulators, Filters, Couplings, Refueling Mechanisms, Welded Manifolds, and highly-integrated ChEMS™ Modules are available for applications ranging from cryogenic to high pressure and severe service systems. Reliable heritage products for Intelligent solutions. For more information about VACCO products, contact: John Habis, Vice President of Business Development (626) 450-6432.

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