

## **Honeybee Selects GPI Plasma Source for NASA Lunar Dust Simulation**

**TUCSON, ARIZONA – MARCH 08, 2010** - As NASA prepares to send spacecraft for space exploration, developing the technology to do so is no easy task. A significant problem faced by equipment in use for lunar, planetary and asteroid environment is ‘extraterrestrial dust’ – essentially, extraterrestrial dirt. Unlike soil found on Earth, space dust is composed of very fine particles capable of significant equipment abrasion, coating, and clogging of mechanical parts. Because extraterrestrial soil is so different from that found on earth, it must be replicated synthetically so that NASA is able to design equipment capable of dealing with the risks of extraterrestrial dust.

Creating synthetic extraterrestrial dust is no easy task and requires significant technological innovation. To help in doing so, NASA contractor Honeybee Robotics of New York has asked General Plasma, Inc (GPI) of Tucson, AZ to design an Annular Plasma Source capable of treating dust in a vacuum environment that simulates the conditions the material would be exposed to in extraterrestrial environment. The plasma source will clean organic compounds from the surface of the dust particles and mimic the solar wind. The plasma applied to the dust will also create surface defects on the dust particles similar to those found on the moon.

John Madocks, President of General Plasma is very excited to be helping the United States once again return to the surface of the moon stating “our revolutionary plasma technology has many different applications. While typically used in the vacuum thin film coating industry, using our product to create simulated lunar dust shows the versatility and capability of the GPI Plasma Source technology. We are thrilled to be involved in such a unique and important project.”

Jason Herman, Program Manager for Honeybee Robotics was pleased to be working with GPI to develop the Plasma Source technology to include in their lunar dust simulator pointing to “General Plasma’s reputation for quality Plasma Sources, customer support and timely delivery.” Herman went on to point out the importance of this project to the Space Program underscoring that “it is simply too risky to place equipment in space without effectively testing for the dust conditions that will be faced.”

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