



By Robert Gaither

The Tooling Paint Shop at LM Aero - Fort Worth recently implemented a new lean method for improving the process by which paint and other contaminants are removed from aircraft tooling prior to the application of new paint.

After preliminary evaluation of several abrasive-based cleaning systems, Tooling Operations selected a dry ice-based blasting system manufactured by Cold Jet, Inc. Due to the dry ice blast medium's unique ability to sublimate, or convert directly from a solid blast pellet to a vapor (carbon dioxide), the blast media reclamation requirement normally associated with sand and wet-blasting systems is eliminated.

This characteristic of the dry ice blasting process eliminates the need for construction of costly blast media containment rooms and allows use throughout the factory.

During the first six months of use, the system was responsible for eliminating approximately 400 man-hours of labor normally required to prepare tools for paint. Likewise, the time allotted for tooling rework, which normally requires removal of tooling from production's use, was substantially reduced.



Paul Cater conducts a dry ice "blasting" operation in the factory, a new lean process that improves the way paint and other contaminants are removed from aircraft prior to application of new paint.

Dry ice blasting, a valuable lean manufacturing initiative, offers other significant advantages over conventional cleaning methods. Before obtaining this system, environmentally harmful lacquer thinners containing volatile organic compounds were used to remove paint and other contaminants from tools before the application of new paint.

During the first six months after installation, the system was responsible for eliminating the use and disposal of approximately 200 gallons of environmentally harmful lacquer thinners.

Employees having 'a blast' with new process for removing old paint, contaminants



Ima Galindo handles preparations for use of dry ice blasting, a process saving time and money, and reducing the dependence on environmentally harmful lacquer thinners.

Dry ice blasting has proven itself as an extremely cost-effective method for cleaning virtually any type of material from which aircraft tooling is commonly fabricated. Tooling Operations and Manufacturing Development and Integration are currently evaluating other applications for dry ice blast cleaning.