

NAS NORTH ISLAND - NAVY REGION SOUTHWEST NAVY ENVIRONMENTAL LEADERSHIP PROGRAM

POLLUTION PREVENTION

TUMBLE BLASTING

LEAD ACTIVITY

Naval Air Station (NAS) North Island

STATUS

Complete

MISSION

Provide corrosion control on small components

REQUIREMENT

Conventional methods of providing corrosion control on small components from equipment used at Navy sites consist of manually removing the corrosion in a blast booth. This method is considered costly and does not adequately protect Navy personnel from exposure to the removal media. A cheaper and safer method of providing corrosion control is required.

DESCRIPTION

Conventional corrosion control measures for small equipment components at NAS North Island consisted of using a manual blasting system at Naval Aviation Depot (NADEP). The tumble blasting system currently used at NAS North Island replaces this labor-intensive, costly system with a glass bead blasting process in an enclosed tumble blaster. The process takes approximately 15 to 20 minutes and provides corrosion control to small equipment components such as tie-down chains, nuts, and bolts. The components are washed using a parts washer, cleaned with the Tumble Blaster, then treated with a corrosion prevention compound (CPC). The system is automatic, stationary, and completely enclosed, providing adequate protection from the removal media to Navy personnel. The enclosed unit does not require exterior ventilation; therefore, no air permit is required. Also, the system is less costly compared to the conventional blasting systems.



Tumble Blaster

The Aircraft Intermediate Maintenance Department (AIMD) and the Commander of Naval Air Forces Pacific Fleet (CNAP) Support Equipment Facility currently use the tumbler blaster at Buildings 801. The tumble blasting system is used at the facility to provide corrosion control on air-capable ships that have ground support equipment, such as tow tractors and dollies.

BENEFITS

- The system is stationary and automatic, allowing personnel to conduct other duties while the system is operating
- The system is less expensive than conventional blasting
- Navy personnel are protected from blasting media by the enclosed unit
- No air permit is required as the process is a closed-loop system with no outside ventilation required

ACCOMPLISHMENTS/CURRENT STATUS

Date	Activity
OCT 1996	Procured and distributed tumble blasting units
MAR 1999	Procured system for Building 39 at Naval Air Systems Command (NAVAIR)

FUTURE PLAN OF ACTION & MILESTONES

Not Applicable

COLLABORATION/TECHNOLOGY TRANSFER

The tumble blasting system is being evaluated as part of the Pollution Prevention Equipment Program (PPEP). It can be used at Navy sites where corrosion control measures are required on small equipment components.

BIBLIOGRAPHY

None available

RELATED GOVERNMENT INTERNET SITES

None available

RELATED NAVY GUIDEBOOK REQUIREMENTS

- 10005 Pollution Prevention (P2) Equipment Site Preparation

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