

THE PROBLEM



- Broad diversity of parts are currently primed by air spray application.
- VOC: Even water based products have significant VOC content.
- Overspray contributes to waste.
- Inefficient transfer efficiency.
- Higher material cost.
- Recessed areas of complex geometries not coated, protected.



THE SOLUTION - ECOAT -

- Cationic Epoxy Technology.
- Chrome free.
- Very low VOC (~85% reduction).
- Near 100% Transfer Efficiency.
- Waste stream reduction.
- Complete coverage of complex parts – corrosion protection.
- Highly automated process.
- Approved MIL-SPEC CARC primer.
- Proven industrial process.
- Currently no Ecoat at Depots.



DEMONSTRATION

- Proposed Demo Sites: ANAD and RRAD
- PHASE I: Needs assessment and pilot system design.
- PHASE II: Pilot system build, shakedown, and ecoat selection.
- PHASE III: Parts coating and testing. Cost, performance analysis.

Compact Ecoat Line



Pilot Ecoat Line



Organization	Personnel	Role
ARL*	PI: Fred Lafferman	Project coordination and DoD oversight
PPG*	Matthew Scott	E-coat expertise, Project tasks execution
ANAD	Chris Coss	Facilitate depot needs assessment and demonstration activities
RRAD	Barry Henry	Facilitate depot needs assessment and demonstration activities
TARDEC	Dan Nymberg	Technical Support, demonstration oversight, communication with Program Managers/PEOs.

ELECTRODEPOSITION PAINTING

- Positively charged paint particles deposit on negatively charged parts
- Ideal for complex parts and recessed areas
- Closed loop system – very little waste
- “Throwpower” – coating seeks recessed areas and complex shapes
- Uniform and accurate film thickness control
- High solids, “dry” film – ideal for bulk coating process

