

Aggregate Chip Spreader CPD Development

Technology Description

The Aggregate Chip Spreader (ACS) is a self-propelled, diesel-engine driven machine with a minimum ten-foot (10') basic paving width. The aggregate chip spreader is durable and capable of spreading an even coating of aggregate one layer thick over an asphalt emulsion sprayed surface. Multiple layers of various aggregate types may be placed on various binders to address specific distress types and surface conditions for improving wear surface conditions of Main Supply Routes (MSRs) and other related horizontal construction missions. EXWC developed Capability Planning Document (CPD) for the Aggregate Chip Spreader.

Value to the Warfighter

The aggregate chip spreader's capability to expediently build MSRs and other horizontal structures to support multiple missions drives the need for it to be one of the initial pieces of equipment in theater. The aggregate chip spreader provides essential and immediate capabilities required for building and repairing roads, MSRs, airfields, parking areas and other expedient horizontal infrastructure within the theater of operations to support the mission.

Economics of the Technology: ROI or Payback

The ACS is a mature, commercially based non-developmental item that is fully adaptable for military use with minor modifications ready for full rate production. It provides expedient yet inexpensive resurfacing methods associated with humanitarian / civic assistance missions and construction projects during deployments. It is capable to operate on JP-8 or high sulfur diesel fuels and utilize locally procured or NCF developed aggregates.

Technology Transition Documentation

This Transition Category 1 (Knowledge Products) of the NAVFAC Technology Usability Model is based on existing commercial of-the-shelf (COTS) products and outlines the Key Performance parameters (KPPs), Key System Attributes (KSAs) and other system attributes into the CPD that would meet the capability requirements, which would further translate into specifications, documentation and acquisition packages for NAVFAC, SYSCOMs, PEOs/DRPMs/PMs, and NEPO.

The Capability Planning Document (CPD) for the Aggregate Chip Spreader (ACS) has been coordinated with all stakeholders such as NECC, various EXWC depts., and NEPO) and was forwarded to OPNAV N957 Expeditionary Combat Branch for review and approval.

Site Implementation

The Aggregate Chip Spreader (ACS) is part of the future buy-plan for NECC units. NECC will be fielding and allocating these assets across the naval Construction Force. EXWC is providing technical expertise and the specifications for the acquisition process.

Specific Applications

The Aggregate Chip Spreader (ACS) will be used for expediently building MSR's and other horizontal structures; to support multiple missions associated with humanitarian civic assistance and construction projects during a contingency or deployments.

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