



UNITED STATES DEPARTMENT OF DEFENSE

HUMANITARIAN DEMINING R&D PROGRAM

Multi-tool Attachments for Demining

Wide array of commercial and specialized excavator and loader based attachments for area preparation, technical survey and mine clearance

The Humanitarian Demining Research and Development (HD R&D) Program has developed a wide variety of excavator and loader based tools for mechanical mine clearance. These attachments give deminers the capability to perform area preparation, technical survey and mine clearance from a safe area. Tools that have proven useful include



STATUS

Operational field evaluations of various tools are underway in Afghanistan, Angola, Cambodia, Chile, Iraq, Lebanon, Sri Lanka, Vietnam, the West Bank, and Zimbabwe

Wet soil sifting buckets deployed to Guadalcanal in 2015
Cambodia in 2016
Zimbabwe in 2018
Sri Lanka in 2019

vegetation cutters, grapples, tillers, and buckets for sifting, grinding, and crushing. Development of sifting buckets capable of working in wet soil conditions took place in FY 2015. Deployed to Guadalcanal (this OFE is now complete), Cambodia and Zimbabwe, these buckets enable work to continue in rainy conditions that otherwise would halt operations. The HD R&D Program has modified several small, medium and large class excavators with armor protection and interfaces needed to use these tools in various demining environments. Operational Field Evaluations (OFE) can be performed with HD R&D Program developed excavators or loaders, or with just the tools mounted to the demining organization's own host equipment.

Cutting-Edge Solutions
DEMINING TECH

MINE DETECTION



FEATURES

- Provide reach-in mechanical mine clearance capability from a safe area
- Large variety of attachments can meet many mechanical mine clearance situations
- Adaptable to host nation owned excavators and HD R&D Program assets
- Commercially available tools facilitates world-wide support

APPLICATIONS

- Vegetation removal to include full size trees
- Technical survey
- Mine clearance by sifting, tilling, grinding, or crushing

Several of the many excavator based demining tool attachments:

Rockhound cutter on host nation excavator in Vietnam



Gator Grapple in Cambodia



Promac cutter in Cambodia



Denis-Cimaf Cutter in Guadalcanal



Rocklands sifter in Chile



Riddle sifter in Cambodia



Rotar sifting bucket



Remu sifting bucket



Conical wet soil sifting Bucket



Allu bucket with host nation excavator in Afghanistan



Tamina tiller



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