



UNITED STATES DEPARTMENT OF DEFENSE

HUMANITARIAN DEMINING R&D PROGRAM

A complete suite of tractor attachments for area preparation and AP mine clearance

MANTIS

The Mantis System is a set of specialized tractor attachments used in mine action. Armored tractors and loaders fitted with area preparation or clearance attachments can cover large areas of AP mine suspect land. Ground engaging implements loosen hard soil for manual deminers and expose mines. Magnets, including the HD R&D-developed Power Harrow + Magnet which engages the soil, remove metallic clutter that triggers detectors. Rollers locate mined areas and reduce suspect area. Tractor attachments include:

- Grab bucket
- Tree picker
- Soil sifter
- 4 in 1 bucket
- Bedformer
- Roller
- Spring rake
- Rotary mine comb
- Rotary mower
- V-form cultivator
- Magnet
- Power Harrow + Magnet
- Megastar Sifter

STATUS

Mantis is clearing high density AP minefields in **Afghanistan** with the HALO Trust. Initially on an armored John Deere tractor and now on HALO's tractors and loaders, Mantis attachments have processed 3,660,000 square meters and recovered over 29,000 mines and unexploded ordnance.

Mantis tractor and attachments completed a successful operational field evaluation in **Nicaragua** where it performed area reduction and quality assurance operations over 250,000 square meters of land.



Mantis cultivator on HALO loader loosens soil for manual demining.

Cutting-Edge Solutions
DEMINING TECH
MINE CLEARANCE & AREA PREP



FEATURES

- Agricultural tractor and loader tools are versatile in mine action
- Setco solid rubber tires and mine roller can withstand many AP mine blasts



Magnet attachments reduce minefield clutter



APPLICATIONS

- Area preparation, threat reduction, and quality assurance in AP suspect areas



Roller



V-form cultivator



Modified Standen Pearson Megastar Soil Sifter

US Army RDECOM CERDEC NVESD
info@nvl.army.mil
10221 Burbeck Road
Fort Belvoir, VA 22060-5806 USA
www.humanitarian-demining.org