



UNITED STATES DEPARTMENT OF DEFENSE

# HUMANITARIAN DEMINING R&D PROGRAM

## Mine Clearing Sifter

### A dozer-mounted AP mine sifter

Mine Clearing Sifter (MCS) is a dozer-mounted anti-personnel (AP) mine sifter capable of lifting and sifting mines, unexploded ordnance (UXO) and minefield clutter. MCS can go to a depth of 15 cm. The system is hydraulically driven and incorporates Standen Star technology as the sifting medium. The sifter weighs approximately 5700 kg and will clear a path 280 cm wide. The mines are side cast by a cross conveyor for subsequent disposal.

A Rockland Rough Service Rake has been integrated with a quick hitch mechanism for scarifying hard soil prior to mine clearance operations. This action breaks up sod and fractures the soil, thus improving the sifting process.



Soil travels up the sifting bed of the Mine Clearing Sifter during testing

### STATUS

The Mine Clearing Sifter completed performance testing and is a candidate for an operational field evaluation.

Similar technology for a smaller platform is under consideration.

## FEATURES

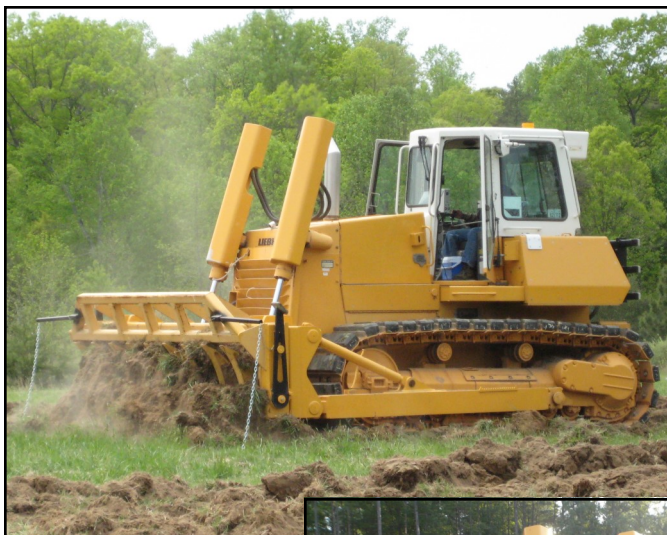
- Uses COTS state-of-the-art sifting technology
- Cross conveyor will side cast mines to either side
- Operates on host vehicle hydraulic system
- Cruise control provides constant ground speed. Cruise speed selectable from 150 m/hr to 1km/hr
- 4 Video cameras provide operator view of both conveyors , driving forward and backing up. Has remote monitoring system.

## APPLICATIONS

- Can lift and sift soil for mines, UXO and minefield clutter
- Can follow flails, tillers and grinders in a quality assurance role.
- Can operate in some dry soil that has not been previously worked

## SPECIFICATIONS

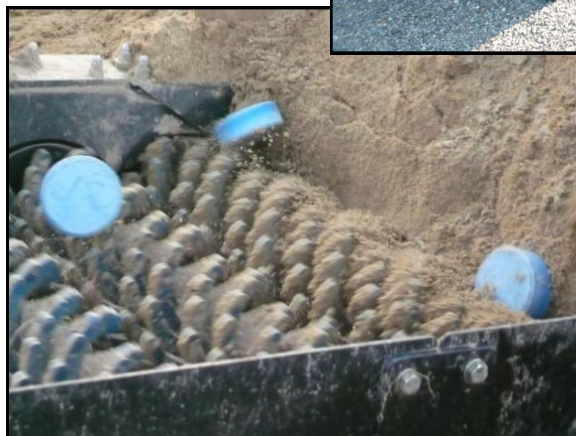
Length (Sifter)	3.4 m
Width (Sifter Bed)	2.6 m
Height (Sifter)	1.2 m
Weight (Sifter)	5680 Kg
Sifting Speed	0.15–1 km/hr
Power Requirements (Sifter)	< 29 Kw/40 hp
Sifting Depth	15 cm
Power Dozer	177 Kw/ 238/hp
Max Road Speed	9.3 Km/ 6.0 mph



Rockland Rough Service Rake



Sifting Bed with Standen Stars



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