



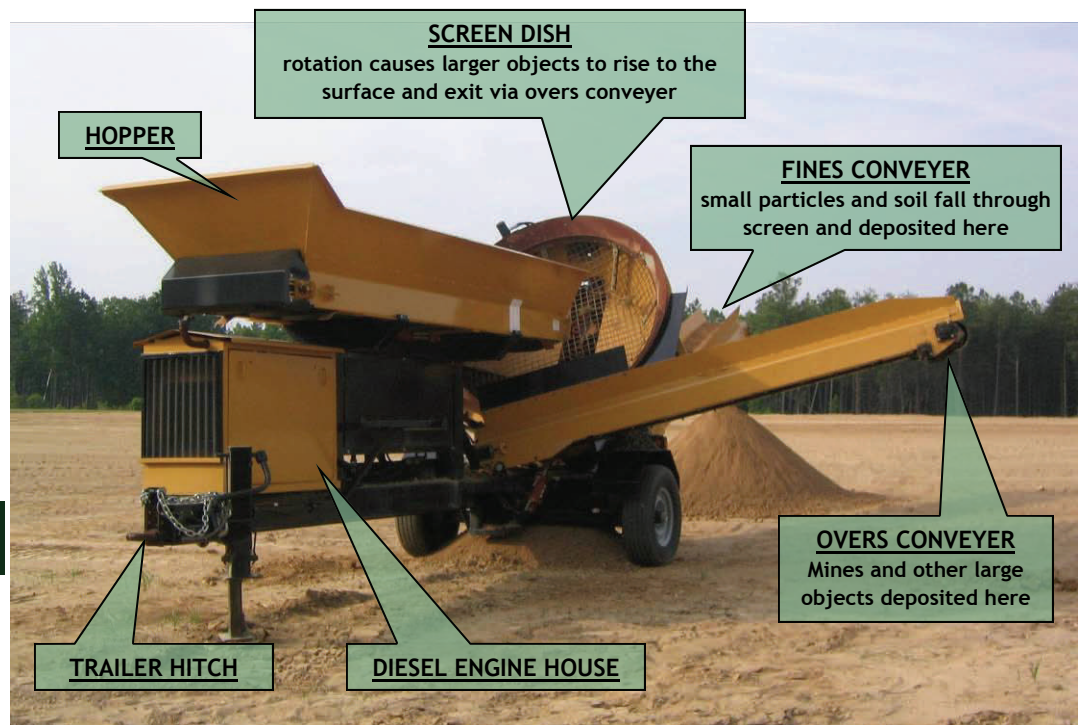
UNITED STATES DEPARTMENT OF DEFENSE

HUMANITARIAN DEMINING R&D PROGRAM

Orbit Screen

Self-powered mobile screener that continuously sifts materials, gently separating larger objects from the soil

The Orbit Screen Model 68 is a stand-alone sifter that can be used continuously to separate larger materials from a soil mix. Three different screen sizes supplied with the Orbit Screen have mesh openings of 3/4 inch, 2 inch, and 3 inch. According to the materials being screened and the density of the soil, the screens can easily be changed to separate small soil particles from larger bulky items.



STATUS

The Orbit Screen Model 68 began an operational field evaluation in **Afghanistan** with The Halo Trust in May 2007.

To date, the Orbit Screen has successfully uncovered over **550 AP mines** in over **9,000 m³** of soil.

The hopper can be filled by an armored loader. Once the material is loaded, a conveyor belt at the floor of the hopper feeds the material mix into the screen dish. Once in the rotating screen dish, the material rolling over itself allows large particles and light/fluffy items to rise to the surface. The larger particles are deposited onto the overs conveyer where a trained Explosive Ordnance Disposal operator can sort through the pile to identify dangerous items. The processed soil is fed out the fines conveyer free of landmines and other items larger than the screen mesh size.

Cutting-Edge Solutions
DEMINING TECH

MINE CLEARANCE



FEATURES

- Principles of material flow effect an easy, quick and natural particle size separation
- Can be used continuously on any screenable material, including rocks up to 100 lbs
- Hydraulic stabilizers for instant leveling
- Easy to set up, easy to operate, change screens in minutes

Resistant to Plugging: Plastic, paper, sticks, roots, weeds, grass, etc. simply rise to the surface of the turning material and quickly exit the screen.

Self-Cleaning: During operation the screen holes rotate continually exposing a new side of the hole to the flowing materials. This action helps by wiping off some of the moist materials, small sticks, grass or weeds etc. from the wire.

Transport: Can be accomplished with every day equipment. The plant is easily transported on public streets or highways without special permits, as well as around the work site.



APPLICATIONS

- Sifting for AP mines or UXO in various soil types, or in pre-excavated soil berms



Loading the Hopper for Screening



Collecting Debris for Inspection

SPECIFICATIONS

Orbit Screen Model 68 Diesel

Operating Weight	3,518 kg (7,740 lb)
Engine Type	Yanmar Water Cooled Diesel 3TNV828
Net Engine Power	19.4 kW (26 hp)
Length x Width x Height	10.3 x 2.3 x 2.9 m (33'10" x 7'6" x 9'6")
Axle Weight	2,773 kg (6,100 lb)
Screen Drive	Hydraulic—Variable Volume
Conveyor Drive	Hydraulic—Fixed Volume
Hopper Feeder Drive	Hydraulic—Variable Volume
Hopper Feeder Capacity	1.38 m ³ (1.8 yards ³)
Hopper Loading Height	2.4 m (7'8")
Screen Diameter	1.8 m (72")
Mfg. Nominal Rating	38.2 m ³ (50 Cubic Yards/Hour)
Screened Material Discharge Height	(10'-11')
Overs Material Discharge Height	(6'6")
Hitch Type	2 5/16" Ball or Pintle Ring

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