

## SIFTER SYSTEMS | NOMA VIBRATION SIFTER

Ararat Company | Northern Iraq

### GENERAL DESCRIPTION

The *NOMA Vibration Sifter* consists of a vibration mesh layer attached to an Oral 4 x 4 truck. It is used to sieve mine-contaminated soil which is loaded into it by an armoured excavator or armoured wheel loader. The sifter system vibrates the mesh layer to sieve the soil. Fine soil drops down during the sieving process leaving the contaminated soil in the container. The supervisor oversees the unloading of the contaminated soil into a selected area.

The dimensions of the mesh are 45 mm x 45 mm, which is smaller than the smallest mine. The sifting process is recommended for use in high fragmentation areas. The machine is sufficiently powerful for work in difficult terrain.



NOMA VIBRATION SIFTER

### CLEARANCE METHODOLOGY

The armoured wheel loader or armoured excavator drops dry soil into the top container of the sifter. The operator then starts lifting the container to feed the soil into the vibration mesh layer. After sieving, the same process is repeated until the second container is full. The sifted soil is then unloaded into a specific area where deminers check the soil visually and with metal detectors.

### MACHINES IN USE TO DATE

Four machines are currently being used by Ararat in Northern Iraq (Kurdistan)/ Sulaymania.

### **ENGINE, FUEL AND OIL**

The engine is a Russian six-cylinder, as supplied in the Oral 4 x 4 truck.

### **FACTORY SUPPORT**

- > A basic spare parts set is included in the purchase package.
- > Heavy maintenance can be provided on request.
- > Mechanic and operator training as well as refresher training can be provided.

### **MAINTENANCE AND SUPPORT**

On-site visits by a technical team with mobile workshop can be arranged with Ararat.

### **TESTS AND EVALUATIONS**

No information yet available.

### **REPORTED LIMITATIONS AND STRENGTHS**

No information yet available.



Sifter systems in operation

## DIMENSIONAL DATA

1. Length without attachment	6,000 mm
2. Length total	6,000 mm
3. Width without attachment	2,500 mm
4. Width total	2,500 mm
5. Clearing   Working width	N/A
6. Height   Overall	3,000 mm
7. Mass   Basic vehicle	4,000 kg
8. Mass   Detachable unit(s)	Sifter 3,000 kg
9. Mass   Overall	7,000 kg

## OPERATIONAL DATA

10. Wheels   Tracks (description)	Wheels
11. Ground Bearing Pressure (kPa)	N/A
12. Hill climbing ability (in degrees)	30°
13. Number of Chains   Chisels   Tools	N/A
14. Beat pattern (hits per m <sup>2</sup> ) at different operating speeds	N/A
15. Length of Chains   Tools	N/A
16. Diameter of flail drum	N/A
17. Rotation Speed	N/A
18. Clearance   Working depth in varying terrain	As required
19. Working Speed (m <sup>2</sup> /h)	
> Light Soil   Medium Vegetation	20 cubic m/h
> Medium Soil   Medium Vegetation	
> Heavy Soil   Dense Vegetation	15 cubic m/h
20. Control of Clearance   Working depth	N/A
21. Additional attachable working tools	
22. Armour	8 mm
23. Remote controlled	No
> greatest distance	
24. Transportation	Self driven
> short distances	
> long distances	
> sea transport	
> air transport	

## SYSTEM STATUS AND DEPLOYMENT

25. Machines in use	4
26. Other types	No
27. Location of use	Northern Iraq
28. Totally cleared so far (m <sup>2</sup> )	Not given

## ENGINE | FUEL | OIL

29. Engine	Oral
30. Engine power at the flywheel	N/A
31. Sufficient power supplied to working tool	N/A
32. Fuel capacity	300 l
33. Fuel consumption	15 - 20 l/h
34. Separate engine for working unit	No
35. Cooling system	Water cooled
36. Oil capacity (both engines)	20 l
37. Hydraulic oil capacity (both engines)	100 l

## COSTS

38. Cost of system	Not given
39. Other costs	Not given
> training	
> spare part set chains   belts	
> repair costs for one year	
40. Availability for hire	Not given

## OTHER

41. Operator comfort	Not given
42. Air conditioning	No