

Explosive and Drug Detection System (MEDDS)



MINE PROTECTED VEHICLE



There is a general acceptance that a set of trained dogs is currently the only capable field vapour detector. This ability, is however negated by their inability to engage in long duration physical strain and maintaining the same level of concentration.

In overcoming this constraint, MECHEM developed the MECHEM Explosives and Drug Detection System (MEDDS). This system is based on the collection of air samples in the field, using an air sampling machine, and then employing dogs in an environmentally controlled area to detect the presence of a target scent.

The system has evolved and been refined over the years and is currently employed in the identification of explosive vapour in landmine fields.

The primary use is that of area reduction, whereby sectors that do not contain traces of explosives or the target scent is eliminated. This has a resultant cost-saving implication.

USE TO DATE

MECHEM Medds dogs have analyzed air samples drawn from the Balkans, Middle East, Mozambique and Angola.

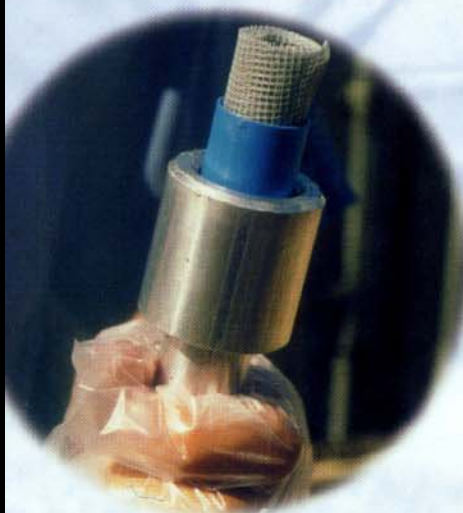
In all these areas Medds has been utilized as an area reduction tool as well as for quality assurance. In utilizing the Medds system, MECHEM was able to clear nearly 5000 kms of road in Angola in as few as four months.



TEST & EVALUATION

MECHEM has done vast evaluation and testing on the system to ensure accurate and trustworthy analyses.

The British authorities have tested the system in 1998 and found the system 98% accurate. This outperforms by far the other systems used in the same application.



TECHNICAL SPECIFICATION **BACKPACK SAMPLING MACHINE**

| | | |
|---------------------------|---|---|
| Engine | Husqvarna 240 RBD petrol | |
| Vacuum unit | Electrolux MRVCEL 31 | |
| Tank | Approx. 40 minutes | |
| Weight | 9.8 kg | |
| Engine rev @60/min | + - 5500RPM | |
| Fuel type | High octane + synthetic 2 stroke | |
| Fuel mix ratio | 80:10:00 | |
| Service intervals: | Air filter | Clean with soapy water after use |
| | Park plug | Replace after 100 hours |
| | | Replace after 100 hours |

In circumstances where a 220 or 110V power source is available an electronic powered back pack can also be used.



AFTERSALES **SUPPORT**

- ◆ 6 Months warranty
- ◆ Full training
- ◆ Maintenance
- ◆ All year spare parts availability
- ◆ Continuous research and upgrading.

VALUE **ADDED BENEFITS**

- ◆ Area reduction
- ◆ Less false alarms
- ◆ Cost-saving
- ◆ Accurate information gathering
- ◆ Quality assurance.