

MECHEM DEFLAGRATION SYSTEM



The MECHEM Deflagration System utilizes a safe and extremely cost efficient pyro-technic composition that, when, ignited, produces a very hot plasma substance that melts through the metal casing of a landmine.

It then ignites the explosives inside the mine to facilitate its self destruction through a rather slow burning process.

Whilst a partial detonation is possible (as a result of the detonator of the mine being activated by the heat generated), most of the explosive mass would probably have burnt away by the time such detonation might occur.

Irrespective of the technology used to locate landmines the actual disposal of the mine usually remains to be a major problem.

The possibility of anti-lift mechanisms and booby traps makes it extremely dangerous to handle or lift a landmine. It is common practice to destroy such landmines in situ by detonating an explosive charge in close proximity of the mine – unfortunately requiring expensive (and dangerous) high explosives. Explosives are however sometimes difficult to obtain and the transporting and storage of such explosives will always be a major problem. The MECHEM Deflagration System can be used to safely destroy the Landmine in situ without the aid of any explosives.

COMPONENTS OF THE SYSTEM

The MECHEM Deflagration System (MDS) consists of the following elements:

- Deflagration Powder
- Igniter
- Remote Electronic Trigger

Deflagration Powder

The Deflagration powder is a safe and extremely cost efficient pyrotechnic composition that when ignited produces a very hot plasma substance that melts through the metal casing of a landmine. It then ignites the explosives inside to self destruct through a rather slow burning process. Whilst a partial detonation is possible (as a result of the detonator of the mine being activated by the heat generated), most of the explosives mass would probably have burnt away by this time. The Deflagration powder can be ignited remotely making it very safe to use.

Igniter

The igniters used with the system are specially modified manual igniters. These are ignited via a Booster that is part of the Remote Electronic Trigger. This Booster provides the electrical circuit for igniting the igniter from a safe distance.

Remote Electronic Trigger

The remote Electronic Trigger consists of an ignition Trigger (A) and a Booster (B) that is used to trigger the igniter at a safe distance.



Ignition Trigger

Booster

Why use the Mechem Deflagration System?

With the MECHEM DEFLAGRATION SYSTEM the operator can safely initiate the Deflagration powder from a safe distance. Not only is this a proven method, but it can also be used with minimal training and by low skilled operations.

General

The MECHEM Deflagration System (MDS) is available in two basic modular kits.

The first being the MDS Landmine Package and the other the MDS UXO Package. Content of the packages was formulated for specific applications.

Other requirements are at least one MECHEM Deflagration Electronic Trigger System. This is required to activate the igniters from a safe distance via wired remote control. All items in the MECHEM Deflagration Kits are available individually as required.



MECHEM DEFLAGRATION POWDER

MDS Landmine Kit

This kit is supplied in a standard corrugated cardboard package that measures approximately 300x300x300 millimetres. The package contains the following:

- 1 x Safety Data Sheet, operating instructions and a 100g powder measuring tube.
- 2 x 10 kg plastic bags of Deflagration Powder.
- 6 x Containers each containing 25 igniters.

Note:

The igniter container (25 igniters) is individually packed in a plastic sleeve to protect it from moisture. Once opened igniters must be kept dry.

The above content would be sufficient for at least 150 landmine burns.

MDS UXO Kit

The MDS UXO kits consist of the following:

- 1 x Safety Data Sheet and operating instructions.
- 3 x 10 kg plastic bags of MECHEM Deflagration Powder.
- 1 x Container containing 25 igniters.
- 2 x Containers each containing six Burning Pots. (In total 12 pieces)
- 2 x Containers each containing six Burning Pot Lids. (In total 12 pieces).
- 2 Stands for holding the pots.

Note:

Pots, lids and igniters can be bought separately. As an additional requirement an electric firing box, booster and electric wiring can be bought.



25 IGNITER CARTON CONTAINER