# Mobile Demil System

## Safe Destruction of Weapons and Ammunition





## A SAFER WORLD

Millions of small fire arms and light weapons and equally many rounds of ammunition have been lost in recent years as a result of attacks on fixed sites, patrols and convoy movements. Burglary, theft, corruption, as well as poor discipline and practices contribute to the diversion of military material.

Several storage sites of old and outdated weapons and ammunition explodes every year resulting in both loss of lives and properties. It is therefore of great importance to give priority to reduction of stocks of old weapon and ammunition in order to make a safer world for all of us.



#### **MOBILE DEMIL SYSTEM**

- 1. Ammunition Dismantling Unit (MESC-10)
- 2. Ammunition Destruction Unit (ADU)
- 3. Weapon Destruction System (WDS)
- 4. Utility Module

SaferWorld International's Mobile Demil System is designed for easy deployment to storage sites for the destruction of weapons and ammunition.

All units are built in standard sea containers, except for the Ammunition Dismantling Unit (MESC-10) which is built for a flatbed trailer. The system is easy to transport and take into operation where it is most needed.





## **AMMUNITION DISMANTLING UNIT - MESC 10**

The Ammunition Dismantling Unit is a Mobile Explosion Suppression Chamber that enables safe dismantling of heavy caliber ammunition. It will protect the surrounding area from the effects of any explosion equivalent to 10 kg TNT, 7.5 kg C4 or ammunition up to caliber 155 mm.



MESC-10 in closed position



MESC-10 in open position



MESC-10 with band-saw

Use the Ammunition Dismantling Unit to cut heavy caliber ammunition into smaller pieces before destruction in the Ammunition Destruction Unit. The band-saw is equipped with water cooling for increased performance.

The unit weighs around 25 tons and can be moved to site on a flatbed trailer.

#### **PROTECTION CHARACTERISTICS**

- No fire ball
- No fragment disposal
- No blast pressure

#### **DETONATION CONTAINMENT CAPACITY**

- 10 kg TNT
- 7.5 kg C4
- Ammunition with a caliber of up to 155 mm



### **AMMUNITION DESTRUCTION UNIT - ADU**



The Ammunition Destruction Unit (ADU) is a container unit for heat destruction of small arm ammunition and other explosives. The ADU provides efficient, secure and environmentally friendly destruction on site.

#### **DESTRUCTION CAPACITY**

- 4 000 pieces of 7.62 ammunition per hour
- 400 pieces of 14.5 mm ammunition per hour

The ammunition loaded into the ADU is destroyed at 500°C in a Hot Destruction Chamber that is designed to withstand explosions and propelling ammunition or fragments. Gases from the destruction chamber are filtered and treated to prevent air pollution or inhalation of hazardous substances.

#### 1. LOADING ROOM



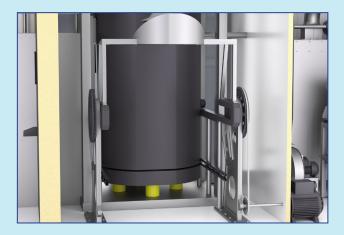
The ammunition is fed into the destruction system from the Loading Room. Feeding is done batch-wise at intervals that depends on the type and caliber of ammunition that you want to destroy. A typical interval is 5 minutes. Feeding can be done with packed or unpacked material.



#### 2. HOT DESTRUCTION CHAMBER

The Hot Destruction Chamber maintains a temperature of 500°C. Once the ammunition is loaded into the chamber, the heat will cause it to either burn or explode. The destruction chamber is designed to withstand and contain the effects of continuous explosions from ammunition as well as other explosives.

The ADU relies on an electrical supply to produce the heat required in the destruction chamber.



#### **3. EMPTYING THE CHAMBER**



When the destruction chamber is filled to approximately 60 percent, it is time to empty the content. Let the scrap cool down in the scrap tray.

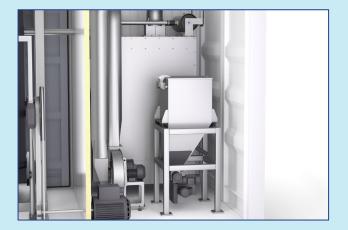
The scrap metal can then be separated from the ashes and sold for recycling.

#### 4. DUST COLLECTION & GAS TREATMENT

To prevent pollution and health hazards, dust and gases from the destruction chamber are collected, filtered or treated with additives.

Minimized release of:

- Heavy metals
- Mercury
- Dioxins
- Acidic gases





## WEAPON DESTRUCTION SYSTEM - WDS

WDS is a mobile container-sized unit for destruction of weapons. Using a mobile solution, unnecessary transport of weapons can be avoided. Destruction teams can be allocated timely and without delay to any location accessible by car.



The Weapon Destruction System (WDS) is built in a 20 ft or 40 ft sea container. The equipment is designed for destruction of small arm weapons such as pistols, guns and rifles.

The main part of the weapon is disfigured in a metal shredder. Some parts might need to be destroyed by cutting and for that reason a band-saw is included.

Typical capacity of the plant is 60 rifles per hour, depending on size and type of weapon.

The container is equipped with lights and air condition in order to provide good working environment.

- Avoid risks related to transportation of weapons and ammunition
- Avoid delays by deploying teams on short notice





## WEAPON DESTRUCTION SYSTEM - WDS 20



## UTILITY MODULE

The Utility Module contains everything you need to support the operation of the Mobile Demil System at a location where standard infrastructure is not available.

The Utility Module contains:

- Electrical power generator
- Diesel storage
- Electrical central
- Compressed air
- Fire extinguishing equipment
- Spare parts storage
- Storage for consumables, such as sorbents/ additives and filters for off-gas treatment system
- A small workshop with basic set of tools





SaferWorld specializes in the research, development and manufacturing of products for demilitarization or that protects against explosions and other external threats.

Many of our products have innovative features that either improves safety or mobility or make for a more cost efficient solution.

Our customers value our expertise in preventing damage from explosions, destruction of weapons and ammunition and safe transportation of explosives, hazardous gases or suspicious objects.

Specific customer references can be supplied upon request.

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