

UNIVERSAL MUNITION STORAGE CONTAINER (UMSC)

The U.S. Army Chemical Materials Activity Recovered Chemical Materiel Directorate (CMA RCMD) has developed a thin-walled Universal Munition Storage Container (UMSC) to serve as the overpack and storage container for a recovered chemical munition from recovery through destruction. The UMSC can be used during large-scale recovery and destruction operations.

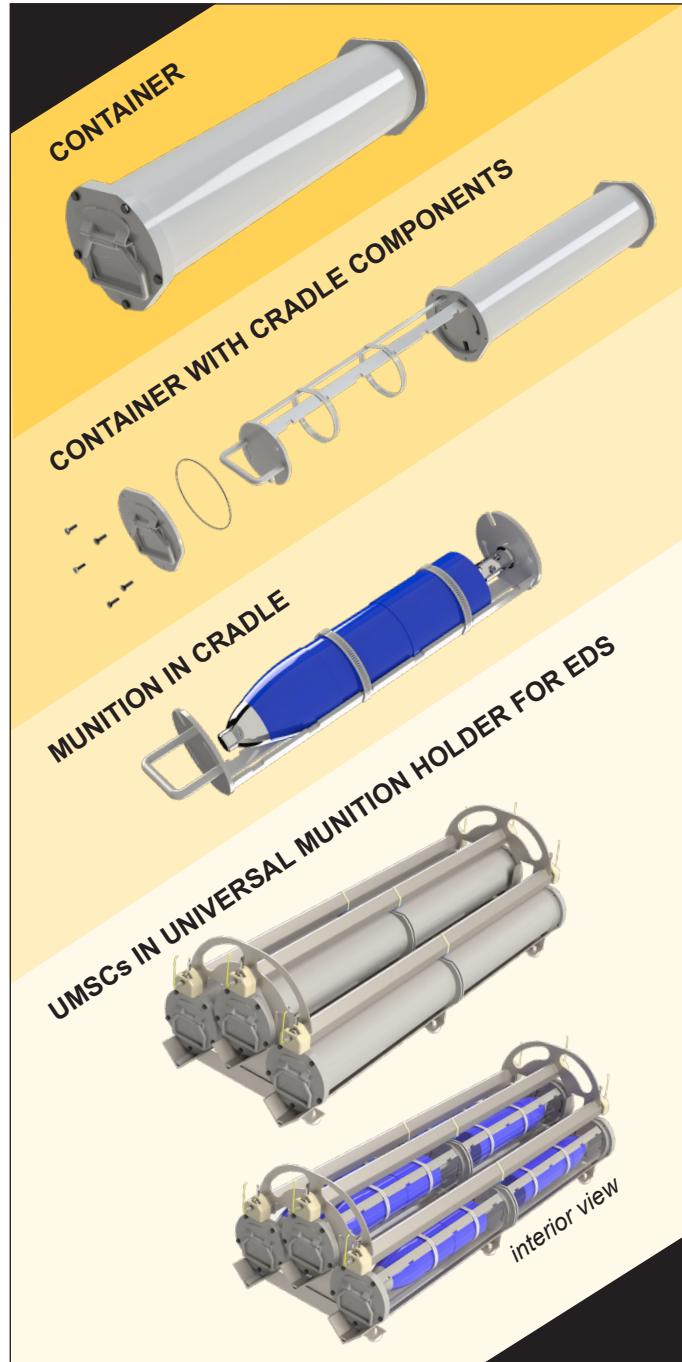
Traditional overpack containers are thick-walled, and a recovered chemical munition must be unpacked prior to destruction. However, the UMSC is destroyed along with the munition without unpacking it, saving up to 90 minutes per operation, reducing:

- time required for large-scale operations
- risk of operator exposure to chemical agent
- physical toll on operators wearing personal protective equipment, e.g., dehydration, fatigue

The UMSC is a 16-gauge mild steel flanged tube with a bolted lid. The UMSC cradle is the component that houses and secures the munition. The munition rests on the cradle's two cross plates and is secured with band clamps. The cradle can hold any munition size up to and including 105mm projectiles and 4.2" mortar rounds.

Once the cradle is placed inside the UMSC, the lid is fitted with an O-ring and bolted shut. An indexing pin at the bottom of the UMSC allows for accurate alignment of the linear shaped charges used with CMA RCMD's Explosive Destruction System (EDS). Accurate alignment ensures successful access of the munition's chemical-agent fill and burster material for neutralization.

A munition sealed inside the UMSC may be stored and transported within the bounds of the recovery site but must be placed in an overpack approved to transport recovered chemical warfare materiel in the public domain, such as a Multiple Round Container, to be transported over public roads.



A recovered chemical munition is seated in the cradle of a Universal Munition Storage Container, which serves as an overpack container for secure storage of the munition. The single-use UMSC is destroyed along with the munition in CMA RCMD's Explosive Destruction System (EDS).