Destruction Plan Denmark

Third Meeting of States Parties to the Convention on Cluster Munitions (CCM), Oslo, 11-14 September 2012.

Presentation on the destruction of the stock of Cluster munitions in Denmark

Major Kim Willum Guldbech,
Liaison and verification branch, Defence Command Denmark.

Background

- In late 2011 Danish MoD decided to speed up the destruction process.

- The destruction process started in mid 2012 and is expected finished in late 2013.

Scope

Destruction of:

27.000 ea DM 642 / 155 mm
15.000 ea DM 662 / 155 mm
20 ea Rockeye MK-20 / bombs

A total of 2.440.940 explosive submunitions.

Retention

- Denmark will keep 2700 (1st august 2018) peaces of sub-munitions for training purpose.

- The submunition will be separated from the shell and stored in carbon tubes – and hence not operational anymore.

Choosing the company

Danish Acquisition and Logistics Organization found that the contract with our normal ammunition disposal factory also covered disposal of this type of ammunition.

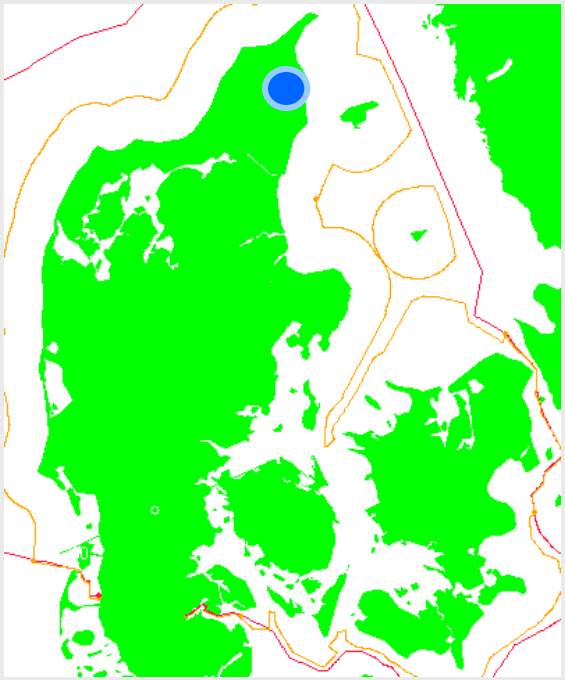
The cost is estimated to be approximately 18 mio Danish kroner or 2,5 mio Euro.

7,5 Danish kroner per bomblet or 1 Euro.

EXPAL

Tuenvej 120, Elling, 9900 Frederikshavn
Denmark

DENEX



Located in:	**Frederikshavn**
Total Surface:	**340.000 m²**
Built Surface Area:	**18.000 m²** (53 buildings)
Storage Capacity:	**31 EX magazines**
Turnover:	**Around 40 mil. €**
Quality systems:	**AQAP 2110** **ISO 9001** **ISO 14001**

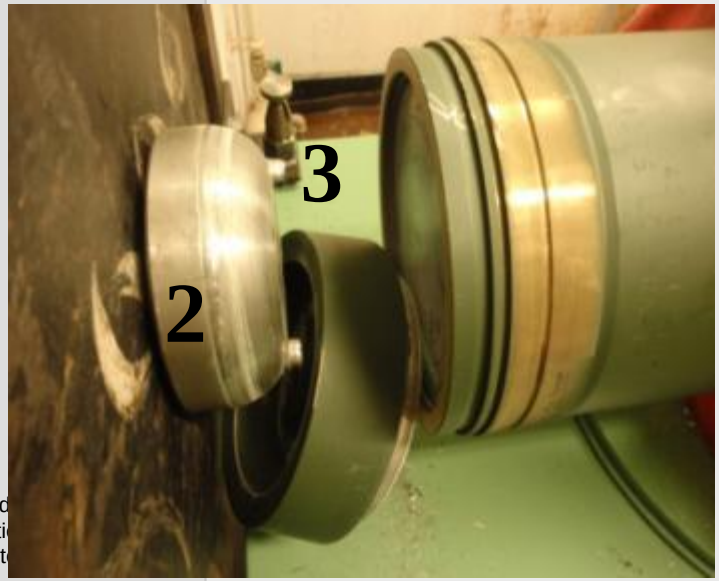
Where it is actually happening

How it is done in detail

Removal of ejection charge.

1. Lifting plug.
2. Cover plate.
3. Ejection charge.
4. Holster for ejection charge.

How it is done in detail



Removal of base closure.

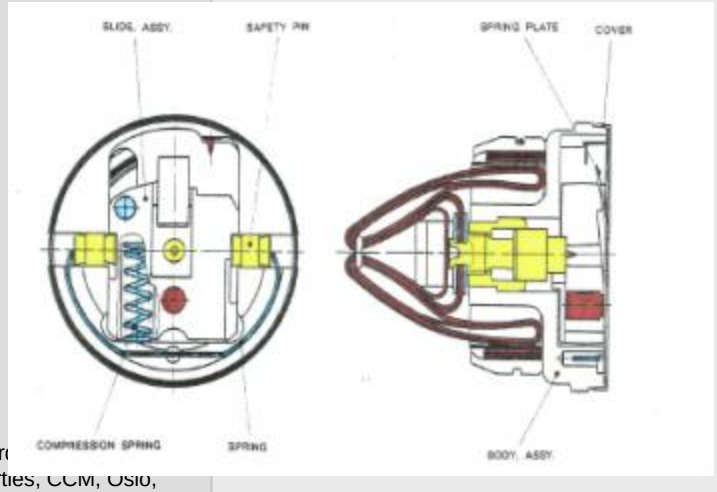
1. 155 mm ICM DM 642 projectile is fixed on a special trolley and placed in a secure room.
2. A special tool is mounted in the bottom of the ICM shell.
3. Base closure is removed

How it is done in detail

Removal of bomblets.

1. After the base closure is removed the operator enter the room.
2. An operator turns the shell so the bottom faces the carton tube.
3. The operator leaves the room.
4. The bomblets are pressed in to the carton tube with a special tool.

How it is done in detail



Removal of fuze from bomblet DM 1384

1. Four bomblets are taken from the carton tube at a time.
2. Bomblets DM 1383 are then placed in a machine which automatically cuts the fuze of.
3. The fuze remains in the room where they have been cut and are secured with glue.
4. Then it is transported to one of Expal's factories for destruction

How it is done in detail

Destruction of bomblets without the fuze.

1. The bombs are placed in a small container for cooling which runs fully automatic and uses nitrogen.
2. After cooling down to minus195,8 Celsius the bomblets are automatically transferred by a robot to a pressing machine.

How it is done in detail

Destruction of bomblets without the fuze.

1. The bombs are then crushed.

2. The crushed bombs are pushed into a separator, where the explosives are separated from the metal parts.

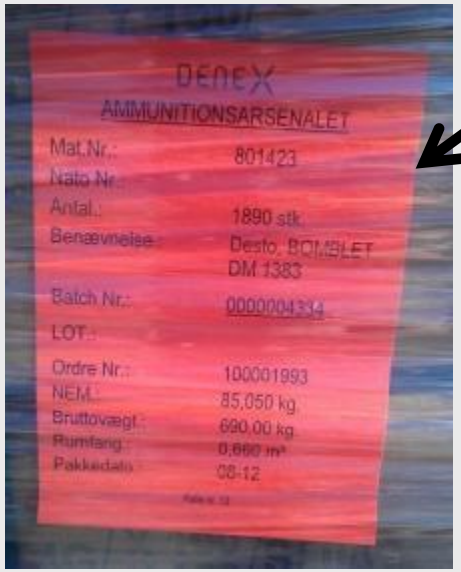
How it is done in detail

Cutting empty shell ICM DM642.

1. It is cut in two places.
   (The lower part just before the rotating belt and upper part just after the rotating belt) separating the cupper rotating belt.

2. After this the shell cant be used operationally anymore.

Packing and storing bomblets



Questions