

Description of Technology:

Refurbishment of any life expired warhead is a challenging task. Indian Air- Force projected a requirement of refurbishment of Pechora warhead with indigenous explosive composition. The Russian- origin Pechora missile is a surface to air weapon system that engages various enemy aerial targets including Unmanned Aerial Vehicles (UAVs), helicopters, and fighter aircrafts. The Air-Force is having limited number of imported Pechora missiles from 1974 to 1991 vintage in its inventory. A refurbished warhead is produced by replacing the filling in the vintage warhead with indigenously developed /available high explosive having similar explosive and sensitivity characteristics. HEMRL took up this challenging task and finalized suitable indigenous explosive composition by carrying out the studies of OEM filling. RDX/TNT based composition was selected as main filling and RDX/Wax composition based booster charge for Pechora warhead.

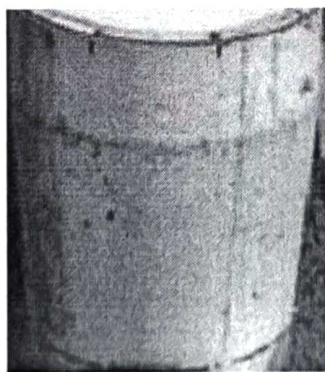
The refurbished Pechora warheads gave similar blast and fragmentation results as compared to OEM filled warheads during evaluation trials which completed feasibility studies of refurbishment of Pechora warhead with indigenous explosive composition.

Application Areas:

Pechora missile is a surface to air weapon system that engages various enemy aerial targets including Unmanned Aerial Vehicles (UAVs), helicopters, and fighter aircrafts.

Its USP- such as Certification and test results etc.:

On comparative evaluation of the refurbished warhead filled with indigenous composition and OEM warhead, the blast and fragmentation parameters observed were similar/ in the same range.



Pechora Warhead