

High Explosive Technologies for 84mm ATEX Shell (PBXPW-1)

Description of Technology:

There was a need to develop high explosive technologies for the blast type of ammunition to destroy various targets.

High explosive technology has been developed by DRDO to destroy various targets. Exhaustive studies were carried out to finalize the HE compositions and their filling methodologies in warhead to realize the required performance lethality at the desired distances. The pressable HE technology has been developed for the main filling of the shell and for the booster charge.

More powerful main filling of HE composition has been finalized for the Blast (BF) shell. Booster pellets are of HE composition (PBXP 101). They are developed for continuation of explosive train.

HE preparation and pressing for shell of ATEX has been established. All trials such as static performance, fuze initiation, SD explosive train, blast, dynamic trials of ammunitions for design validation and final performance has been completed successfully. Developed high explosive composition met QR.

Application Areas:

High explosive compositions and their filling in shell of PBXPW-1 is designed and developed by DRDO to destroy various targets by blast at short distance.

Unique Selling Point (USP):

All the trials including User trials of ammunition in both static and flight modes have been completed successfully. Developed technology met QR and it is equivalent to global level. All the raw materials for the filling of warhead system are available indigenously. The equipments required for the preparation of explosive composition and filling are available within India.

Contact Details

Interested companies/industries are requested to apply against this EoI to following address:-

To,

Director

High Energy Materials Research Laboratory (HEMRL)

DRDO, Govt. of India, Ministry of Defence

Sutarwadi, Pune-411 021

Email-director.hemrl@gov.in

Copy to:- (without attachment)

The Director

Directorate of Industry Interface & Technology Management (DIITM)

Room No. 447, DRDO Bhawan, Rajaji Marg, New Delhi-110 011

Email-diitm.hqr@gov.in

List of Support documents to be attached with EoI

- (a) Memorandum and Articles of Association (Should be incorporated as per Indian Companies Act, as amended time to time)
- (b) Certificates of registration as a manufacturing unit, if any.
- (c) Audited Balance Sheet for the preceding three years.
- (d) Income Tax returns for the preceding three year period
- (e) Details of shareholding/ownership pattern especially foreign partners/ shareholders, foreign employees, directors, etc. The company must adhere to the prevailing Govt of India policies and regulations on Foreign Direct Investment (FDI)/DIPP norms as applicable.
- (f) Annual budget for R&D during last three years.
- (g) Numbers and details of IPR or patents, etc., held by the company.
- (h) Number of technically or professionally qualified personnel.
- (i) Record of past performance (e.g., Supply orders executed against of Ministry of Defence orders, Public Sectors and Paramilitary Forces, if any).
- (j) Availability of adequate infrastructure (List of machines and their production capacities) and technical expertise.
- (k) List of Testing and Support equipment's
- (l) ISO/ ISI certification or any other certification
- (m) Relevant clearances form the authorities/ ministries (if any)
- (n) Capacity and capability to undertake developmental work and to accept attendant financial and commercial risks.
- (o) Capacity/capability to market the product through the marketing network, sales and service network, reliability to maintain confidentiality.
- (p) PESO and DPIIT license for explosive handling if ToT is for high energy Material, explosives, propellants, and component/ system dealing with it etc.
- (q) Under taking form company seeking ToT that none of its Directors, Independent Directors, non-executive Directors, Key management personnel are involved in any corrupt practices, unfair means and illegal activities.
- (r) Details of the industrials license for defence manufacturing be provided by the industry seeking ToTs.