

Fire Protective Boot (Wildland & Structural)

1. Centre for Fire, Explosives and Environment Safety (CFEES), Delhi has developed “Fire Protective Boots (wildland & Structural)” technology. A brief of details of Wildland Fire protective Boot and Structural Fire Protective Boot is given in subsequent paragraphs.
2. Wildland Fire Protective Boot: Forest fires are significantly different from structural or other types of fires, and hence the boots that are required to be worn by the firefighters handling these fires differ from other type of fire protective boots. Considering the increase in the occurrence of forest fires across the country, primarily during summers, there was a necessity for developing indigenous Wildland Fire Safety Gear. One important component of the Wildland Fire Safety Gear is the Wildland Fire Protective Boot. Boots to be worn during wildland firefighting must provide good balance to the body while walking through uneven terrain, and adequate breathability to facilitate firefighting through long hours, as well as provide adequate protection against all foreseen and unforeseen dangers during wildland firefighting. CFEES has designed boots that offer the necessary protection to fight the wildland fire as mandated by the applicable Standard, ISO 16073 – Part 6 (“Wildland firefighting personal protective equipment – Requirements and test methods – Part 6: Footwear”), when assures the wearer of minimum essential protection against the wildland fire ground hazards in conformance with the Standard ISO 16073 – Part 6; simultaneously ensuring snug fit, enhanced comfortability and stability and easy operability.
3. Specifications of CFEES-developed Wildland Fire Protective Boots:-
 - Boot design caters for improved breathability and comfort
 - Designed as an Ankle-boot, for improved ankle support and easy operability
 - Boot Closure mechanism: Lace with Zipper (with Zipper having interlocking mechanism) for improved fit and quick donning-doffing. Zipper placed on the side for easy donning-doffing.
 - Anti-penetration Insole and Toe-cap fabricated from “Non-metallic” material, leading to considerable weight reduction of the final product; without compromising wearer’s safety.
 - Boot having Retroreflective Tape adhered at the “Counter” for easy trackability
 - Cleats designed to provide enhanced traction and stability
 - Weight (of a pair of boots): < 2 kg
 - Protection: ISO 16073 – Part 6 & IS 18589 – Part 6
4. An Indian Standard, IS 18589 – Part 6, has also been developed for this product, which will aid in certification of these Boots well within the country, thereby reducing the product certification time and overall product cost.

5. Structural Fire Protective Boot: Protective Structural fires are different from forest fires and, therefore, the boots that are required to be worn by the firefighters handling these fires differ from aforementioned Wildland Fire Protective Boots, both in design and performance specifications aspects. Boots to be worn during structural firefighting must provide protection against flames, high heat flux, falling debris, electric shocks and burns, carcinogenic chemicals, smoke, unstable structures, slips, trips and falls, apart from providing adequate breathability. CFEES has designed Boots that offer the necessary protection (to fight the structural fire) as mandated by the applicable Standards, ISO 11999 – Part 6 (“PPE for firefighters — Test methods and requirements for PPE used by firefighters who are at risk of exposure to high levels of heat and/or flame while fighting fires occurring in structures. Part 6: Footwear”) as well as EN 15090 (“Footwear for firefighters”), which assures the wearer of minimum essential protection against the structural fire ground hazards in conformance with the Standards ISO 11999 – Part 6 and EN 15090; simultaneously ensuring snug fit, enhanced comfortability and stability, and easy operability after wearing them. These Boots are a complete success at indigenisation, with most of the raw materials (~80%) having been developed indigenously and the construction also been indigenised. This is a major step forward towards self-reliance.

6. Specifications of CFEES-developed Structural Fire Protective Boots:

- Boot design caters for improved breathability and comfort
- Designed as a Half-Knee boot: for improved protection, without compromising ankle support, fit and operability
- Boot Closure mechanism: Lace with Zipper (with Zipper having interlocking mechanism) for improved fit and quick donning-doffing. Zipper placed on the side for easy donning-doffing.
- Anti-penetration Insole and Toe-cap fabricated from “Non-metallic” material, leading to considerable weight reduction of the final product; without compromising wearer’s safety.
- Boot having Retroreflective Tape adhered at the “Counter” for easy trackability
- Cleats designed to provide enhanced traction and stability
- Weight (of a pair of boots): < 3 kg
- Protection: ISO 11999 – Part 6, EN 15090 & IS 18582 – Part 6

7. An Indian Standard, IS 18582 – Part 6, has also been developed for this product, which will aid in certification of these Boots well within the country, thereby reducing the product certification time and overall product cost.

The combined technology is being offered to industries. Interested industries are required to forward their Expression of Interest (EoI) along with supporting documents (details as per Part I, Part II and Annexure (of this document) and Financial Bid (excluding Taxes/ GST) in a sealed envelope for the combined technology of Fire Protective Boot (Wildland/ Structural) to the following address:-

(a)

To,
The Director
Centre for Fire, Explosive and Environment Safety (CFEES)
Brig. S.K. Mujumdar Marg, Timarpur-Delhi-110054
E-mail: director.cfees@gov.in
Fax No: 011-23819547

(b) A copy of EoI may be sent to the following address without any attachment:-

To,
The Director,
Directorate of Industry Interface & Technology Management (DIITM),
Room No. 447, DRDO Bhawan, Rajaji Marg, New Delhi-110 011
E-mail: diitm.hqr@gov.in
Phone No. 011-23007446
Fax-011-23793008

The list of documents to be attached is provided in Annexure – I. Kindly provide the reference of page no. of supporting document in the relevant field of form.

PART-1

General Information

(Please enclose documents in support of information provided)

1.	Name of the Technology requested for Technology Transfer (Technology name and concerned Lab, Category)	
2.	Name of the industry/ organization	
3.	Complete Address and other details	
	Registered Office State Phone No Fax Email Website	
	Factory State Phone No Fax Email Website	
4.	Point of Contact Name Designation Address Mobile No Ph No Email ID	
5.	NAME OF CMD/ MD /PARTNERS/ PROPRIETOR/ etc Name Designation Address Mobile No Ph No Email ID	
6.	Date of Incorporation of company	
7.	Foreign Direct Investment in company (if any in %)	
8.	Shareholding pattern	
9.	Turn over as per Audited Balance Sheet for the preceding three years. Year _____ Year _____ Year _____	
10.	Annual budget for R&D during last three years (if any) Year _____ Year _____ Year _____	
11.	Income Tax returns for the preceding three years period Year _____ Year _____ Year _____	

12.	Nature of company DPSU, Private Limited, Public Limited, Partnership, Proprietary, Ex- Serviceman Unit	
13.	Category of industry Large Scale, Medium Scale, Small Scale, Micro, Startup	
14.	MSME Registration No	
15.	Certificates of registration as a manufacturing unit, if any.	
16.	If Startup, DPIIT Registration No	
17.	UDYOG AADHAR No	
18.	PAN Number	
19.	Details of Industrial license for defence manufacturing issued by DPIIT (if any)	
20.	Details of PESO license (if any)	
21.	GST Number	
22.	Nature of business Manufacturing/ Sole Selling or Authorized Agent/ Assembler/ Traders/ Dealer/ Processor/ Repacker/ Others	
23.	Details of current products and services Products and services Supplied (please specify Govt/ Domestic market/ Export)	
24.	Record of past performance (e.g., Supply orders executed against of Ministry of Defence orders, Public Sectors and Paramilitary Forces, if any).	
25.	Details of registration with NSIC / SSI, DGS&D, other Defence Department, other Govt. Dept, membership of FICCI/ASSOCHAM/CII or other Industrial Association (Attach relevant copies of registration letters)	
26.	Have you already taken any technology from DRDO (If yes, give details attaching separate sheet) Name of the Technology, Lab, Year, License number & Status	
27.	ISO/ ISI certification or any other certification (If yes, give details)	
28.	Relevant clearances form the authorities/ ministries (if any)	
29.	Capacity and capability to undertake developmental work and to accept attendant financial and commercial risks.	
30.	Capacity/capability to market the product through the marketing network, sales and service network, reliability to maintain confidentiality.	

PART-2

Infrastructure and other Information

1.	Total area of factory Covered (m ²), Uncovered (m ²), Bonded space available (m ²)	
2.	Ownership of factory Self-owned, partnership, rental	
3.	Electric power Sanctioned Installed Standby (if any)	
4.	Availability of adequate infrastructure (List of machines and their production capacities) and technical expertise	
5.	Name of bank & A/c No Name of bank A/c type A/c no Address of the bank Phone: Email:	

6. Details of current products:

S.No	Type	Description	Licensed/installed capacity	Annual production for preceding 3 years

7. Details of foreign collaboration, if any

S.No	Product	Name and address of collaborator	Year	Remarks

8. Details of products developed for services

S.No	Nomenclature of stores	Order No. and date	Remarks

9. Please give details of important facilities & infrastructure as per following format for:

- (a) Production
- (b) Unconventional, special m/c
- (c) Testing & quality control facilities

S.No	Description of m/c	Make & model	Qty	Date of purchase	Remarks

10. Furnish the following details with relevant certificates and documents

- (a) R&D facilities available :
- (b) Inspection quality control of raw material components :
- (c) Assistance from central agency for testing / calibration etc.: :
- (d) laboratory and drawing office facility :

11. Principal customers:

S. No	Name & address	S.O No and date	Date of last supply	Products supplied	Value

12. Future plans (if any) in respect of expansion programme/ installation of additional machines/ test facilities etc.**13. Name of the technology requested for transfer**

(give self-assessment of your capability to absorb the technology)

14. Details of employee as on date on firm's pay roll

PERMANENT				
Category	Post Held	Number	Qualification	Total Service
Technical	Prod. Manager Q.C. Manager Supervisor Testing Staff (QC) Skilled workers Unskilled workers, etc			
Administrative	Purchase Manager Accounts Officer Office Superintendent Clerical Others, etc			

TEMPORARY				
Category	Post Held	Number	Qualification	Total Service
Technical	Prod. Manager Q.C. Manager Supervisor Testing Staff (QC) Skilled workers Unskilled workers, etc			
Administrative	Purchase Manager Accounts Officer Office Superintendent Clerical Others, etc			

DECLARATION:

I / we confirm that the information furnished in Part 1 & 2 above is correct. In the event of any information given by me / us is found incorrect / false at any time, I / we understand our EoI for ToT will be cancelled/ rejected without notice, beside any other appropriate action against me / us.

Industry seal

Authorized signatory

Name(s) in capital

Designation and seal of authorized signatory

Date:

Place:

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 from 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 from 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 industrial license for defence manufacturing be provided by the industry seeking ToTs.
- (s) Application cum Industry Assessment Form