








TRIAL DIRECTIVE (TDs) OF WATER MIST EXTINGUISHER 09/10 LITRS CAPACITY (BACK PACK TYPE / HIGH PRESSURE)

Sl.	Technical Parameter	Q R/S SPECIFICATION	Trial Directive
1	Nomenclature/ Name of product/gadget/equipment	High pressure water mist CAF fire extinguisher Backpack type, ultra light, Carbon composite with Pet liner pressure vessel 9/10 ltrs and air cylinder.	To be checked physically by BOOs at vendor site.
2	Conformity	The Water Mist & CAF(Back Pack) high pressure extinguisher shall be confirmed to EN 3-7:2004+A1:2007-08 standards The complete system shall be tested for compliance from an internationally/nationally accredited laboratory for compliance to all 30 clauses (3.2, 3.15, 4.2, 4.3, 4.4, 4.5, 6.1, 6.2, 6.3, 7.1.1, 7.1.2, 7.2, 7.3, 7.4, 8.1, 8.2, 9.2, 10.1, 10.2, 10.3, 10.4, 10.5, 10.6.1 & 10.6.2, 14.1, 14.2, 15.2, 15.3, 16.1, 16.2) of EN 3 - 7:2004 + A1: 2007-08 (E) Standard mandatorily applicable for the complete system."	To be checked and verified with relevant EN certificates.
3	Mounting type	Backpack	Firmment to be checked physically.
4	Configuration/ Description	It shall be mounted on a sturdy frame suitably cushioned for comfort, provided with shoulder pads for carrying as a backpack and a handle to be carried by hand. All materials used shall be of fire retardant type. Backpack shall be supplied with air cylinders.	To be checked physically by the BOOs.

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10.	Characteristics of extinguishing medium of AFFF Compound with infrared spectrogram (to be furnished).	Characteristics of extinguishing medium of Special AFFF Compound shall be- Density : 1.04 (kg/cm <sup>3</sup> , Viscosity : 1.35 (m <sup>2</sup> /s, pH Factor 7.8, Refractive Index 1.34 @ 20 +/- 20C (accredited laboratory test report required)	To be verified with relevant certificates from Govt approved lab.
11.	Pressure Vessel Material & Capacity (Nominal Charge)	Ultra light Carbon Composite with PET Liner of 9/10 liter capacity.	To be physically checked and verified with relevant certificates by the BOOs.
12.	Minimum wall thickness of pressure vessel (mm)	Minimum wall thickness of pressure vessel should be 5 mm	To be checked and verified with relevant certificates.
13	Extinguishing gun material	Stainless Steel	To be checked and verified with relevant certificates.
14.	Weight of extinguishing gun.	Shall not more than 750 +/-50 gram.	To be checked physically by BOOs.
15.	Length of standard of Hose for backpack system	Hose shall be EN marked, not less than 1.3 meters for backpack system.	To be checked physically and verified with relevant certificates by BOOs.
16.	Weight of fully charged Backpack system	Weight of fully charged Ultra light Carbon composite with PET liner Backpack system shall be not more than 20kg.	To be checked physically by BOOs.

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**PERFORMANCE :-**

Sl.	Technical Parameter	QRs/ Specification	Trial Directive
17.	Air Cylinder Capacity (Litrs)	2 litre	To be checked physically by BOOs.
18.	Air Cylinder pressure (Bar)	300 bar	To be checked physically by BOOs.
19.	High Pressure Type	High Pressure Type (Dynamic Operating pressure to be tested in the accredited laboratory test report which will be considered as high pressure for as per clause No. 3.15 of EN 3 - 7:2004 + A1: 2007-08 (E) Standard.) $\geq$ 37.6 Bar for Ultra-light Carbon composite with PET Liner vessel.	To be checked and verified with relevant EN certificates.
20.	Lancing Distance of Gun	More than 15 +/-2 meter	To be tested physically by BOOs.
21.	Minimum operating time	25 +/-2 second	To be tested physically by BOOs.
22.	Operating temperature	System shall be designed for 60°C or more and minimum 5°C or less and certified by the manufacturer as per Clause 7.4 of EN 3-7:2004+A1:2007-08 standards as per the accredited test report for backpack system.	To be checked and verified with relevant certificates.
23.	Fire Rating	Class A, Class B and Electrical Fire Rating with Special AFFF Compound for backpack 55A, 233B, E1000V (Dielectric suitability) with commercial brand name of fire extinguishing medium as per accredited laboratory test report for Backpack System.	To be checked and verified with relevant certificates of EN.

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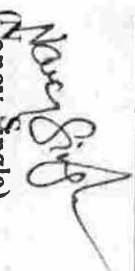



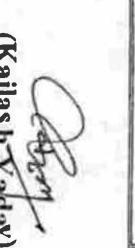

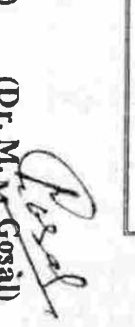
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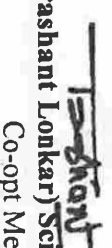


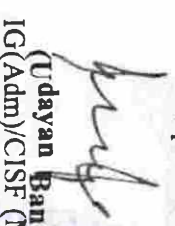
31. Pre dispatch inspection	Pre Dispatch Inspection (PDI) of product shall be carried out by CISF Fire officers as per specification, at the vendor site where all the testing facilities are available.	To be carried out by BOOs at vendor's site.
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