

TRIAL DIRECTIVE OF WATER MIST & CAF EXTINGUISHER 09/10 LTRS CAPACITY (BACK PACK TYPE/ HIGH PRESSURE)

Sl.	Technical Parameter	QRS/ SPECIFICATION	Trial Directive
1.	Nomenclature/ Name of product/gadget/equipment	High pressure water mist CAF fire extinguisher Back-pack type, ultra light, Carbon composite with Pet liner.	To be physically checked by Board at vender site.
2.	Conformity	The Water Mist & CAF (Back Pack) high pressure extinguisher shall be confirmed to EN 3-7:2004+A1:2007 standards	Firm to submit certificate and Board to be checked.
3.	Mounting type	Backpack	Fitment to be checked.
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 by the board physically.
5.	Model & make	Model Number shall be permanently marked as declared in Accredited Laboratory Test Report.	Lab report to be provided by vendor.
6.	Main Components:	Pressure vessel shall be hold the media with safety valve, compressed air cylinder coupled with a reducer, hose pipes for discharge of water mist media, extinguishing gun.	To be checked physically by BOO.


1.  AC/SSB

2.  Team Comdr/NSG

3.  AC/ITBP

4.  AC/CRPF

5.  DC/BSF

6.  DO/DFS

7.  SSO(T)BPR&D

8.  AIG/Fire(CISF)

9.  DIG(Fire)/CISF

10.  IG(Adm) CISF

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CONSTRUCTION:

Sl.	Technical Parameter	QRS/ SPECIFICATION	Trial Directive
7.	Air Cylinder Material	Ultra light Carbon composite with PET	Firm to submit certificate.
8.	Type of Foam	Special AFFF Compound conforming for higher fire rating A55, B233, Spreading coefficient for special AFFF Compound shall be +5 minimum, concentrations shall be 6%.	Firm should provide datasheet .
9.	Commercial Brand Name of the Special foam (fire extinguishing medium) as per accredited laboratory test report wherein higher fire ratings i.e A55, B233, E1000 V (Die Electric Suitability) achieved to be declared.	Commercial Brand Name of the Special foam (fire extinguishing medium) as per accredited laboratory test report wherein higher fire ratings i.e A55, B233, E1000 V (Die Electric Suitability) achieved, to be declared.	Fire to submit certificate.
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 ³ , Viscosity : 1.35 (m ² /s, pH Factor 7.8, Refractive Index 1.34 @ 20 +/- 2°C	Firm to provide datasheet.

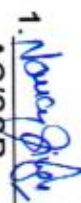







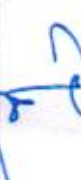

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Sl.	Technical Parameter	QRS/ SPECIFICATION	Trial Directive
11.	Pressure Vessel Material & Capacity (Nominal Charge)	Ultra light Carbon Composite with PET Liner of 9/10 liter capacity.	To be physically checked by the BOO.
12.	Minimum wall thickness of pressure vessel (mm)	Minimum wall thickness of pressure vessel should be 5 mm	Firm to submit certificate.
13.	Extinguishing gun material	Stainless Steel	To be checked physically by BOO.
14.	Extinguishing gun weight (750 grams approx)	Shall not more than 750 +/-50 gram.	To be checked physically by BOO.
15.	Length of EN marked Hose 1.3 meter for backpack system	Hose shall be EN marked, not less than 1.3 meter for backpack system.	To be checked physically by BOO.
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 BOO.

PERFORMANCE :-

17.	Air Cylinder Capacity (Ltrs)	2 litre	To be physically checked by BOO.
18.	Air Cylinder pressure (Bar)	300 bar	To be physically checked by BOO.









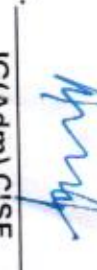
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19.	High Pressure Type	High Pressure Type (Dynamic Operating pressure to be tested in the accredited laboratory test report which will be considered as high pressure for as per clause No. 3.15 of EN 3 - 7:2004 + A1: 2007-08 (E) Standard.) ≥ 37.6 Bar for Ultra light Carbon composite with PET Liner vessel.	Firm to submit lab certificate.
20.	Lancing Distance of Gun	More than 15 +/-2 meter	To be checked by BOO physically.
21.	Minimum operating time	Less than 25 second	To be checked by BOO physically and on trial.
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.	Firm to submit certificate lab report.
23.	Fire Rating	55 A, 233B, 1000V with AFFF Compound as per EN.	Board to check for fitment and functional aspects.

CERTIFICATION:-

24.	Approval	PED (Pressure Equipment Directives) approval as per 97/23/EC (Encumbrance Certificate).	Firm to submit certificate.
25.	Pressure Gauge	Pressure Vessel shall be fitted with a pressure gauge (CE Marked).	To be physically checked by BOO.

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Sl.	Technical Parameter	QRS/ SPECIFICATION	Trial Directive
26.	NOC (No objection certificate)	No objection certificate (NOC) for Air cylinder and its valve Pressure Vessel from Petroleum and Explosives Safety Organization (PESO), Nagpur.	Firm has to provide certificate.
27.	Pressure Vessel	Pressure Vessel shall be CE marked from Notified body.	To be checked physically by BOO.
28.	Consent from OEM	Specific consent of the OEM for the value additions made along with a confirmation that fire ratings of the equipment would not be affected by these value additions.	Firm has to provide certificate from OEM.
29.	Test Reports	Test Report No. should be declared/ mentioned with date.	The firm should provide a certificate of confirmation.
30.	Declaration about Govt. Accredited Laboratory where Test Conducted	Name of ILAC/NABL/ Central Govt. Accredited Laboratory where Test Conducted is required.	Firm to submit certificate from NABL/International for confirming.
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 conducted by BOO.

1. (Nancy Shingla)
AC/SSB

2. (Dayvir Singh)
Team Comdr/NSG

3. (Naresh Namdev)
AC/ITBP

4. (Neeraj Shahi)
AC/CRPF

5. (Kailash Yadav)
DC/BSF

6. (S.K. Tomar)
DO/DFS

7. (Dr. M.M. Gosal)
SSO(T)BPR&D

8. (N.H. Rout)
AIG/Fire(CISF)

9. (Rajnath Singh)
DIG(Fire)/CISF

10. (Udayan Banerjee)
IG(Adm) CISF