

**66. FIRE PROXIMITY SUIT**



# SPECIFICATION

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## ANNEXURE

General Technical requirement For TE : ( schedule- 1 )

General Technical Requirement ( GTR )

Schedule 1: " FIRE PROXIMITY SUIT" conforming to level 2 to EN: 469-2005. Suitable for Class III Fire defined as:- Radiant heat and pocket of flames, for example near fire rescue work and knockdown fire fighting operation in proximity to flame.

### 1.0 SCOPE & APPLICATION:-

Fire Proximity Suits are used as the 'basic turn out gear' by the fire fighters in the offshore and onshore establishment for tackling incidents of fire. The Fire Proximity Suit shall provide protection for fire fighter torso, neck, arms, to the unit & legs to ankle during Fire Fighting Activities. A generous overlap suitable for all body movements shall be mentioned between jackets & trousers, above items certified with CE marking & supported by Test Report Certificates from authorised labs are to be procured.

(a) It shall consist of the following components:-

- Coat & Trouser - EN 469:2005, level 2 certified with CE marking
- Fireman Helmet - EN 443:2009, Type B (the shell of helmet will cover the back of neck) certified with CE marking
- Fireman Gloves - EN 659:2008 certified with CE marking
- Fireman Boots in sizes ( 7,8,9,10 , 11 )- EN 15090:2012 certified with CE marking
- Antiflash Hood - EN 13911:2004 certified with CE marking

### 2.0 APPROVAL:

All the component of the Fire Proximity Suit should be approved to following EN standards and should be supported with both "EC Type Examination Certificate" as per Article 10 & "EC Quality System certificate" as per Article 11 A or 11B as per EEC guidelines for all 5 items;

### 3.0 FABRICATION:-

Fabric:- The fabric namely Nomex/Kevlar or equivalent may be used for manufacture of the suit. The garment manufactures have to furnish the genuinity certificate/test certificates issued by M/s. DuPont ( or ) the manufacturer of the fibre for the fabric.

The Generic Fibre Shall Be As Below

1. Outer shell/ Layer of colour (orange/ khaki/ navy blue ) contains fibre composition of " para aramide + meta- aramide + 2% antistatic etc. GSM 190 ( minimum ), (OR) "para aramide + polybenzimidazole + 2% anti static GSM 190 ( minimum)
2. Middle Layer contains fibre composition of:- meta aramide + para aramide + PTFE bicomponent membrane,
3. Lining Fabric contains fibre composition of:-Blend of Meta aramide ( or ) Blend of Modarylic.

### 4.0:- SAMPLING CLAUSE

Sample Clause:- One sample (in 10 Nos to 100 Nos) shall be tested for destructive testing at firm's cost to ensure the no. of layer etc. specified as per relevant EN standards from any of the ILAC/NABL accredited laboratory or any Central Govt Labs.

### 5.0:- Supplier Has To Educate to End user

- a) The Fire Proximity suits are used at a close proximity to the Fire never exceeding a closeness of more than 1 meter from the Fire. They are NEVER to BE USED for FIRE ENTRY Purpose.
- b) How to use the fire suit about wearing and removing

- c) How maintain the fire suit.
- d) Limitation of use of fire suit according to the user manual provided along with the fire suit .
- e) Fire suit needs to be Inspected every time after use to identify if it suitable for deployment. The reason is that after Exposure to every Fire Accident the Fire Fighting suit may get damaged and hence, this may be render the Fire Proximity suit unsuitable for deployment till it is repaired .
- f) Wash care maintenance of Fire suit is strongly recommended. Ideally after every six months the Fire Suits should be sent back to the manufacture for Wash Care and Maintenance. This will ensure that the Fire Proximity suits are Clean and suitable for deployment after exposure to previous Fire Fighting activity.
- g) The Fire Fighting suits normally are recommended with a shelf life of 5 years from the date of manufacture and ideally should be replaced after this period.

#### 6.0:- Labelling

Each set must be having LABEL attached and Instruction on the label.

Improper process could modify the clothing features and protective levels, Keep clothing dry and clean in suitable place at ambient temperature and humidity ,Do not expose it to heat or cold surface and to repair the clothing we recommend to use only materials like the ones used for the manufacturing of the clothing . No other materials must be used and repairs must be carried out only by an experienced staff or directly by the manufacturer .The clothing has been planned with high quality components . In spite of this protective features can be subject to degradation in the long run as a result of the condition of working place. Therefore it is not possible to fix the durability of the clothing but in any case followings exposed to a risk that might damaged whatever components .

#### 7.0:- Note:-

- a ) Technical manual comprising of servicing details shall be supplied with system.
- b) The firm are required to submit satisfactory test report/ type test certificate (TTC) from International Laboratory Accreditation Corporation (ILAC) or the world wide affiliated / recognized labs or NABL Accredited Lab or any Central Govt Lab's conforming to the governing specification to the concerned DQA of DGS&D along with CE certificate.
- c) The firm shall also furnish manufacturer's test certificate for the fabric, major components and main item on the basis of the test performed on the representative samples.

#### General Technical requirements for T.E.-( Schedule-2 )

Schedule 2. Fire Proximity Suit Overall Style Confirming to Ministry of Defence Specification No. JSS.4210-26:2013.

A ) In addition to the marking clause 8 provided in the governing specification, the manufacturer shall provide a Care label. It shall be provided by stitching the label containing instructions at a conspicuous place in the suit.

B ) Storage:- Store Fire proximity suit dry and clean in a well ventilated store room having low Humidity. Continuous exposure to Heat and cold may reduce the shelf life.

C ) Technical Manual Comprising of service details and User Handbook for Guidelines to the user shall be supplied with each set.

D ) The firm are required to submit satisfactory Test Certificate from the testing Agency mentioned at Cl: 6.8 and 6.9 read with Note given below in the Governing

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E ) The firm shall also furnish manufacturer's test certificate for the fabric, major components and main item on the basis of the test performed on the representative samples.

The Fire Proximity Suit shall consist of the following components.

1. Overall Suit
2. Over Boots
3. Hand Gloves
4. Hood incorporating helmet and Visor.

The Supplier has to Educate the end user.

- A. How to use the fire suit for wearing and removing.
- B. How to maintain the Fire suit.
- C. Limitation of use of Fire suit according to the user manual provided along with the Fire suit.
- D. Fire suit need to be Inspected after every use to identify if it is suitable for re-deployment or need any repair work.

Wash care maintenance of fire suit is essentially followed for the long life of the suit. Wash care once in six months keep the suit fresh and avoid fungus attack and increases life.

Fire Proximity Suit Conforming to EN:469-2005 and according to the General Technical requirements (NDMA-NDRF ITEM) (For Civil User)

Specification : Fire Proximity Suit conforming to EN: 469-2005 and according to the General Technical Requirements ( GTR ).