



**EC TYPE EXAMINATION (MODULE B)  
CERTIFICATE No. MED035124WS/001**

***This is to certify** that RINA Services S.p.A. (Notified Body No. 0474) did undertake the relevant type approval procedures for the equipment identified below, which was found to be in compliance with the Fire Protection requirements of Marine Equipment Directive (MED) 2014/90/EU, including the requirements and testing standards of Regulation (EU) 2023/1667.*

*MED Item N°*

**MED/3.3a**

*Description*

**Fire-fighter's outfit: protective clothing (close proximity clothing): (a) Protective non reflective clothing for fire fighting ZFMH-FZ**

*Type*

*Applicant*

**SHANGHAI FANGZHAN FIRE TECHNOLOGY CO., LTD.**

BUILDING.41,NO.1-42, LANE 83  
NORTH HONGXIANG ROAD, WANXIANG TOWN  
PUDONG NEW AREA, SHANGHAI, CHINA

*Testing standards*

**EN 469:2020**

*Reference standards*

**SOLAS 74 Reg. II-2/10, IMO Res.MSC.36(63)-(1994 HSC Code) 7, IMO Res.MSC.97(73)-(2000 HSC Code) 7, IMO Res.MSC.98(73)-(FSS Code) 3.**

*Issued in* SHANGHAI *on*  
April 10, 2024

*This Certificate is valid until*  
April 9, 2029

*This Certificate consists of this sheet plus an attachment*



**Qiang Sun**

**RINA Services S.p.A.**



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*Manufacturer*

**SHANGHAI FANGZHAN FIRE TECHNOLOGY CO., LTD.**

*Place of Manufacturer*

BUILDING.41  
NO.1-42  
LANE 83  
NORTH HONGXIANG ROAD  
WANXIANG TOWN  
PUDONG NEW AREA  
SHANGHAI  
CHINA

*Name & place of Authorised Representative*

ANTONIO TRANI (SSI SRL)  
Via Ponte dei Francesi 43 - 80146 Napoli, Vat 10227171211, ITALY  
ITALY

### **Product Description**

The Fire-fighter's outfit: Protective Clothing (close proximity clothing) - protective non reflective clothing for firefighting (Type: ZFMH-FZ), comprising jacket and trousers made of aramid fiber in 4 layers.

The fire-fighters outfits were produced in following characteristics:

- in the styles without or with a backpack (protect the air bottle worn on the back of the fire man);
- in 6 different sizes suitable for wearers height range: 165cm ~190 cm;
- in 3 different colours (navy blue, orange and yellow).

### **Main Characteristics**

*Fabric Assembly:*

- Outer: Aramid check reinforced fabric (195±10g/m<sup>2</sup>);
- Waterproof breathable layer: Aramid non-woven fabric + flame retardant PTFE membrane(160±8g/m<sup>2</sup>);
- Insulation: Aramid non-woven fabric(70±4g/m<sup>2</sup>);
- Comfort Layer: Aramid viscose flame retardant fabric(120±6g/m<sup>2</sup>).

*Levels of Performance achieved: Level 2 (X2, Y2, Z2)*

- Heat transfer- Flame: LEVEL Xf2;
- Heat transfer- Radiation: LEVEL Xr2;
- Resistance to water penetration (Moisture Barrier): LEVEL Y2;
- Resistance to water penetration (Seamed Specimen): LEVEL Y2;
- Water Vapour Resistance: LEVEL Z2.

### **Field of Application / Limitation**

Approved for use as protective clothing for firefighters.

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Fax +39 010 5351000





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**Reference Documents**

Technical documents and manuals prepared by SHANGHAI FANGZHAN FIRE TECHNOLOGY CO., LTD. as following:

- Technical Drawing for Fire Fighter's Outfit with backpack, and approved by RINA with No. SHFP-26530;
- Technical Drawing for Fire Fighter's Outfit without backpack, and approved by RINA with No. SHFP-26531;
- Labeling, and approved by RINA with No. SHFP-26533;
- Main Technical Parameters, and approved by RINA with No. SHFP-26535;
- Bill of Material, and approved by RINA with No. SHFP-26571;
- Instruction Manual, field by RINA with No. SHFP-26532.

**Test Carried Out**

Test reports according to EN469:2020 for Fire Fighter's Outfit issued by SGS-CSTC Standard Technical Service (Shanghai) Co., Ltd. as following:

- with backpack:
  - Performance report (Ref. No.: SL52405285966901TX) on Apr.02.2024, filed by RINA with No. SHFP-26584;
  - Design report (Ref. No.: S52325345297901TX) on Jan.10.2024, and filed by RINA with No. SHFP-26585.
- without backpack:
  - Performance report (Ref. No.: SL52405285965101TX) on Apr.02.2024, filed by RINA with No. SHFP-26586;
  - Design report (Ref. No.: S52405250158301TX) on Jan.10.2024, filed by RINA with No. SHFP-26587.

**Marking of the Product**

The product is to be marked according to par. 7 of ISO 13688:2013 & par. 8 of EN 469:2020, and with name & address of manufacturer, type designation, and the MED Mark of Conformity.

**Notes**

Wheel marked Helmet/Hood with visor, gloves and boots are to be provided to compliment the outfit.

Each product is to be supplied with its manual for use and maintenance.

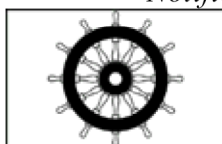
Storage, handling, cleaning, use and restrictions for use to be in accordance with the manufacturer's instructions.





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*The mark of conformity may only be affixed to the above type approved equipment and a Manufacturer's Declaration of Conformity issued when the production control phase module (D, E or F) of Annex II of the Directive is fully complied with a written inspection agreement with a Notified Body*



**XXXX/YYYY**

**"WHEELMARK FORMAT"**

**XXXX**      *Notified Body number undertaking surveillance module*

**YYYY**      *The year in which the mark is affixed*

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***General conditions for the approval***

- a) The initial conditions verified by RINA at the time of the approval are to be maintained
- b) Any changes to the initial conditions are to be promptly communicated to RINA, which reserves the right to repeat the relevant assessment
- c) This certificate will not be valid if the manufacturer makes any changes or modifications to the approved equipment, which have not been notified to, and agreed with RINA
- d) RINA personnel are to be allowed to witness during the performances of activities, upon their request
- e) The activities are to be carried out in compliance with the RINA Rules and/or other applicable Rules
- f) Should the specified regulations or standards be amended during the validity of this certificate, the product is to be reapproved prior to it being placed on board vessels to which the amended regulations or standards apply.



**Qiang Sun**

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**RINA Services S.p.A.**