

# PROTECTING THOSE WHO PROTECT US

Specialist Cleaning & Maintenance  
Services for Firefighting PPE





# Contaminated Gear Puts Firefighters at Risk

Firefighting turnout suits and PPE can retain harmful substances, including carcinogens, after every incident. These carcinogens can be inhaled or absorbed through the skin. Alarming, only around one-third of firefighters' PPE is cleaned after every incident\*.

- Research by the Fire Brigades Union (FBU) has revealed that firefighters face a higher risk of death from cancer, heart attacks, strokes, and other diseases.\*\*
- Firefighters' mortality rate from all cancers is 60% higher than that of the general population.

Without specialist decontamination, these toxins pose serious health risks and compromise a garment's protective performance. Not only that, but by washing these items at home or at the fire station, there's a risk of contaminants being spread when PPE is transported and stored, and further cross-contamination during domestic laundering cycles. The firefighting sectors' own research and guidance now point to the need for evidence-based decontamination to be carried out promptly and consistently after every exposure.

## Sources

\* Contamination of UK firefighters' personal protective equipment and workplaces, Taylor A. M. Wolffe, Anna Clinton, Andrew Robinson, Louis Turrell & Anna A. Stec

\*\* University of Central Lancashire (UCLan) Scottish Firefighters Occupational Cancer and Disease Mortality Rates: 2000-2020, and has been published in the Journal of Occupational Medicine.

**“No one should get ill from going to work, and firefighters deserve to go home at the end of their shift as safely and healthily as they began it”**

Riccardo la Torre, Fire Brigades Union National Officer, 2022

# Proven Safety & Readiness Process

We deliver safe, compliant, and ready-to-use turn-out gear and suits through evidence-based decontamination, a 15-point inspection, and expert repairs. In partnership with VimpeX, we use Lejon Kemi detergents proven to remove up to 95% of cancer-causing contaminants from firefighting PPE.

- Evidence-based detergents proven to remove harmful substances, with up to 95 % carcinogen removal in independent tests
- Manufacturers' inspection and repair compliance
- Moisture barrier integrity testing within our 15 point inspection
- Barcode tracking and full garment history for auditability
- 7 day turnaround and service level agreement
- Optional reserve stock and wardrobe management

## Sealed for Safety

Contaminated kit is sealed in soluble bags to limit handling and cross-contamination; the bag dissolves in the wash, keeping contaminants contained.



## Our Repair Protocol in Practice

- We only use original parts and fabric: manufacturer-approved fabrics, thermal liners, and components for every repair.
- We don't take shortcuts when making repairs: old reflective tape is entirely removed and never covered over.
- A permanent record of care: every repair is logged against the garment's unique barcode, creating a full audit trail.





# Our 15 Point Inspection Process

From decontamination to our final 15-point check, every stage of the CLEAN process is designed with one goal: ensuring the firefighters who protect our communities and their families are protected by gear they can trust, without question.

## 1-3 Critical Safety Filters

- 1. Dirt & Soiling**  
If excessive dirt or stains remain after washing, we rewash until clean.
- 2. Contamination**  
If garments are contaminated (e.g., with hazardous or biological material), we rewash until safe to use.
- 3. Moisture Barrier**  
Compliance is critical; If the moisture barrier is damaged or compromised, the garment will be condemned and removed from circulation

## 4-7 Physical Integrity

- 4. Damage: rips, tears, burns**  
If damage compromises function or safety, the garment is condemned and replaced.
- 5. Reflective Trim**  
If reflective areas are worn, faded, or detached, we replace or condemn the garment as required.
- 6. Seams**  
We repair split, frayed, or loose seams if possible; otherwise the garment is condemned.
- 7. Liner Integrity Discolouration**  
If fabric is severely discoloured or the liner is damaged, the garment is condemned.



Image © FlamePro.

## 8-10 Functional Tests

- 8. Wristlets**  
If stretched, frayed, or damaged, we repair or replace as required.
- 9. Retroreflection**  
If the reflective function is reduced, we replace or condemn the garment.
- 10. Liner Attachment**  
If the liner is loose, torn, or detached, we repair it if possible; otherwise, condemn it.

## 11-13 Hardware Test

- 11. Fixtures**  
If hooks, buckles, or other fittings are damaged or missing, we repair or replace.
- 12. Closures: zips, velcro, studs**  
Fix or replace if fastenings don't securely close.
- 13. Braces**  
Repair or replace if stretched, frayed, or detached.

## 14-15 Final Verification

- 14. Labels and Barcodes**  
If missing, illegible, or incorrect, we replace before returning to service.
- 15. Water Droplet Test**  
If the garment fails to repel water droplets, it is condemned and removed from circulation.

**Quality Assurance:** All inspections are conducted by certified technicians using manufacturer protocols.

# What Makes Our Service Different

We serve fire and rescue services across the UK with a dependable, standards-compliant PPE cleaning and maintenance care model. Our teams work to follow consistent procedures, giving incident commanders and PPE managers confidence that the kit returns fit for duty.



## Our Mission is Your Safety

From decontamination to our final 15-point check, every stage of the CLEAN process is designed with one goal: ensuring the firefighters who protect our communities are protected by gear they can trust, without question.



## A Benchmark for PPE Repair

We built our dedicated Repair Hub around a simple principle: a repaired garment must meet the same protective standards as a new one. The original garment manufacturer trains our technicians, and they work to that same exacting intolerance for error. This is not just about fixing a tear; it's about restoring the garment's certified integrity so it performs without question when called upon. Our technicians are trained to meet manufacturer requirements, using original or approved materials. Every repair is recorded against the garment's unique barcode and reinspected before being returned to duty.

# CLEAN

LINEN & WORKWEAR

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