

# ASSESSING PROTECTIVE CLOTHING

## EXCELLENCE IN ASSESSING Heat and Flame Protective Clothing

**BTTG Fire Technology Services (FTS) is a world renowned centre of excellence for the testing and assessment of protective clothing and gloves for firefighters, welders, foundry and other industrial workers, police and military. Testing and design assessment to all the relevant European and International performance specifications in these areas can be carried out at FTS including:**

- **EN 469/ISO 11613**  
Protective clothing for firefighters
- **EN 470-1/EN ISO 11611**  
Protective clothing for welders
- **EN 531/EN ISO 11612**  
Protective clothing for industrial workers
- **EN 533/EN ISO 14116**  
Limited flame spread materials
- **EN 1486/ISO 15538**  
Protective clothing for specialised firefighting
- **EN ISO 14460**  
Protective clothing for automobile racing drivers
- **ISO 15384**  
Protective clothing for wildland firefighting
- **BS 7971-10/BS 7971-6**  
Protective clothing and gloves for police use
- **BS 7971-1**  
Protective equipment for police use: ergonomic performance and compatibility assessment
- **EN 407**  
Protective gloves against thermal risks
- **EN 659/ISO 15383**  
Protective gloves for firefighters
- **EN 12477**  
Protective gloves for welders
- **EN 340/EN 420**  
General requirements - protective clothing/gloves
- **EN 13911**  
Protective clothing for firefighters - fire hoods

Each of the above specifications require small-scale laboratory tests (see overleaf for examples). Some require design assessments (e.g. EN 469, EN 470-1) and some have an optional requirement for manikin testing (see other FTS leaflets). All the EN specifications are the basis of CE-Marking (see other leaflets). Several of the above list of specifications are being revised, a task in which FTS is directly involved.



### **EN 469:2005 replaces EN 469:1995**

It now provides a choice between two levels of performance for heat protection, resistance to water penetration and water vapour resistance.

**ISO 15384:2003** is being developed into an EN. It is more specific to the intended end use (wildland firefighting) than EN 531:1995 or its expected successor EN ISO 11612.

**EN 471:2003** (high-visibility clothing) differs only slightly from EN 471:1994. This specification is relevant to firefighters and others exposed to heat/flame. Testing and CE-marking to EN 471 is included in our range of services.

**BS 7971 Parts 1, 6 & 10** (protective equipment for use in violent situations and training) are three of a series of performance specifications published in 2002-4. They are aimed at police/military use and are thus outside the scope of CEN standards related to the PPE Directive 89/686, but they can be used as a basis for CE-marking.

Can perform most tests in all specifications for fire protective clothing, gloves, and hoods

Represented on British (BS) European (CEN) and International (ISO) technical committees for fire protective clothing and related items

Co-ordinates and participates in inter-laboratory trials of fire test methods

Many other tests for protective clothing available at BTTG