

What is the difference?

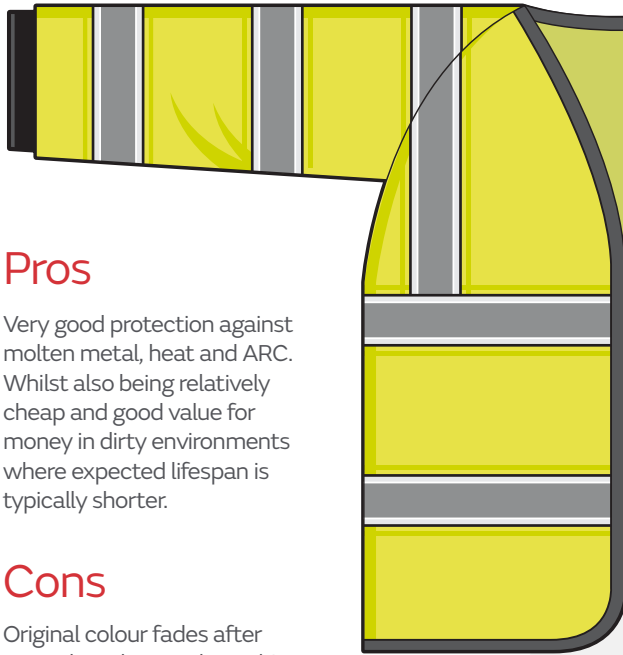
FR treated?

Inherent FR?

Working around risks such as electric ARC, molten metals and radiant heat require protective clothing that is either fire-retardant (FR) treated or inherent FR. But do you know what their important differences are and why one is cheaper than the other? If not, keep reading to learn how you can make better choices in the future.

FR treated

FR treated fabrics are based on cotton, blended with polyester, para-aramid or polyamide. For these fabrics to get their FR properties a chemical treatment is applied to the fabric in such a way that it fully penetrates the fibre and as such is bonded throughout the entire fabric. As a result, it becomes flame retardant and keeps this property during the lifetime of the garment.



Pros

Very good protection against molten metal, heat and ARC. Whilst also being relatively cheap and good value for money in dirty environments where expected lifespan is typically shorter.

Cons

Original colour fades after several washes, and to achieve similar FR properties as inherent FR the fabrics are heavier and less comfortable.

Inherent FR

Inherent means “existing as a natural or permanent quality of something”. So, when it comes to inherent FR fabrics, it means that at least one of the fibres used in that fabric has its own FR properties. The most common FR fibres used in protective clothing are modacrylics and aramids, which provide excellent protection against flames and heat. Commonly lightweight clothing is preferable, due to its lightweight and comfort. And the good news with inherent FR is that the higher the performance level of the fibre, the lower the weight you need to achieve a certain level of protection.



Pros

Excellent heat and ARC protection, great colour fastness hence good cost in use performance, lighter weight solutions with excellent comfort levels, and it's often used in environments where the corporate look is vital.

Cons

Limited protection against molten metal splash and is more expensive than FR treated.

What to choose?

Unfortunately, as it varies by industry and user there is no simple answer to this question. Whilst we have listed some pros and cons above, it does all come down to your own needs and preferences. As these are often important decisions, we are more than happy to provide you with the right advice.



Call us for more information or click on the QR code for FR brochure.