









Electric Arc Flash

BE SAFE & COMPLIANT

Cintas is the largest provider of managed flame resistant clothing programs. Over half a million wearers choose their flame resistant clothing (FRC) program from Cintas — making Cintas the most trusted source for FRC apparel in North America. With unparalleled service and diverse options, Cintas offers FRC products from manufacturers who engineer them to be more durable, more comfortable and lighter than any other garments of their type.



HAZARDS ASSESSMENT

OSHA regulations require employers to provide their employees with personal protective equipment (PPE) in certain work environments to reduce employee exposure to hazards.

For example, do your employees or contracted workers...



work on or near electricity or energized parts?



work with flammable liquids or gases?



weld or come into contact with molten metals?

If you answered 'Yes' to any of these, you should consult with a safety professional to determine whether a protective apparel program may be required.

As an employer, it is your responsibility to comply with industry standards and OSHA regulations to protect your employees from hazards they may encounter. Failure to comply can leave your business liable and you may face the risk of litigation and government fines. Cintas can provide your employees with PPE and design a laundry service program to fit your company's needs as determined by you.

ELECTRIC ARC FLASH



2,000

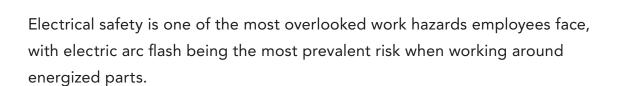
Arc flash sends 2,000 people to burn centers each year

FOURTH

Electrical injuries in general ranked fourth in workplace fatalities

<600v

Most of these fatalities occurred when working with less than 600 volts



Electric arc flash is a dangerous explosion caused by an electrical fault.



NFPA 70E is an industry standard which outlines how to properly protect your employees and create a safe working environment, as well as help your company comply with government regulations.

NFPA 70E applies to all personnel working on energized equipment greater than 50 volts or equipment that could produce an arc flash – which means virtually every industry has employees at risk.

SIMPLIFIED TWO-CATEGORY FLAME RESISTANT CLOTHING SYSTEM



CATEGORY 2 REQUIRED PPE

Also fulfills NFPA 70E requirement of Level 1

CATEGORY 4 REQUIRED PPE

Also fulfills NFPA 70E requirement of Level 3

✓	Safety glasses or goggles	✓
✓	Hearing protection (inserts)	\checkmark
✓	Insulated rubber gloves with leather protectors	✓
✓	EH heavy-duty leather footwear	\checkmark
✓	Arc rated long sleeve shirt/coverall (8.0 ATPV or higher)	✓
✓	Arc rated long pants/coverall (8.0 ATPV or higher)	√
✓	Hard hat with Arc rated face shield and balaclava	✓
	Arc rated coveralls	\checkmark
	Arc rated (40 cal) Arc Flash suit jacket	✓
	Arc rated (40 cal) Arc Flash suit pants	✓
	Arc rated (40 cal) Arc Flash suit hood	✓



FLASH FIRE



16%

Fire and explosions are responsible for 16% of fatalities in oil fields

3 SECONDS

NFPA defines a Flash Fire as 3 seconds or less



Flash fire is an intense flame that erupts without warning and spreads rapidly through a diffuse fuel, like gas or vapors of an ignitable liquid, over a matter of seconds.

Combustible dust is a concentration of airborne particles in a closed area which can be ignited by a spark or even static electricity.



OSHA enforces policy 29 CFR 1910.132(a), the general industry standard for Personal Protective Equipment (PPE), clarifying its position for the failure to provide and use Flame Resistant Clothing (FRC) in oil and gas well drilling, servicing and production-related operations.



NFPA 2112 is the Standard on Flame-Resistant Garments For Protection of Industrial Personnel Against Flash Fire. This standard provides minimum requirements for the design, construction, evaluation and certification of flame-resistant garments. The NFPA 2113 standard specifies the minimum selection, care, use and maintenance requirements for FR garments.

MOLTEN METAL SPLASH



Molten metal splash commonly occurs when moisture or wet materials are introduced causing the metal to explode violently and throw dangerous molten metal into the air.

3,000°F

Molten metal can reach temperatures up to 3,000°F and above causing severe injury or death

Failure to provide personal protective equipment designed for molten metal splash hazard is a serious infraction of OSHA standard 29 CRF 1910.132, the Occupational Safety and Health Act of 1970, and other regulations which can lead to convictions and fines.



MANAGING YOUR FRC PROGRAM



Partnering with Cintas for your flame resistant clothing options delivers you three key benefits: **comfort, convenience** and **care**.

COMFORT

We offer a full line of retail inspired protective apparel from the best brands and fabrics. We individually fit uniforms for each employee to ensure the right look and fit.

CONVENIENCE

We save you time with weekly route services to collect soiled garments and return them after being professionally laundered according to industry best practices.

CARE

We comply with industry best practices regarding the proper laundering, repair and replacement of flame resistant clothing.

With the help of your employees, Cintas will work with your company to ensure compliance with these industry best practices to protect your employees.

Advantages of a managed industrial laundry program:

Proper Laundering

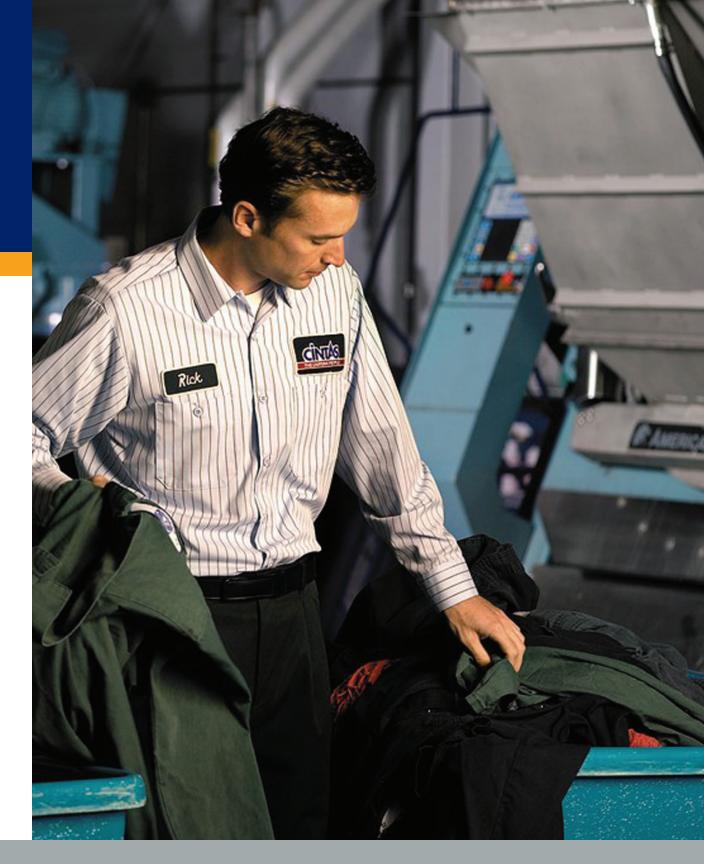
Using appropriate water temperatures, water softness and chemical formulas.

Weekly inspection and repair

Searching garments for holes, missing buttons and broken zippers and repairing with FR materials.

Proactive replacement

Retiring garments from service.





A TAILORED PROGRAM TO MEET YOUR NEEDS

Once you have identified the appropriate PPE for your employees, you can choose a rental, lease or purchase program based on your workforce and budget.

RESPONSIBILITIES	RENT	LEASE	PURCHASE
Weekly Laundering	Cintas	Employee	Employee
Weekly Inspections	Cintas	Employee	Employee
Repairs	Cintas	Cintas	Employee
Delivery	Cintas	Cintas	Company
Size Changes	Cintas	Cintas	Company
New Orders/Replacements	Cintas	Cintas	Company
Management of Program	Cintas	Cintas	Company
Initial Fitting	Cintas	Cintas	Company

We can add logos and names to your garments for a custom look. If the size of your workforce increases, we add additional uniforms.

Contact us today to learn more about how Cintas can help you with your Personal Protective Equipment Program.

CARHARTT FR RENTAL WORKWEAR



294 Carhartt 88/12 Long Sleeve Shirt 6.5 oz, Khaki (62), Light blue (80), Navy (20) ATPV 9.5, ARC 2 ASTM 1506, UL 2112 Certified



Rental FR Workwear Only from **CintAs**.



297 Carhartt Long Sleeve T-Shirt 6.7 oz, Heather Gray (31) ATPV 8.2, ARC 2



371 Carhartt **88/12** Pant 9 oz, Navy (20) ATPV 12, ARC 2 ASTM 1506, UL 2112 Certified



290 Carhartt Carpenter Jean 11.75 oz, 100% Cotton, Denim (83) ATPV 15.2, ARC 2 UL 2112 Certified



280 Carhartt Jean 14.75 oz, 100% Cotton, Denim (83) ATPV 23.8, ARC 2 UL 2112 Certified



391 Carhartt **88/12** Coverall 7 oz, Navy (20) ATPV **8.6**, ARC 2 ASTM 1506, UL 2112 Certified

PROTECTIVE CLOTHING

60694 Light Blue (80)

70644 Navy (20)



70644 UltraSoft® Pant 9.5 oz, Navy (20) ATPV 12.4, ARC 2, UL 2112 Certified **8803** Navy (20)



7 oz, Khaki (62), Light Blue (80), Navy (20) ATPV 10 (Navy), 9 (Light Blue, Khaki) ARC 2, UL 2112 Certified

7733 Tecasafe™ Plus Shirt

8803 Tecasafe™ Plus Pant 8.5 oz, Navy (20) ATPV 10.2, ARC 2, UL 2112 Certified

8066 Tecasafe™ Knit Polo 6.7 oz, Navy (20) ATPV 8.2, ARC 2, UL 2112 Certified



7733 Khaki (62)

> Navy (20)

Light Blue

8066 Navy (20)



80309 Nomex[®] IIIA Vest/Jacket Liner Navy (20) ATPV 37, ARC 3 UL 2112 Certified (Can be worn with 80308)

80308 Nomex[®] IIIA Bomber Jacket 5.3 oz, Navy (20) ATPV 12.6, ARC 2 UL 2112 Certified



656 Nomex[®] IIIA Shirt 4.5 oz, Light Blue (80) Khaki (60), Navy (2) ATPV 4.5, ARC 1 UL 2112 Certified

60698 Nomex®/Rayon Shirt 4.5 oz, Denim (83) ATPV 4.5, ARC 1 UL 2112 Certified



6724 UltraSoft® Bomber Jacket 10 oz, Navy (20) ATPV 12.4, ARC 2 UL 2112 Certified

746 Nomex[®] IIIA Pants 7.5 oz, Navy (20) ATPV 7.0, ARC 1 UL 2112 Certified



6728 UltraSoft® Liner/Jacket 10 oz, Black (35) ATPV 30.8, ARC 3 UL 2112 Certified

82302 UltraSoft[®] Coverall 9.5 oz, Navy (20) ATPV 12.4, ARC 2 UL 2112 Certified

8723 Tecasafe™ Plus Coverall 7 oz, Navy (20) ATPV 10.2, ARC 2 UL 2112 Certified (not shown)

737 Nomex[®] IIIA Coveralls 6 oz, Navy (20), Liberty Blue (26) ATPV 5.6, ARC 1 UL 2112 Certified (not shown)



82302 Navy (20)



ENHANCED VISIBILITY



64308

61286 Orange E-Vis 88/12 Workshirt

7 oz, Orange ATPV 8.6, ARC 2, UL 2112 Certified

60079 Orange E-Vis 88/12 Jacket 9 oz, Orange ATPV 12.2, ARC 2

60078 Jacket Liner 15.5 oz, Grey Arc Rating N/A when worn alone. When worn with 60079, ATPV 61.3 (not shown) 64302 88/12 Shirt with Reflective Trim

7 oz, Navy (20), Light Blue (80) ATPV 8.7, ARC 2, UL 2112 Certified

64303 88/12 Pant with Reflective Trim 9 oz, Navy (20) ATPV 12.4, ARC 2 UL 2112 Certified



64308 Tecasafe[™] Plus Shirt with Reflective Trim 7 oz, Khaki (62) ATPV 9.0, ARC 2, UL 2112 Certified

64307 Tecasafe™ Plus Coverall with Reflective Trim 7 oz, Navy (20) ATPV 10.1, ARC 2, UL 2112 Certified



64303

PERSONAL PROTECTIVE EQUIPMENT

Additional PPE products available upon request.



Arc Flash Suit



63545 **Insulated Hand Tools**



86935 Rubber Insulated **Gloves Covers** Classes 00, 0, 1, 2



86938 Leather Glove Protectors 10" and 12"



82337 Indura UltraSoft® Balaclava



89512 Arc Flash Protective Face Shield



Trust The Team with the White Truck.™

UNIFORMS SERVICES · FACILITY SERVICES · FIRST AID & SAFETY · FIRE PROTECTION · PROMOTIONAL PRODUCTS

1.800.CINTAS1 · www.Cintas.com/ProtectiveApparel

Pursuant to OSHA regulations, 29 CFR 1910.132 (Subpart I), an employer bears sole responsibility for selecting the type(s) of personal protective equipment to be used by its employees. All purchasers of FRC garments and/or laundering services from Cintas bear full responsibility for selecting the PPE appropriate for use by their employees. Cintas makes no representation, warranty, or covenant with

respect to the flame-resistant qualities of the garments or with respect to the fitness or suitability of the garments for any particular use or purpose. The purchase of any goods or services from Cintas is subject to Cintas's Standard Terms and Conditions and/or any other applicable written contract executed between the purchaser and Cintas relating to such purchase.