

**Protective Clothing Decontamination: Understanding the Science**

UniTech’s unique controlled protective apparel laundry process is the result of years of research, development and continuous improvement. Today, using newly available technology, and responding to customer requirements and industry regulation, UniTech’s controlled laundry process exceeds all standards set for safety, consistency and garment cleanliness.

**FACTS**

- UniTech routinely TESTS garments before laundering and after each of the 14+ wash cycles.
- UniTech laundries are consistently clean and sanitary. Our workers even wear special lab coats as if working in a cleanroom. We invite customers to tour our facilities to see for themselves.
- UniTech’s laundering process has attained a standard of excellence in which post-laundry “rejects” virtually never happen – our process has in essence eliminated radiological rejects!

Our proprietary pH Cycling Process detaches any loose contamination from the garment and **Does not permit redeposition onto the garment**. Garments are CLEAN AND DECONTAMINATED when 14+ step laundering is complete.

**New Respirator Management Program**

Optimal respirator use and management is a serious concern for many nuclear facilities. In working closely with its customers, UniTech recognized a need to offer a new program that will assure safer, more productive use, cleaning and maintenance of this important safety equipment.

UniTech selected longtime nuclear respirator expert William Dougherty to work with our customers to institute and manage a structured program of best “real world” practices and processes to get the most effective service, safety and longevity from the respirators in use. Dougherty says, “This initiative is especially timely because the respirator systems UniTech provides its customers today are significantly better and more high-tech than anything available before.” Dougherty adds, “Take the 3M 9100 FX-Air welding helmets with respiratory protection, which have 3M’s Speedglas™ welding lenses that are auto darkening so that the worker doesn’t have to remove and replace the visor while working. The new respirator systems are optimized to meet or exceed the demands of nuclear facility work.”

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**R3 Conference**

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**Ask the Nuclear Protective Clothing Expert**

**What’s Different About Clothing Certifications in Europe vs. the United States?**

As with many safety and health standards in the United States and Europe, UniTech’s (C-Tech) coveralls must undergo an entirely different series of tests to be certified in Europe.

Under EN 1073-2, the European standard for protective nuclear clothing, the European tests are numerous and rigorous, requiring five cycles of cleaning and disinfection as well as exposure to extreme conditions.

The clothing is first exposed to extreme cold temperatures, then extreme hot temperatures. A worker walks in the clothing, and then is asked to fill and empty material into and out of a hopper, kneeling and shoveling for about 10 minutes. During the latter test, inspectors analyze fastening, ease of movement, comfort (including heat stress and humidity transfers), wearers’ responses, and visible defects. The tests also measure inward leakage and undergo a “joint and assemblage” pull test as well as an aerosol test, which measures seamlessness and airtightness respectively, of attached and conjoined garments, such as gloves, boots, hoods, and respirators.

The aforementioned tests are intended to measure resistance from abrasion, tearing, fire and punctures, and seam strength. They are rated and must be within a suitable range to receive approval. For example, for items where airborne radioactive contamination is present, coveralls must be tested and certified to conform with Class I or II (when tested with respirator and hood) standards.

UniTech Safety Services Director Vic Crusselle said Conformité Européenne (Europe’s product safety body) tests products like UniTech’s annually either at their facilities or in-house.

“In the European Union, we have a very proactive program,” Crusselle said. “We are constantly writing files and conducting annual reviews to prepare to undergo certifications.”

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**OPG Pickering Celebrates One Millionth Anti-C Coverall Processed Since 2004**

**Plant Significantly Reduces Radioactive Solid Waste**

OPG Pickering Nuclear Generating Station in Pickering, Ontario, Canada has an ongoing initiative to reduce the quantity of consumable products it adds to the radioactive solid waste stream. Pickering management decided in 2004 to begin using Anti-C coveralls to replace disposable TyVek® coveralls. The Anti-C coveralls were the first washable item introduced to Pickering Nuclear.

Time has proven this to be a good choice. One significant number tells the story. On January 15, 2014, UniTech Services Group, which has acted as OPG’s laundry service provider since the 2004 switch to reusable coveralls, laundered the one millionth Anti-C coverall from Pickering Nuclear.

According to OPG Senior Technical Officer Jack Page, “This is a very important occasion as it relates to a savings of an estimated 2,703 cubic meters of radioactive solid waste that has been diverted since the implementation of this single item.”

The amount of radioactive solid waste saved by using Anti-C coveralls for the last decade would, if it had instead been generated, fill a hockey arena to over seven feet deep.

**What’s New?**

**Breathe Easy:** Continuing our partnership with 3M™ to provide the ideal supplied air respiratory systems for the nuclear facility environment, UniTech announces the availability of 3M™ Versaflo™ AP-600 Series Air Filtration Panels (AFP). AP-600 controls the pressure of the air delivered to a supplied air respirator and helps remove contaminants from compressed air. It features an air pressure regulator and gauge, provides 100CFM/2830 lpm capacity, and is light, portable and easy to maintain. The AP-600 enhances the usefulness of the 3M Versaflo Supplied Air Respirator Systems by eliminating atmospheric contaminants, compressor contaminants, air distribution piping foreign substances, and gases and vapors introduced by piping leaks.

**Utilities Service Alliance (USA) Awards UniTech for Developing USA’s Company Store:** UniTech put its e-commerce skills to work, assisting in setting up the Utilities Service Alliance online “Company Store” at nuksupply.com/usapromo/. Check out the great clothing and accessories!

UniTech partners with USA not only in this effort but also as a key featured supplier of nuclear protective clothing and accessories for nuclear facilities. Utilities Service Alliance provides a business platform for its members to collaborate in plant performance and economic benefit initiatives.
UniTech’s New Respirator Management Program
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“The respirator systems are far and away better and more high-tech than anything previously available.”

The new respirator management program includes in-plant processes that respond to specific challenges faced by nuclear workers. One important premise, now supported by step-by-step procedures for workers, is that routinely keeping the respirator systems clean by observing basic protocols prevents safety problems and plant expense later. “For example,” says Dougherty, “plant workers need to know to avoid touching the respirator with contaminated hands whenever possible. And when exiting a contaminated area while wearing a respirator, workers need to know the proper doffing process while maintaining positive respirator pressure during removal.”

UniTech piloted the program at the HB Robinson plant in Hartsville, SC during a recent cavity seal project. To learn more, please contact Gregg Johnstone at gjohnstone@UniTechUS.com or speak with your account representative.

Upcoming Conferences
* Apr 30-May 1: Bruce Power Suppliers Day/Kincardine, Ontario
* May 5-6: Supply Chain Meeting/Charlotte, NC
* May 11: International Nuclear Career Convention/Marseille, France
* May 11: ENC 2014/Marseille, France
* May 21: OPG Suppliers Day/ Ajax, Ontario
* May 19-22: Conference on Radiation Control/Atlanta, GA
* May 25-27: CANDU Maintenance/Toronto, Ontario
* June 4-6: USA-Promo Sales: Shirts, Jackets, Golf Towels, Hats, Sweatshirts
* June 4-5: Los Alamos National Security: Laundry Bags, ProTech Coveralls, Nylon Shoe Covers
* June 11: International Nuclear Career Convention/Marseille, France
* June 11: ENC 2014/Marseille, France
* June 15-19: ANS Winter Meeting/Anaheim, CA
* June 23-25: UniTech R³ Workshop/Ft. Lauderdale, FL
* July 13-16: Innovative Industrial Solutions/Clearwater, FL
* Sept 11: AECL-Chalk River Suppliers Day/Chalk River, Ontario
* Sept 26: CANDU Energy Suppliers Day/Sheridan Park, MS
* Nov 13: OPG Suppliers Day/ Ajax, Ontario
* Dec 2-3: ASSE/Warwick, RI

Recent Contract Highlights
* Electric Boat: Respirator Parts
* NexxTran Energy: Seaboard: Sleeping
* Florida Power & Light: Turkey Point: 3M Versaflo PAPRs, Accessories & Covers, CoolTech Scrubs
* Bechtel Marine Propulsion: ProTech Bag Suits & Hoods
* Detroit Edison, Fermi II: MaxAir Units & Accessories
* Exelon, Byron: GripTech Gloves, Laundry Bags, Mops, DryGuard, Knee Pads
* Government Scientific: ProTech Coveralls, Nylon Shoe Covers
* Raytheon Company: TOW Missile Cover Bags
* Bechtel Marine Propulsion, NRF: ProTech Bag Suits & Hoods
* Horsehead Corporation: Non-Rad Laundery Service Renewal, Non-Rad Respirator Cleaning & Recertification Renewal
* First Energy, Davis Besse: GripTech Gloves, UniStock Dispensers, Ice Vests, Microfiber
* Los Alamos National Security: Laundry Bags, ProTech Coveralls, Shoe Covers, Bath Towels
* USA-Promo Sales: Shirts, Jackets, Golf Towels, Caps, Sweatshirts
* Arizona Public Service, Palo Verde: Mobile Supply Trailer
* TWA, Watts Bar: Control Rod Maintenance Box Cover, Bags & Tags

Words of Wisdom
“Nuclear power plants of the late 21st century are likely to have about as much resemblance to today’s workhorse light water reactors as a modern automobile has to a 1914 Model T Ford.”
– Richard Lester
Head of the Department of Nuclear Science and Engineering,
Massachusetts Institute of Technology
Paul Manley Retires After 25 Years of Leadership at UniTech

Paul was a major part of nearly everything we’ve accomplished at UniTech for the last 25 years, and with his retirement this spring, we took the time to reflect on his story and his achievements. Paul joined UniTech as Plant Manager/RSO in Springfield, Massachusetts in 1989, and became our Operations Manager in 1994. As Operations Manager, Paul deftly managed a myriad of responsibilities ranging from developing and meeting budget and business objectives, supervising plant managers, developing and enforcing company policies and procedures, to working with Corporate Health Physics and Engineering to assure regulatory compliance. According to longtime coworker and friend Director of Sales & Marketing Gregg Johnstone, “There is no other person I’ve ever known who can get a job done more quickly and effectively than Paul.” Steve Williams, Springfield Plant Manager adds, “Paul always said to call him anytime – day or night – for any help I needed at the plant. Paul was committed to doing everything possible to make sure UniTech served its customers well, and to support his team.”

Paul had an exciting career even before helping grow UniTech to the company it is today. As a young man, Paul flew helicopters in Vietnam as Gunnery Sergeant for the Marines. After completing his military service, he worked as Wastewater Treatment Operator for the Town of Brattleboro, Vermont, then held positions of increasing responsibility at Vermont Yankee.

We thank Paul for all he’s brought to UniTech for the last quarter century, and we wish him an excellent next chapter in life.

Barrow Becomes Operations Manager

In October 2013, Dave Barrow, 22-year UniTech veteran, was promoted to UniTech U.S. Operations Manager. Barrow assumes an array of key company responsibilities. These include developing and meeting budget requirements, developing and implementing business objectives, managing operations procedures, supervising plant managers, maintaining customer relations, enforcing company policies and procedures, and working with Corporate Health Physics and Engineering to assure regulatory compliance. Prior to becoming Operations Manager, Barrow was Plant Manager for UniTech’s Richland, WA facility, as well as earlier positions of increasing responsibility. Prior to joining our team in 1992, he gained nuclear industry experience with Bartlett Nuclear and the U.S. Navy. We’re glad to have Dave Barrow taking over the important role of U.S. Operations Manager.

Social Media

Business relationships are more important than ever. UniTech has developed ongoing social media communications, including Facebook, LinkedIn, Twitter, Google+, and YouTube. Please join us online, give us feedback and share your updates.

Like us on our new Facebook page!

Thanks for reading UniTRACK!
Visit www.UniTechUS.com for a free iPhone button sticker.
Enter code: BUTTON

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