

**20 Years of Partnership**

# **SUPPORTING THE CANADIAN NUCLEAR INDUSTRY SINCE 2001**

**See what we've accomplished together.**



**REDUCE. REUSE. RECYCLE.**



Certificate Number 968  
ISO 9001, ISO 14001



# UniFirst

Founded from humble beginnings in a converted horse barn in Boston, Massachusetts by Aldo Croatti in 1936, with only a handful of employees and a few area customers, today, UniFirst Corporation is a twenty-first century leader in the textile services industry. The company serves more than 300,000 business customer locations throughout the United States, Canada, and Europe, maintains manufacturing operations in Mexico and Nicaragua, and operates the UniTech division as a wholly owned subsidiary.

## ORGANIZATION

### UniFirst

\$1.8 billion/year  
14,000+ team partners  
260 service centers in U.S./Canada/Europe  
Publicly traded on NYSE (UNF)  
Dunn & Bradstreet rating of 5A1

### UniFirst Canada

Began in 1969 in Mississauga, Ontario  
800+ team partners  
24 service centers in Canada

### UniTech Services Group, Inc.

Began in 1957 in Springfield, Massachusetts  
600+ team partners  
8 service centers in the U.S., 1 in the U.K., and 1 in Europe



Founded in Springfield, Massachusetts, UniTech Services Group, a subsidiary of UniFirst Corporation, was the first licensed commercial nuclear laundry services provider in the U.S. We have been providing protective clothing decontamination and specialty monitoring services since 1957 and have been supporting Canadian customers with similar services from three of our U.S. based facilities since 2001.

Over UniTech's 60-plus year business history we have designed, licensed and operated 28 nuclear laundry facilities. To meet changing geographical needs, and in the interest of modernization, we have safely decommissioned 18 former facilities. We currently operate eight service centers in the U.S., one in the U.K., and one in Europe.

## Current Fleet of UniTech Facilities

Plant Location	Year Established
Springfield, Massachusetts	1957
Santa Fe, New Mexico	1960
Royersford, Pennsylvania	1984
Morris, Illinois	1987
Richland, Washington	1993
Ontario, California	1994
Coevorden, Netherlands	1996
Oak Ridge, Tennessee	2002
Barnwell, South Carolina	2003
Oakdale, United Kingdom	2009



UniTech leverages the experience and support of its parent company, UniFirst Corporation. UniFirst invests approximately \$100 million each year into new capital projects and facility upgrades to maximize efficiency and reliability of services. UniFirst's experienced in-house engineering group ensures consistency by controlling designs and specifications, plus employing proven methods and equipment in every element of new construction and upgrades across the 250-plus locations across the fleet. In addition, each UniTech facility has its own Maintenance Department and spare parts to manage all day to day maintenance activities.

With multiple facilities and consistency provided through ISO 9001 and ISO 14001 quality programs, we can quickly shift customers' inbound processing to other UniTech facilities and have flexibility in instances of emergency (e.g. power outages, snowstorms/weather, etc.), or to best manage the laundry volume for rapid turnaround.

For decades, we were "the laundry guys" — but over time, we've expanded our core service areas to serve the full range of industry needs. This includes:

- Nuclear protective clothing design, manufacturing, and management with full lease programs.
- Custom radiation monitor design, manufacturing, and use
- Tool and metal decontamination and monitoring.
- Materials processing and waste management.
- Search-and-seal x-ray services.
- On-site laundry management with shipping, classification, and border management.
- UniTech Mobile Supply Stores™.

### Major Full-Service Customers

UniTech processes over 14 million lbs. of clothing and respirators annually. Over 80 percent of this is UniTech-owned lease clothing. In our 60-plus years servicing the nuclear industry, we have never failed to manage critical laundry needs. We service the majority of the largest utility companies and government agencies in North America, the U.K., and Europe. UniTech provides precise, accurate monitoring of various types of radiation to accommodate a wide range of customer-specified limits for each market sector (i.e. commercial reactors, Department of Energy (DOE), Department of Defense (DOD), nuclear service businesses, and research reactors).

# UNITECH CANADA TIMELINE

## 2001

### UniTech modifies facilities for plastic suit processing

(i.e. plastic suit drying cabinet designed, patented, and installed) within 90 days to process the first shipment of plastic suits from Ontario Power Generation (OPG) on October 10, 2001.



## 2002

UniTech awarded a contingency contract for the provision of emergency laundry services for Bruce Power (BP).



## 2003

UniTech adds clean-controlled laundry and additional respirator processing capacity to its Springfield, Massachusetts facility.

### MARSHALLING UNITECH'S EXPERIENCE, INVESTMENT, AND PROBLEM-SOLVING CAPABILITIES IN CANADA

During the OPG PNGS A Restart Project, OPG had outsourced their nuclear laundry services; however, OPG management quickly realized that the local service provider did not have the capacity to keep up with the demand required to support multiple projects. In response, OPG worked with UniTech to develop a contingency (emergency) contract that would mitigate any risks of PPE-related work stoppages. UniTech quickly added \$1 million in specialty processing equipment at an existing facility and was ready for the first shipment from OPG on October 10, 2001 (90 days after signing the contract).

According to Canadian Regulations, then and now, no company other than a reactor site had ever licensed the discharge of radioactivity to the environment via air or wastewater. UniTech could not operate in Canada in a cost-effective manner without access to permanent radioactive waste disposal (unlike our U.S. operations, where we had 10 facilities with this access and 40 years of industry experience). The solution was to perform the laundering/decontamination at UniTech's established U.S. Facilities. These regulatory requirements are still in place and continue to impact the provision of commercial nuclear laundry services in Canada. Additionally, single-use clothing was a

significant portion of Canadian radioactive waste and without licensing and access to permanent disposal, this prevented the Canadian nuclear industry from reducing their radioactive waste foot-print. As you will see in other sections, U.S. laundry and decontamination support significantly reduces radioactive waste generation, overall cost, and risk.

### MAJOR CANADA INVESTMENT

- Canadian Transport carries all laundry
- New Canadian transport trucks purchased
- Specialized, heated trailers purchased
- IP2 shipping containers purchased

### MAJOR U.S. INVESTMENT

- Designed and installed plastic suit drying
- Added advanced monitoring for all plastic suits (no hand frisking)
- Added advanced respirator processing capacity
- Added clean, controlled laundry capacity
- Doubled Canadian capacity in 2008 with a new facility addition to reduce risk (from loss of power, flood, fire, tornados, etc.) that could prevent laundry processing.





# 2004

UniTech supplies leased, launderable ProTech™ Anti-C's/Oversuits to OPG to replace existing single-use items to reduce cost and radioactive waste.



# 2006

UniTech decontaminates, monitors, and releases 300,000 lbs. of scaffolding from OPG Pickering Nuclear Generating Station (PNGS) and delivers to Bruce Power 1 & 2 Restart Project.

# 2005

UniTech supplies leased, launderable rubber gloves, cotton liners, ProTech™ booties, and black booties to OPG to replace existing single-use items, to reduce cost and radioactive waste.

## BRUCE POWER 1 & 2 RESTART PROJECT (2006 – 2012) SUMMARY

UniTech was awarded a turnkey contract to provide a full lease and launder program for the restart of Unit 1 and Unit 2. The Project was completed in 6 years. Highlights are outlined below.

### PROGRAM HIGHLIGHTS:

#### Major Services

- Full Lease/Laundry Daily Wear/Radiation Personnel Protective Equipment (RPPE)
- RPPE Consumables on a Mobile Supply Store™
- Emergency Clothing on a Mobile Supply Store™
- Turnkey border and shipping management
- On-site coordination and laundry management

#### Full Lease Items

- Daily Wear
  - Fire Retardant (FR)/Non-FR coveralls and towels
  - 1.5 million items processed
- Respiratory Protection
  - Plastic Suits and MSA™ COMFOS™
  - 225,000 items processed
- Waste Avoidance Items
  - ProTech™ Anti-C's, oversuits, booties, gloves, covers, and misc. bags
  - 10 million items processed



#### Radioactive Waste Avoidance

- Lease/Laundry costs were \$5.1 million less than single-use item purchases
- 18 launderable items replaced 18 single-use items
- 5,600 m³ of radioactive waste and \$11.6 million in direct waste cost avoided
- Heat stress reduced for better protection, with no transport delay and no secondary waste

#### Specialty Services

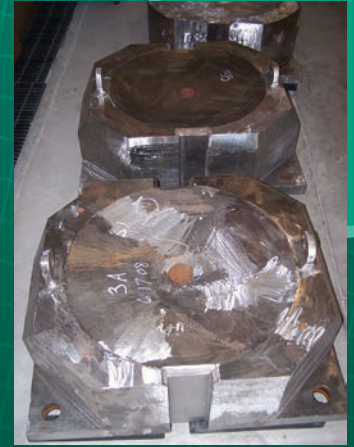
- Turnkey High-Efficiency Particulate Air (HEPA) filtered vacuum/air handling units (filter changes, DOP testing, decon, and repairs) maintenance program
- Arc Flash 20 and 40 cal/cm² suit management program
- HEPA duct decontamination
- Powered Air-Purifying Respirator (PAPR) sales and support
- Launderable covers
- Custom designed and manufactured feeder prep glove bags and ...
- Additional tool and metal decontamination projects highlighted elsewhere in this document.





# 2007

UniTech opens a new \$9 million, 30,000 sq. ft., Canada-only, service wing in Royersford, Pennsylvania.



# 2009

UniTech decontaminates and scraps 500,000 lbs. of structural steel and supports from Bruce Power 1 & 2 Restart Project.



# 2008

UniTech designs, manufactures, and implements 15 different custom launderable bags for OPG to replace their existing single-use items, reducing cost and radioactive waste generation.

## NB POWER REFURBISHMENT PROJECT (2009 – 2012)

UniTech was awarded a turnkey contract to provide a full lease and laundry program for the refurbishment. The project was completed in four years.

### PROGRAM HIGHLIGHTS:

#### Major Services

- Full lease and launder daily wear and RPPE
- RPPE consumables & training clothing
- On-site coordination and laundry supervision
- Turnkey border and shipping management
- Full training facility clothing lease and cleaning

#### Full Lease Items

- Daily wear: scrubs and towels
  - 1.9 million items processed
- Respiratory Protection: Plastic Suits/MSA™ COMFOs™
  - 53,000 items processed
- Waste Avoidance Items: ProTech™ Anti-C's, oversuits, booties, gloves, covers, and misc. bags
  - 3 million items processed



#### Radioactive Waste Avoidance

- Scrubs and low monitoring limits allowed workers to exit Zone 2 without showering for the first time in plant history.
  - Cut showers by 50 percent and saved 187,000 personnel hours.
  - 187,000 personnel hours regained \$11.2 million in productivity.
- 8 launderable items cut 800,000 lbs. of radwaste, or 3,125 m<sup>3</sup>, or 43 individual 40' sealand containers.

#### Specialty Services

- Developed don and doff posters for every dress out, as well as old method versus new method comparisons for all waste avoidance items.
- Provided mannequins as props for training.
- Supplied custom laundry dispenser racks.





# 2010

UniTech implements state-of-the-art alpha monitoring on clothing (41,000 pieces monitored with no alarms) and scaffolding (18,000 lbs.), with alpha ratios as low as 1:1 for the Bruce Power 1 & 2 Restart Project.

# 2011



UniTech's R&D team develops a revolutionary, proprietary, new decontamination process specifically for ProTech™ fabric.

## TOOL AND METAL DECON PROJECTS COMPLETED

Decontamination of tools, scaffolding, and equipment for unrestricted release and survey to verify the absence of radioactivity. Volume for all Canadian Utilities equaled 4.8 million lbs. released for unrestricted use or recycled.

### HIGHLIGHTS:

#### Major Services

- Scaffolding, verify absence of radioactivity
  - 1.2 million lbs. verified and packaged
- Scaffolding, decontaminate and release
  - 400,000 lbs. released or repurposed
- Scaffolding decon and survey w/fixed alpha monitoring
  - 125,000 lbs. released
- Structural steel and SG support decontamination
  - 125,000 lbs. released
- Decontamination and survey of misc. equipment and lead blankets
  - 300,000 lbs. released
- Decontamination and survey VBO hose and miles of electrical cabling
  - 200,000 lbs. released

Obtained all Canadian licensing (WNSL, Non-Proliferation, and ERAP) to allow UniTech to take all transport and border responsibility for the decontamination project and laundry service shipments.



#### Specialty Services

- Developed six custom, automated radiation monitors to ensure most surveys had "human factors" reduced to the maximum extent possible to limit hand frisking.
- Developed a custom soak tank and wet chemistry to achieve decontamination of metals to unrestricted release levels with minimum secondary waste generation.





2012

UniTech is awarded a new 10-year full-service agreement to lease and launder all clothing (including daily wear, plastic suits, all respiratory protection equipment, and 30-plus radioactive waste avoidance items) by OPG.

2013

UniTech Canada obtains all the necessary licensing (WNSL, ERAP and Nuclear Non-Proliferation Import/Export License) so that UniTech can assume responsibility for all customer materials during transport.



2014

UniTech processes 1 million ProTech™ Anti-C's for OPG PNGS, eliminating 2,900 m<sup>3</sup> of radioactive waste.

## DEMOBILIZATION OF A USED MID-CYCLE CANDU 6 REFURBISHMENT TOOL SET PROJECT SUMMARY

Decontamination and unrestricted release of a tool set weighing 2.6 million lbs.

Highlights are outlined below:

### PROGRAM HIGHLIGHTS:

#### Major Services

- UniTech disassembled, decontaminated, and surveyed 2.6 million lbs. of tooling that was scrapped as non-radioactive scrap metal.
- We managed 70 shipments containing 677 crates with dose rates that ranged from 0 to 400 mR/hr on contact.
- UniTech took title to materials at the customer site and exported all materials to the U.S.
- We imported clean scrap metal back to Canada for recycling.
- UniTech provided all shipping documents and customs paperwork.

#### Specialty Services

- UniTech developed custom automated radiation monitors with multiple detector jigs to survey heavy equipment that cannot be placed onto fully automated monitors due to weight restrictions.
- The jigs used ensured "human factors" were reduced to the maximum extent possible by limiting hand frisking.
- UniTech developed a guide sleeve and drum monitor.







# 2015

UniTech's Health Physics and Engineering (HP&E) Department issues "Unrestricted Release of Materials," an 83-page procedure consolidating various regulatory guidelines into a practical guidance document specific to each piece of monitoring equipment.



# 2017

UniTech HP&E Department upgrades the unrestricted release procedure to account for non-detectable isotopes and variations in energy levels, allowing for the classification of laundry as "Exempt" in transport. Also, UniTech is awarded three-year full-service contracts by BP and Canadian Nuclear Laboratories-Chalk River (CRL).



# 2016

UniTech is awarded a full-service contract (including lease, laundry, shipping, border management, on-site coordination) for the OPG Darlington Nuclear Generating Station (DNGS) Unit 2 Refurbishment Project.

## OPG DARLINGTON REFURBISHMENT UNIT 2 PROJECT SUMMARY (2016-2020)

UniTech was awarded a turnkey contract to provide a full lease and laundry program for the Refurbishment of Unit 2 and now Unit 3.

### MAJOR UNIT 2 MILESTONES:

#### Classified and Shipped

- 476 cross-border laundry trucks
- 56 LSA laundry loads

#### Daily Wear Lease and Towels

- 737,247 items processed

#### Disinfect/Decon./Processed

- 261,232 plastic suits
- 177,220 MSA™ COMFOs™

Waste Avoidance Items: ProTech™ Anti-C's, oversuits, booties, gloves, etc.

- 9.2 million items processed

#### Working together with Refurbishment to ensure success and efficiency:

- Refurbishment Maintenance staff worked with UniTech on-site services to ensure that sudden changes in clothing use did not negatively impact the project.
- 1,201 days were worked without a single inventory delay.

Worked in lock step with Health Physics, Civil Maintenance, and Radiation Protection (RP) Departments to help roll out a full-service Blue FR Dailywear Coverall (BLUES) program:

- This was a first for OPG as they were still using Radiation Area Clothing under RPPE. This required collaboration, including: internal suit surveys (10,000 suits internally surveyed for loose radioactivity), Radio Frequency Identification (RFID) chipped inventory to track garment life, and 100 percent monitoring to ensure no measurable radioactivity remained after the decontamination process. This was the first 8 size vs. 50 size BLUES inventory in service at OPG saving significant time with shelf stocking and worker coverall selection.



# 2018

UniTech is awarded a five-year, turnkey PPE and laundry services contract (i.e. clothing leases, laundry services, shipping, border management and on-call, on-site coordination) for the Port Hope Area Initiative Project (PHAI).

# 2020

UniTech obtains classification as an "essential service" provider in every State/Province in response to the COVID-19 pandemic, ensuring no delays in shipments due to international border restrictions. UniTech provides three emergency trailers of PPE to customers at no cost. UniTech continues to work with other cross-border service providers to obtain "essential service" classification at the federal level in order to mitigate any potential interruptions of service.



# 2019

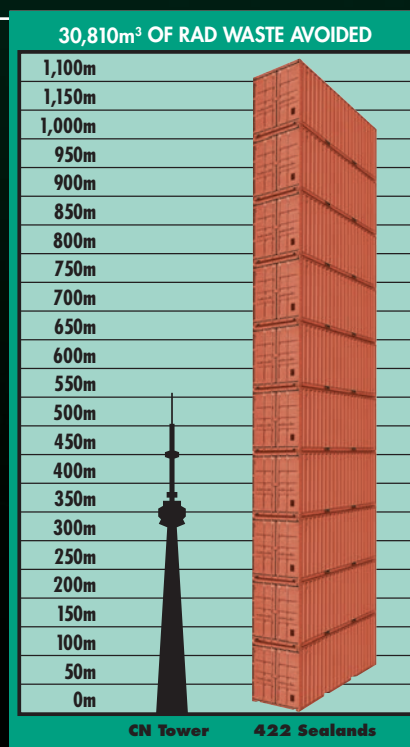
UniTech's HP&E Department upgrades the laundry classification transport procedure to classify materials for all loads exceeding "Exempt" concentration limits.

## CANADIAN RADIOACTIVE WASTE AVOIDANCE SUMMARY

In 2004 UniTech started working with OPG to implement launderable items to replace single-use clothing and bags to reduce the generation of radioactive waste. New launderable items were developed and implemented, and the use of these proven items expanded into all major Canadian projects and almost every Canadian nuclear facility. These items continue to deliver waste avoidance and cost savings. New item development is ongoing.

## PROGRAM HIGHLIGHTS ACHIEVED IN DRIVING WASTE REDUCTION:

- UniTech designed, manufactured, leased, and managed 35 custom Canadian radioactive waste avoidance items.
- UniTech's ProTech™ Anti-C's and oversuits have 3.8 million uses in Canada
- UniTech decontaminated 58.2 million waste avoidance items for Canada
- UniTech's launderable items eliminated 8 million lbs. or 30,810 m<sup>3</sup> of Canadian radioactive waste
- At 259 lbs. per m<sup>3</sup>, launderable items avoided filling 422 individual 40' sealand cargo containers with radioactive waste



"Since 2004, OPG has worked with UniTech to methodically replace significant quantities of our single use RPPE clothing with leased, launderable, RPPE. Over the last 16 years, OPG has successfully rolled out 35 UniTech custom launderable items. These products are better and less expensive than the single use items they replaced. Furthermore, they have significantly reduced our radioactive waste footprint, a key objective that OPG strives for in our waste management program. We will continue to work with UniTech to develop additional items that will further reduce our generation of radioactive waste."

Doug Cathcart  
Section Manager, Common Services –  
Waste, Spills and Transport  
Pickering Nuclear



## UNITECH INDUSTRY INVESTMENT

### RISK MANAGEMENT

All nuclear work can be negatively affected if adequately sized RPPE is not available when needed. Work stoppages and delays caused by a lack of proper RPPE is a risk that must be mitigated. Risks can include: inventory shortages due to collection and distribution problems, work force numbers and sizing, changes in plant radiological conditions, power outages or weather related events (floods, fires, tornados, and snow storms) at the processing plant, shipment delay due to weather, and driver issues or border delay. UniTech has used a multi-point risk management strategy to mitigate this risk and in 20 years we have never negatively impacted a single Canadian outage or project.



## UNITECH INDUSTRY INVESTMENT

### LICENSING, CLASSIFICATION, AND TRANSPORT

UniTech provides a complete turnkey laundry and shipment process in which UniTech manages and maintains all licensing and liability from the time a load leaves the customer site until it's returned. This includes the classification and any interface with the various regulatory agencies.



#### RISK

#### MITIGATION STRATEGY

##### Minimizing Inventory Risk

- UniTech compared and managed lease clothing sizes and use to predict future use.
- Our on-site coordinator prepared shipping documents and inventoried on hand clothing.
- UniTech maintained \$12 million of new lease clothing in our warehouses to cover any emergency.
- We staged emergency inventory at several customer sites.

##### Minimizing Service Risk

- We have multiple ISO 9001 and 14001 certified facilities available to process loads, with the ability to reroute trucks on the road.
- Our plants are wired for an emergency generator and we own a 750KW mobile generator (maintained in standby condition at all times).
- UniTech currently maintains 10 nuclear laundry licenses worldwide, backed by a 60-year positive compliance track record with CNSC, NRC, Agreement States, and European Regulators.

##### Transport Risk

- UniTech uses only modern trailers and tractors that have roadside maintenance and breakdown replacement within four hours.
- Our seasoned driver pool has over 20 million miles driven for Canada with no accidents.
- Although we are already certified by Provinces and States as an "essential service" provider, post COVID-19 UniTech will work with trade groups to establish Federal "essential service" classification.

##### Licensing

- WNSL/NSRD licensing is maintained so that UniTech can classify and export/import radioactive materials.
- ERAP is maintained to manage all transport related emergencies in Canada.
- Export license for non-proliferation is maintained and updated to support specific projects where required.

##### Classification

- We developed a proprietary laundry classification procedure.
- The alarm point takes into account non-gamma isotopes.
- UniTech Canada employees are Class-7-shipper-qualified.

##### Transport

- UniTech has established security procedures and security seal and control program.
- We supply 53' trailers that are insulated and Kevlar-lined and feature double e-track, with heat, and internal AC/DC lighting.
- We supply approved 20' and 40' IP2 containers available as needed which can be set up to be transported in tandem.
- Other specialty trailers/packages and overweight and over-height permit services available.
- We have completed 11,500 cross-border shipments (20 million miles) with no accidents and zero missed deliveries due to equipment or driver failure.

## UNITECH INDUSTRY INVESTMENT

# CLOTHING TECHNOLOGY/INVENTORY MANAGEMENT

to Support Radioactive Waste Avoidance

UniTech has been designing, manufacturing, leasing, and decontaminating clothing for over 60 years. In the last 20 years we have used the ProTech™ fabric that can be decontaminated over 100 cycles. This fabric allows for one launderable coverall to replace over 100 single-use coveralls and the associated purchasing costs. It provides better protection, less heat stress, and better fit and function to maximize value. It also generates significantly less radioactive waste disposal costs for both UniTech and our customers.

UniTech leased PPE and accessories are seamlessly managed to maximize value for customers through semi-annual inventories and periodic adjustment to match demand. Upon end of garment life, UniTech handles all disposal and related costs. Over the last 16 years, there have been more than 65 million uses of UniTech leased items in Canada.

UniTech provides clothing/bags that are durable, long lasting, and constructed for optimum decontamination. Items include:

- ProTech™ fabric is strong, provides better fit and function, featuring raglan sleeves for better upper body movement, back vents for worker cooling, and a fabric assembly that has zero thermal loading per EPRI heat stress guidelines.
- Launderable bags are made from strong fabric with seams constructed for strength and optimum decontamination and include: handles to improve movement, windows to see contents, and zippered closures to eliminate tape and secondary waste.
- Color-coding the collars of all coveralls, and rubber gloves facilitates faster worker selection.
- Our BLUES are manufactured in 8 sizes versus 54 sizes (to reduce inventory needs and reduce worker selection time) and the design includes: elastic in-pant cuffs (to prevent tripping hazards), felled seams (for strength and improved decon) and RFID chips (to track and manage the inventory until end of life at which point a free replacement is automatically provided).





## UNITECH INDUSTRY INVESTMENT

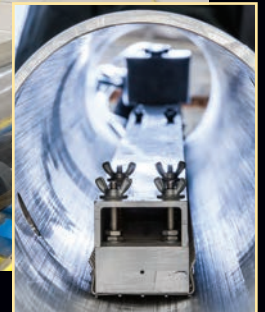
# AUTOMATED RADIOLOGICAL MONITORS

Designed, Manufactured, and Used

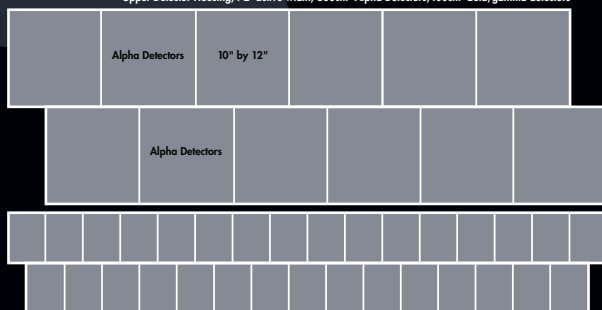
UniTech specializes in radiological monitoring designed and built in-house. Every garment must be verified to meet customer limits. Our clothing monitors are 72" wide allowing full, flat analysis versus the 36" and 48" monitors commercially available. Without the ability to monitor clothing laid out flat, the arms of a coverall must be folded over the trunk which shields the beta radiation yielding an inadequate measurement. Moreover, detector size and layout impacts the quality of measurement. UniTech's monitors have staggered rows of 100 cm<sup>2</sup> and 600cm<sup>2</sup> detectors above and below the belt, to locate both small particles and dispersed contamination, a design unique to UniTech. Our monitors have evolved to provide more specialized monitoring beyond clothing. Outlined is a small sample of monitors in use at UniTech.

### UniTech Automated Radiological Monitors:

- UniTech has: minimized "human factors" (compared to hand frisking through computer-controlled alarm points), fixed detector to surface distance (consistent geometry), computer controlled scan speeds (that ensure optimum counting statistics) and 100 percent engineered detector/item coverage (ensuring a flat efficiency across the belt width).
- UniTech automated radiation and contamination monitors ensure a cost-effective, accurate, repeatable measurement for each and every survey performed on all clothing types and materials to the maximum extent possible.



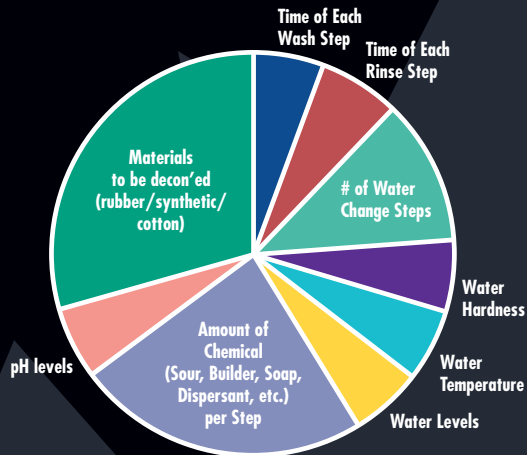
Upper Detector Housing, 72" active width, 600cm<sup>2</sup> Alpha Detectors, 100cm<sup>2</sup> beta/gamma detectors



## UNITECH INDUSTRY INVESTMENT

# PROPRIETARY DECONTAMINATION WASH FORMULAS

Protective clothing that cannot be decontaminated for reuse does not benefit the Nuclear Industry or UniTech. Residual radioactive material is present in all RPPE and daily wear. Conventional clothing wash formulas do not adequately remove this material resulting in redeposition during the wash process creating buildup that shortens garment life. UniTech R&D has developed specialized wash regimens and proprietary chemical formulations to maximize removal.



Decades of UniTech's focused development in decontamination technology in this key area has resulted in:

- The reversal of radioactive buildup on all launderable items.
- The effective decontamination of all RPPE and especially our proprietary ProTech™ fabric in order to meet customer limits and ensure long garment life.
- The generation of minimal amounts of radioactive waste.
- A calibrated "Proof of Delivery" precision injection system that is used to ensure proper chemical injection every wash cycle.



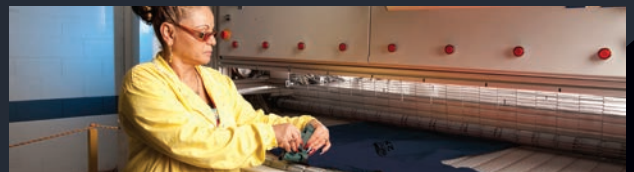
## UNITECH INDUSTRY INVESTMENT

# CLEAN DAILY WEAR

As part of UniTech's Continuous Improvement Process (CIP), we engage in original, proactive research projects and studies that provide new information and insights. Customer protocols for how RPPE and daily wear are used in the field have evolved over the years. For example, BLUES are now the primary daily wear and are worn under PPE and plastic suits. UniTech has processed 5 million BLUES from Canadian customers. Our most recent studies showed:

- All BLUES contain H-3. The nylon fiber in the FR fabric contains 24 percent moisture when dry. This moisture collects H-3 while being worn or stored in the plant. The average H-3 activity is 2pCi per coverall.
- 1.2 percent of all incoming BLUES will alarm a Small Article Monitor (SAM) prior to decontamination
- Post decontamination, BLUES will pass the Automated Laundry Monitor limit of 4,500 dpm/100 cm<sup>2</sup>, Cs-137, 95 percent confidence. However, 0.02 percent will fail in a SAM

- Radioactivity is measured on the individual coveralls as well as in the wastewater used to decontaminate the laundry. This effluent requires discharge as regulated



Recommendations:

In order to minimize: alarms at exit and/or inter-zonal monitors or SAM monitoring and ensure FR protection is not compromised, UniTech recommends the following:

- Stations that receive 100 percent monitoring should continue.
- Stations that receive statistical monitoring (4 out of 100) should shift to 100 percent monitoring.
- Coveralls going home should be minimized.
- Coveralls should not be washed at home — almost all household laundry detergents have fabric softener (an ignition source), and FR fabrics cannot be washed with non-FR fabrics (also ignition sources).



## What we've accomplished together in Canada during the last 20 years:

1. We have released 4.8 million lbs. of tools and equipment for unrestricted use or scrap metal.
2. We have decontaminated and returned for reuse 58 million waste avoidance items which included: ProTech™ Anti-C's, oversuits, gloves, booties, bags, mops, etc.
3. We have implemented 35 different launderable items to reduce radioactive waste, improve efficiency, reduce cost, and improve function, which has resulted in the elimination of 8 million lbs. of radioactive waste (or 30,810 M<sup>3</sup> of radioactive waste).
4. We have processed, decontaminated, repaired, disinfected, and returned for reuse 1.7 million plastic suits.
5. We have processed, decontaminated, monitored to release levels and returned for reuse 37 million pieces of daily wear (BLUES, scrubs, towels, and underwear).
6. We have successfully completed 11,500 cross-border laundry shipments with no delivery delays due to: weather, border incidents, accidents, equipment failure or facility power outages.



"I'VE WORKED WITH UNITECH SINCE 2001 WHEN OPG FIRST CONTACTED THEM TO HELP AS A CONTINGENCY LAUNDRY SERVICE PROVIDER, THROUGH THE LAST 10 YEARS OF FULL SERVICE, AND MOST RECENTLY THEIR TURNKEY PROGRAM FOR THE FIRST DARLINGTON REFURBISHMENT PROJECT.

UNITECH HAS ALWAYS MET OPG'S NEEDS, BROUGHT FORWARD NEW AND IMPROVED CLOTHING/SERVICE OPTIONS TO IMPROVE WORKER EFFICIENCY AND PROTECTION WHILE REDUCING THE GENERATION OF RADIOACTIVE WASTE AND OVERALL PROGRAM COST SO OPG CAN FOCUS ON MAKING POWER."

Bill Owens, OPG, Senior Vice President, Refurbishment Execution

"SINCE 2002, UNITECH HAS ALWAYS DELIVERED RELIABLE, ON-TIME AND COST-EFFECTIVE SERVICES THAT HAS ALLOWED BRUCE POWER AND OUR VENDORS TO FOCUS ON OUR CORE BUSINESS OF PRODUCING POWER AND COMPLETING MAJOR PROJECTS."

Jennifer Edey, Vice-President, Site Services, Bruce Power

**UniTech has been decontaminating Canadian protective clothing and materials for 20 years. During this period, we have:**

- Provided all requested services on time and on budget.
- Provided customers the option for UniTech to be responsible (via a custom laundry management program) that includes: managing all licensing, classification, manifesting, and border management services from the time materials leave the customer site until they are returned.
- Developed, manufactured, and used advanced radiation monitoring equipment to survey laundry, tools, and equipment with "human factors" reduced or eliminated while ensuring 100 percent of each item is surveyed per our approved ISO 9001 procedures.
- Developed products and services that improve worker efficiency, reduce cost, and reduce the generation of radioactive waste.
- We have developed custom lease programs that: eliminate clothing capital investment, allow quantity and sizing adjustments without cost and eliminate the generation of RPPE related customer radioactive waste.

Moving forward to strengthen our Canadian business partnerships, UniTech continues to seek new strategies to create economic benefits for the local economies while generating continuous improvements in efficiency for our customers, including:

- Continuous R&D developing new cost-saving programs and products.
- Increased investment in facilities and equipment (including a physical processing plant in Canada).
- Potentially landing a UniTech facility in Canada.
- Establishing relationships with indigenous community stakeholders.

We have delivered for 20 years! Thank you for your business. It has been our pleasure to support your needs. How may we be of further service?

Kent D. Anderson  
Director, Canadian Operations  
UniTech Services Group, Inc.

Michael J. Bovino  
President  
UniTech & UniClean Divisions  
UniFirst Corporation

Steven S. Sintros  
President & Chief Executive Officer  
UniFirst Corporation



WWW.UNITECHCDN.COM  
(800) 344-3824 EXT. 166  
Info@UniTechCDN.com