# SpaceVac & Textiles An Introduction





SpaceVac International - The World's Leading High Level Cleaning System



The textiles industry - from production to large scale laundries - present a range of challenges for cleaners and facilities managers.

During the processes carried out in these facilities, dust and lint can disperse and settle both above and below the eyeline.

This creates a number of risks for all involved - not least innumerable health issues caused by the the small dust particles in these raw materials which can also be endotoxins and thus harmful if ingested into the lungs.

In addition, the lint and dust particles themselves are actually potentially explosive - meaning that left unchecked, this combustible dust can build up throughout the facility and potentially ignite; causing catastrophic loss of life and property.

SpaceVac International and our market leading ATEX approved highlevel cleaning system, provides cleaners, Facilities Managers and building owners with a safe, fast and cost-efficient way to remove these hazards from the environments with none of the risks associalted with traditional cleaning methods.



Those working in the textile and laundry Industries and their ancillary functions can experience health problems due to breathing in various dusts, fibres or fumes.

These hazardous materials include chlorine, hupochlorite, ammonia. sulphur dioxide and filter powder etc in laundries and dry-cleaners laundry contaminated with asbestos textile process dust, eg cotton and wool reactive dues, particularly without proper ventilation, for example when mixing or preparing dyes

#### What are the risks?

Textile workers can be at risk of occupational asthma and respiratory irritation from exposure to process dust. Laundry workers can be at risk of respiratory irritation from breathing fumes such as chlorine, hypochlorite, ammonia and sulphur dioxide.

#### How to control the Risks...

Risks to health can be greatly reduced where exposure to fumes, dusts and airborne chemicals is controlled.

Where powder materials are being handled, care should be taken to ensure that people are not exposed to excessive levels of dust and appropriate respiratory protection should be provided and worn.

Up-to-date COSHH assessments. control to within Workplace Exposure Limits (WELs) and simple health surveillance are priorities where dust is a hazard.

For the wool industries typically dusty operations include opening, blending, carding, and backwinding.

For cotton, control measures are likely to be required for most early processes including raw material handling, opening, carding, drawing, combing, beaming, ring spinning, and high speed winding.

Legislation in place states that cleaning should be done using something like a vacuum cleaner, not a broom or brush or compressed air which will only disperse the material over a wider area than actually remove the material from the environment

Byssinosis - an illness associated with exposure to cotton dust with both acute and, in some cases. long-term effects. The numbers of compensated cases have been in single figures for more than the last decade (Table IIDBo5). The number of death certificates per year with byssinosis recorded as the underlying cause of death has been also low in the last decade: typically, there have been fewer than five deaths and in 2009 there were 2 deaths



## SpaceVac Vs Traditional Methods

SpaceVac's innovative line of highlevel cleaning systems present the perfect tool for cleaning these hazardous materials found within the textiles and laundries sectors; providing a number of clear advantages over traditional cleaning methods.

The legislation surrounding these hazardous materials states that materials should be vacuumed rather than cleared using compressed air or other methods - however a vacuum alone will not clear everything.

By creating a system that allows for the vacuuming of high-level areas from the safety of the ground floor, SpaceVac is able to create a number of operational opportunities;

To begin with, by moving all cleaning back to the ground floor, all of the inherent risks associated with working at height are all completely removed.

In addition the ability to clean from the floor means that cleans are able to be completed without any additional access equipment such as scaffolding or hydraulic platforms. By removing the need for these items, cleaning with SpaceVac is not only substantially cheaper per clean but also significantly faster as users don't have to keep moving platforms every few metres of cleaning.

This not only makes cleaning cheaper but also enables facilities to minimise disruption and operational downtime.

#### The Only Bright Spark Allowed

As noted previously, the dust and particles dispersed in these facilities is potentially combustible, meaning that specialist cleaning equipment has to be used in these areas.

Our ATEX cleaning system was the first high-level cleaning system of its kind, anywhere in the world, to be certified as safe for use in these specialist environments.

By creating a fully conductive, all carbon version of our cleaning system, users can easily put SpaceVac to work, safe in the knowledge the system is the safest on the market.



## SpaceVac ATEX:

### A World Leader in High-Level Cleaning

When creating our ATEX highlevel cleaning system, our team of engineers went back to the drawing board in creating a brand new iteration of our innovative technology.

To be certified as safe for use within specialist explosive atmospheres, a new set of cleaning poles were created that utilised a 100% carbon composite that offered total conductivity. Poles were created in 38mm and 50mm variants - with a full 5k ULTRA model also developed before fitting with our unique safety locking mechanism.

This unique development not only offers greater operator safety - by ensuring the system doesn't separate during operation - but also ensures that no gaps can form in the system over which static can jump and potentially ignite.

By offering a variety of ATEX pole systems - from our entry level LITE systems through to our zom ULTRA range, we have been able to create a range of systems that meet not only a number of

operational environments but also serve different price points in the market as well; from entry level or occasional users right through to power users working at elevated heights or cleaning extreme heavy duty materials.

In addition to the a brand new range of cleaning poles, our team of engineers went to work create a brand new line of Anti-static and Atex certified cleaning heads, tools, brushes and accessories.

All of these add-ons feature the same unique safety locking mechanism as found on the cleaning poles, and can all interconnect to create custom heads - enabing operators to work over or around difficult obstacles.

The system is completed with a full anti-static hose kit - including a no slip cuff that ensures the poles and hose stay connected at all times - to provide a completely safe, end to end cleaing solution to be deployed with an appropriately rated ATEX vacuum (which can be supplied on request including our own line of SpaceVac branded ATEX vacuums!)



### Talk to us about our ATEX System today!

Book a demo on your premises at the website spacevacinternational.com

## Case Study:

### Darra (Australia)

Our range of cleaning systems proved to be a popular choice for the team onsite at Darra in Australia who have quickly seen the benefits of introducing SpaceVac on their premises.

Recognising the imperative to keep the production facility free of LINT, the management at Darra undertook a program of upgrades onsite. This took the form of the installation of 14 Lint blow-down fans, which worked to keep lint and dust blowing down from higher levels.

While this helped to keep upper levels free of the material, the remainder of the plant still had to be completely cleaned on a twice-yearly basis by a specialist cleaning contractor who still had to come and remove the built up lint.

All of this presented a number of problems for the team onsite including the health and safety risks outlined elsewhere in this document . In addition the methodology was proving to be extremely expensive - with the 14 fans installed totalling nearly \$50,000 worth of investment

onsite. Further the twice yearly cleans were adding nearly another \$30,000 per year in cleaning fees as well as drastically affecting production at peak times through the year.

The simple addition of SpaceVac onsite made a number of huge differences to the team.

Firstly the general cleanliness standards onsite improved dramatically with all materials now being removed on a regular basis rather than sitting for prolonged periods of time - thus improving the health of workers and reducing the risk of explosion.

In addition, the system meant that the plant no longer needed to utilise the expensive fans full time - meaning no more maintenance or power costs either.

The system paid for itself onsite within a matter of weeks and is now being rolled out to other production facilities across Australia





## Find Out More:

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