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Stops contamination in its tracks



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ISO 9001:2000

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Distributed by:

High Performance  
Contamination Control Zones

www.dycem.com



Dycem CleanZone Blue covers the whole changing area at electronics giant Philips.

## Dycem

Dycem has been manufacturing High Performance Contamination Control Zones since 1966. Our headquarters are in Bristol, England and Warwick, Rhode Island, USA.

Dycem's High Performance Contamination Control Zones are easy to use and provide a simple, long lasting and highly effective method of minimising foot and wheel borne contamination.

Use Dycem wherever contamination is a concern, e.g entrance and exit ways to critical areas, changing rooms, transfer hatches, corridors and airlocks.

Our diverse market place includes: Pharmaceutical, Aerospace, Semi Conductor, Disc Drive, Bio Medical, Research Labs, Hospitals, Medical Device, Fibre Optic, Computer Rooms, Optical, Automotive, Printing, Biotech, Microelectronics, Packaging and Food.

Our blue chip user base of thousands includes companies such as Sony, Glaxo SmithKline, Lilly, Johnson and Johnson, Motorola, Roche, IBM, Pfizer and Texas Instruments.

We have a wide range of product options, including loose laid mats, fixed mats and bespoke floor coverings to suit your individual needs and a comprehensive sales, service and distribution network covering more than 50 countries.

## Contamination Control you can trust

Dycem High Performance Contamination Control Zones deliver an outstanding, highly reliable and proven performance. With Dycem you get the reassurance of lower particle and microbial counts resulting in improved operational efficiency.

Dycem is internationally recognised under the ISO 9001:2000 standard. That's why we are confident of offering you genuine assistance on the products most suited to your facilities.

### The benefits of choosing Dycem:

- Prevents over 99% of viable and non viable contamination from entering your critical area.
- Reduced floor and air particle/microbial counts.
- Improved yield, cost savings and profitability.
- Reduced risk of high product rejection rates.
- Dycem products provide a clearly visible barrier zone - highlighting to personnel that they are about to enter a critical area.
- Dycem products cannot be bypassed and require no overt action.
- Highly cost effective solutions.
- All Dycem products contain a high performance anti-microbial.
- No Silicon, latex or DOP outgassing.
- Full warranty.
- 3-5 year life-cycle.
- Environmentally friendly products.
- Easy to clean & maintain.
- Reduced critical area cleaning costs.
- Cleaner shoes and wheels give improved ESD contact.
- Global customer support.
- Improved quality of working life due to reduced allergens in the atmosphere.

"Independent tests carried out at GlaxoSmithKline prove that Dycem High Performance Contamination Control Zones prevent over 99% of all viable and non-viable foot and wheel borne contamination from entering a critical area."

Dr Caroline Clibbon, Senior Microbiologist, GlaxoSmithKline, UK



# Contamination

Clean conditions are needed to prevent contamination from getting into critical products or processes. Contamination can result in rejected goods, manufacturing downtime and loss of consumer confidence. The negative impact on product yields, reworking and operational effectiveness is significant and the effect on profitability can be considerable.

Contamination can be viable or non-viable, and be known by a variety of different terms depending on the industry, such as; particles, pathogens, allergens, micro-organisms, airborne molecular contaminants (AMC's) and bacteria.

Microbial contamination has serious consequences for life sciences. One microbe included in a batch of aseptic drugs can threaten the whole batch being quarantined or even scrapped.

Equally, viable contaminants in hospital operating theatres, ITU's and recovery areas can have a significant effect on the risk of Hospital Acquired Infections (HAI's).

All Dycem High Performance Contamination Control Zones incorporate Biomaster™ protection. This highly effective anti-microbial has been proven to inhibit the growth of over 50 organisms including Salmonella, E.coli, Listeria, Campilobacter, Pseudomonas, A.Niger (black spot mould growth), Algae and MRSA. For further details please visit [www.dycem-cc.com/tpapers](http://www.dycem-cc.com/tpapers).



“We installed Dycem High Performance Contamination Control Zones 12 months ago as part of our ongoing programme to control contamination. It was so effective at removing contamination from both feet and wheels that we decided to increase the number of Dycem areas as we built our additional cleanrooms and moved towards more controlled warehouse environments.”

Suzanne Stubbs, Technical Manager, Shield Medicare.

## Dycem Controls Contamination

Dycem dramatically reduces the risk of contamination getting into your products and processes.

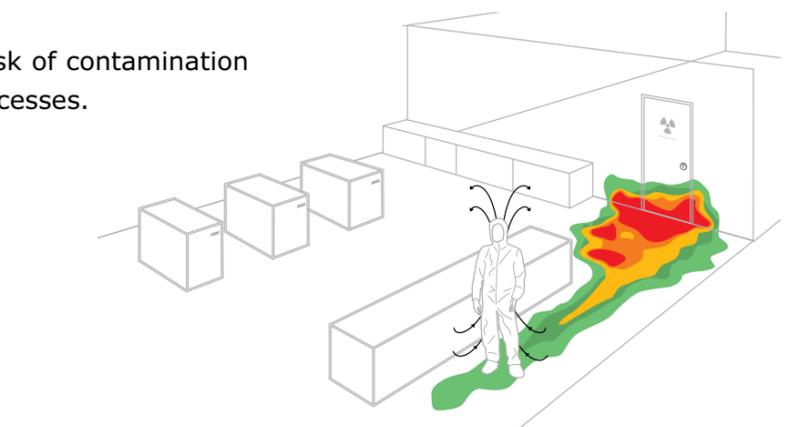
### Prevention

80% of contamination entering your critical environment does so on feet or wheels. (Source: 3M).

Using Dycem's High Performance Contamination Control Zones prior to all entrances to critical areas will prevent over 99% of foot and wheel borne contaminants from ever entering the critical area. (Source: Dr C. Clibbon, GSK).

### Airborne Contaminants

The effectiveness of your critical environment is threatened by the continuous movement of contaminants. Once turbulence stops, airborne contaminants fall due to gravity and/or airflow. If they fall onto an unprotected floor they are free to rise as a result of vortices created by the movement of personnel and wheeled traffic.

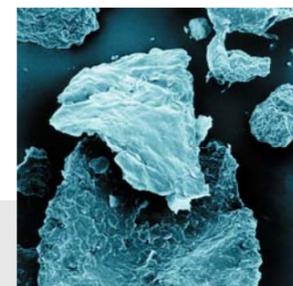


Using Dycem inside the critical area adjacent to products and processes dramatically reduces airborne contaminants by up to 60%. (Source: L. Ranta, Mcon Labs).

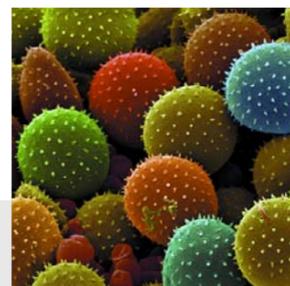
- high level contamination
- medium level contamination
- low level contamination

### Cross Contamination and Potent Compounds

Extensive areas of Dycem's High Performance Contamination Control Zones eliminate the risk of cross contamination by trapping foot, wheel and air borne contamination on their surface.



Scanning electron microscope image of human skin scales. [Mag x 160]



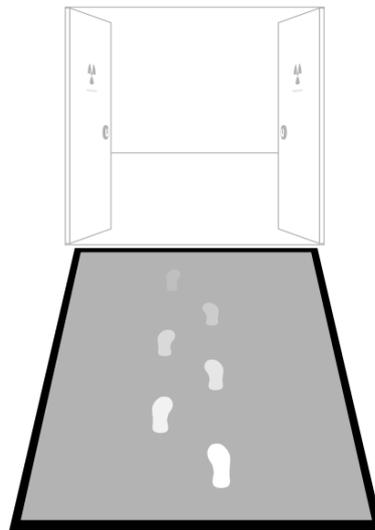
Scanning electron microscope image of fungal spores. [Mag x 500]



Scanning electron microscope image of common dust. [Mag x 205]

# How Dycem Works

Dycem's High Performance Contamination Control Zones combine a unique polymeric compound with advanced processing technology. This combination creates Dycem's 4 S's - Size, Suppleness, Smoothness and Service, which deliver the most effective contamination control solution on the market.



## Size

Contamination on feet and wheels come in multiple layers and varying sizes, requiring multiple steps for complete decontamination.

Effective decontamination needs at least six footfalls, three for each foot, or three full wheel rotations.

Dycem High Performance Contamination Control Zones are sized to allow for full decontamination whatever the traffic flow.

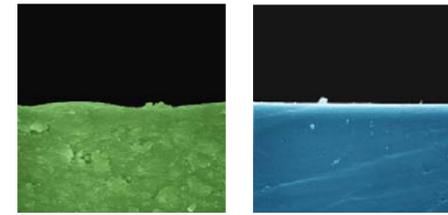
## Suppleness

Dycem's soft, supple surface conforms to the shoe or wheel allowing contact with smaller particles that would otherwise be bridged by larger particles.

This also allows a dense packing of particles so the surface remains effective even after continuous overstrikes in the same area.

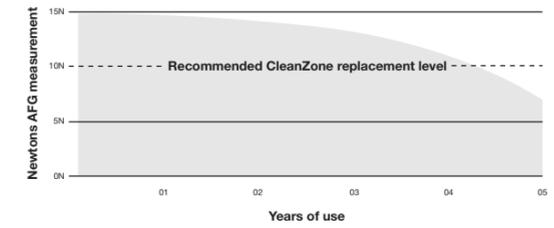


Dycem's supple surface allows contact with all particle sizes.



Proprietary clean room flooring (Scanning electronic microscope image).

Dycem polymeric floor covering (Scanning electronic microscope image).



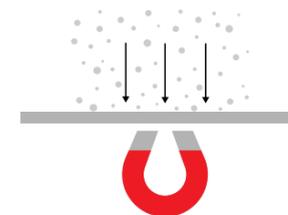
As part of our customer support we continuously monitor the effectiveness of Dycem High Performance Contamination Control Zones throughout their life-cycle.

## Smoothness

Dycem's exceptionally smooth surface creates a natural tack and a high degree of short-range electromagnetic forces (Van der Waals).

This enables it to attract, collect and retain over 99% of particles, ranging from over 100 microns to less than 0.2 microns.

This contamination is held on the surface until cleaned off.



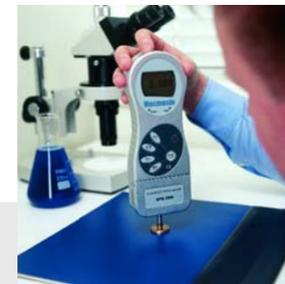
Short-range electromagnetic forces (Van der Waals) enable Dycem to attract, collect and retain over 99% of particles.

## Service

Dycem offers total customer support. Friendly advice and assistance is always available to help you choose the most effective products for your requirements.

We regularly carry out particle collection efficiency tests using our advanced force gauge. The results are plotted on the graph above so we can trace the effectiveness of Dycem High Performance Contamination Control Zones throughout their life-cycle.

Dycem can provide a complete service option allowing you to have total piece of mind.



Technical engineer testing the performance of Dycem.

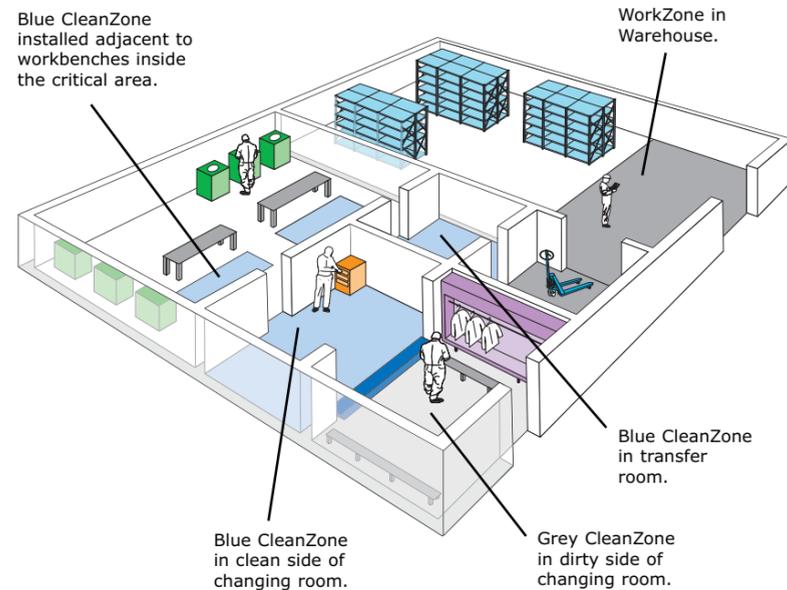


Dycem's highly responsive customer service.

## Where to use

Dycem's comprehensive range of High Performance Contamination Control Zones reduce particulate counts in all your critical areas:

- All entrances to critical areas to prevent ingress of contamination.
- All exits to prevent contamination leaving the critical area.
- In corridors to prevent cross contamination.
- Inside the critical area adjacent to critical products and processes.
- Inside airlocks, gowning rooms, warehouses and product transfer rooms to control contamination.



### Choosing the right size

It is important to choose the right sized Zone, as size optimises both performance and life cycle. There are several factors to consider including:

- Level of contaminants.
- Number of operators and carts.
- How often wet cleaning takes place.
- Physical size available.

Tip: Study the traffic flow during a shift changeover, the busiest time and remember a minimum of 3 footsteps of both feet are needed for optimum decontamination.



Dycem Protectamats control light foot borne contamination in a pharmaceutical manufacturing facility.



Dycem WorkZone controls contamination from heavy wheeled traffic at the Janssen Facilities.



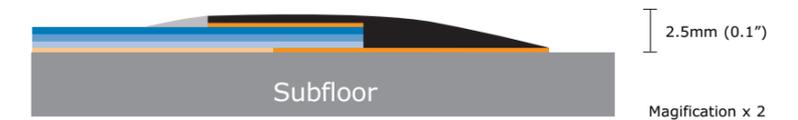
Dycem CleanZone covers the whole changing area at electronics giant Philips.

## Easy to install, easy to clean

Dycem High Performance Contamination Control Zones are available in a wide range of product options to suit your individual facility. We have a range of loose laid mats, fixed mats and bespoke floor coverings.

Once installed, the Zone is a totally sealed system. This means no moisture, contamination or bacteria can get underneath. The thin but strong, low profile Floor Covering is easy for carts and all traffic to negotiate.

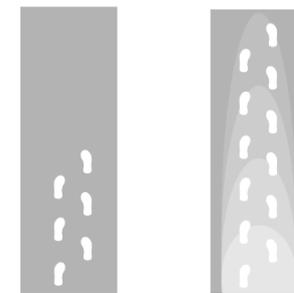
- Cold Weld
- Edging Strip
- Top coat
- Mid coat
- Base coat with polyester fabric
- Double sided adhesive tape
- Waterproof double sided adhesive tape



### Active working system

Dycem High Performance Contamination Control Zones are active working products designed to collect dirt, particulates and bacteria.

Between cleaning Dycem can look dirty. This is good news - otherwise all these particles and microbes would be in your critical areas with the risk of contaminating your products and processes.



Right sized mat for traffic level

The size of the mat needs to be a little bigger or the wet cleaning frequency will need to be increased.

### Cleaning

Cleaning your Dycem High Performance Contamination Control Zone is a very quick and easy process. Simply clean as part of your regular wet cleaning schedule.

Just agitate the contamination on the surface with a damp mop and squeegee dry. This physically removes the dirt and water residue leaving your Mat or Floor Covering immediately ready for further use.



Dycem loose-laid mats are easy to install, simply take out of the box and unroll.



Dycem is easy to clean, simply incorporate as part of your regular wet cleaning schedule.

## A Service you can trust



Dycem is always at the forefront of technology, providing you with the highest quality products and expert advice.

With Dycem High Performance Contamination Control Zones in place you can relax in the knowledge that the threat of contamination is greatly reduced. Dycem is internationally recognised under the ISO 9001: 2000 standard, assuring you of top quality products and services, continuity of supply and support.

### The Dycem total service includes:

- Specialist advice - please contact us so we can assist on the right products for your facilities.
- Dycem staff can install all High Performance Contamination Control Zones.
- Training for your cleaners.
- Annual Particle Collection Efficiency Tests (PCET), with report.
- Deep cleaning to rejuvenate particle collection efficiency.
- Full warranty.
- Highly responsive telephone customer service.
- Global customer support.



"Dycem High Performance Contamination Control Zones have certainly reduced our particulate levels as well as reducing our cleaning costs. We have been very happy with the results and the continued customer care that we have experienced from the Dycem team."

Monsieur Claude W. Muller, expert trainer in 'techniques aseptiques' speaking on behalf of Lilly France.

Please contact us for specialist advice on the right option for your facility:

UK: + 44 (0)117 955 9921 or email: [uk@dycem.com](mailto:uk@dycem.com)

USA: 1-800 458 0060 or email: [info@dycemusa.com](mailto:info@dycemusa.com)