# Deep Cleaning & Disinfection Services

## Datacentre HealthCare Services

### Prevention is Cheaper than Cure

# Who We Are?

**DNC Saudi Arabia** is part of DNC group which was established in the United States of America since 1990 with objective of offering Building Services Engineering for the Residential & Commercial  Buildings, Critical Facilities , Healthcare Facilities with unique capabilities to provide Best in Class Customer Service.

**DNC** is a Specialized service company which offers the Design, Installation and Maintenance services of the Electrical and Mechanical Systems in addition to the Deep Cleaning and Generators services. We continually innovate and improve our business processes to maximize value for our Customers and to improve our company performance. We achieve this through **Safety Excellence, Empowerment of our People, Effective Teamwork, Development of our Partners and Dedicated Customer Focus.**

With our decades of experience, we know how to take a holistic view of the services which we offer especially as it concerns Energy Efficiency and Sustainability. We operate throughout our two offices in Saudi Arabia and United States of America .This has helped us to build an International Experience and Expertise to better serve our Clients and offer the Best and Most Professional Services.

# Our Commitment , Mission, Vision and Purpose

## Commitment

Our Dedicated Team of Professional are always willing to serve our Clients and provide them with Best Services to build Sustainable and Efficient Infrastructure which will serve their Critical Facilities.

## Mission

We strive to provide our Customers services and products that are safe, of High Quality and optimum value to their business

## Vision

To be the first and clear choice in the industry sectors through engaged professional people.

## Purpose

To take care of the people, spaces and places that are important to our clients

# What Services Do We Offer?

**DNC Datacentre Healthcare Services** consists of **Deep Cleaning** and **Disinfection** of the Critical Environment Space and Non-Critical Area of the Datacentre Facility to maximize the Site Availability and maintain the Business Continuity.

This intensive technical cleaning addresses every area of the Critical Facility in accordance with the cleanliness class levels defined by **ISO standards.**

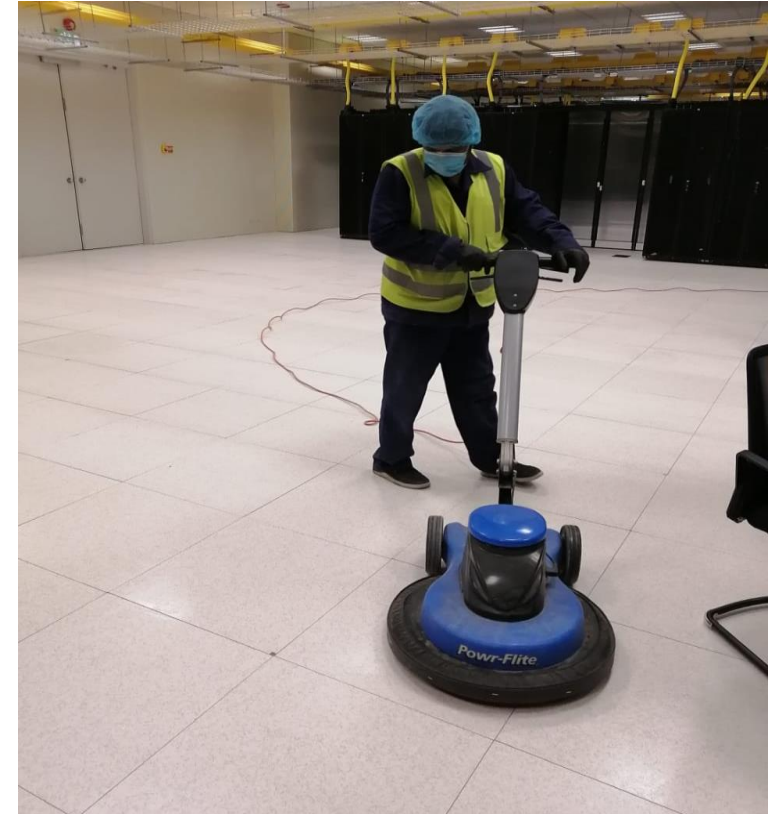We can offer the following services:

- **Deep Cleaning** of Critical Environment Space
- **Deep Cleaning** of Infrastructure Equipment
- **Deep Cleaning** of the Cabinet External Area.
- **Disinfection** of the Critical Facility.
- **ISO Site Cleanliness Level Certification**

# Why Deep Cleaning is Important?

Deep Cleaning is an intensive technical cleaning designed to maintain a clean environment in Critical Facility space. This type of cleaning is vital for the facility **Availability and Uptime**:

- Thorough cleaning will keep the critical environment space free from harmful dust and contaminants, which can lead to **Overheating, Corrosion Damage, Electrical and Mechanical Failure** of IT equipment which can cause an unexpected business downtime.

- **Deep Cleaning** addresses every area within Critical Facility from the **Floor Surface** up to **Ceiling Voids**, above and under **Raised Floor, Walls, Doors, Ledges, Cabinets, IT equipment, Infrastructure equipment**…etc.

- **ISO 14644-1:2015 Class7 or Class8** Standard defines the minimum cleaning requirements for a Mission Critical environment. It specifies the maximum allowable air particles concentration in a critical space.

# Why Disinfection is Important?

**Disinfection** refers to specific measures taken to control, deactivate or kill infectious agents, such as viruses and bacteria. **Disinfection** is normally undertaken on an infrequent basis, during periodic maintenance checks or after a public health event such as **Covid19** which caused a worldwide pandemic.

It is likely that the virus can be introduced and that there can be contamination in the Datacentre facility . The most likely vector for transmission is infected individuals who do not know they are infected.

**Cleaning and Sanitizing** after such a health emergency are important to help prevent the spread of illness and disease.

**Disinfection** will not be effective in the presence of dirt therefore it has to take place immediately after **Deep Cleaning** process to kill germs on surfaces and eliminate any risk of spreading infection.
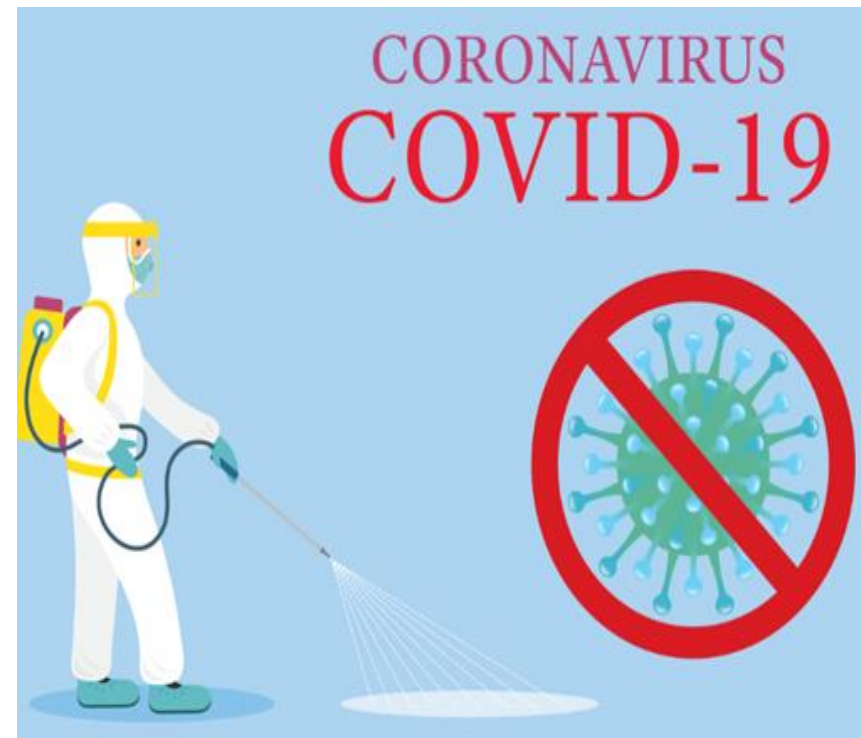
# Service Details

Prior to start the cleaning process, DNC will perform a **Site Survey** to identify the **Critical and non-Critical areas** which require cleaning, the fire alarm detection system, emergency power off switches and fire suppression system.

We must ensure that the Fire Detection and Suppression Systems are deactivated prior to start the cleaning process.

Upon completing the site survey, DNC team will submit a **Risk Assessment Report** to the client which identify the **Potential Risks** and **Mitigation Plan** which be taken by both the Client and DNC to prepare the site for the cleaning process.

# Floor Void

The **Deep Cleaning** of the floor void consists of the following procedures:

- Install all the signage and barriers to ensure the **Health and Safety** of all site personnel.
- Remove the **Heavy Contamination** from the floor.
- Lifting the raised floor tiles and check for the presence of **Zink Whiskers**.
- Vacuum the subfloor using the **HEPA Type Vacuum**.
- Vacuum all the cables, cable trays.
- Clean the pedestals and raised floor tiles.
- Remove the **Zink Whiskers** (if present).

# Ceiling Void

The **Deep Cleaning** of the ceiling void consists of the following procedures:

- Install all the signage and barriers to ensure the **Health and Safety** of all site personnel.

- Safely install ladders to reach the **Ceiling.**

- Vacuum the area above the **False Ceiling** using the **HEPA Type Vacuum**.

- Vacuum and clean the **Overhead Cable Trays, Lighting Units, Diffusers** using the **HEPA Type Vacuum**.

- Vacuum and clean the top of the Cabinets and **Containment** ceiling using the **HEPA Type Vacuum**.

# External Cabinet Cleaning

The **External Rack** cleaning consists of the following activities:

- Clean and vacuum all the surface areas surrounding the cabinets from the top to the bottom using **HEPA Type Vacuum.**
- Clean all the doors and perforation holes using a special and safe cleaning solution using **HEPA Type Vacuum.**
- Vacuum the inlet of the IT equipment to remove all the dust and debris.

The **Infrastructure Equipment** cleaning consists of the following activities:

- Clean and vacuum the **Air Handling Unit**

- Clean and vacuum any **Infrastructure Equipment which are placed** in the whitespace .

# Disinfecting the Critical Environment Space

The general surface cleaning and disinfection consists of the following activities:

- **Disinfect** all **Doors** and **Windows** of the **Technical Rooms (Electrical, Mechanical. Etc).**
- **Disinfect** the **High-touch Surfaces** in the **Whitespace** such as Rack door handles.
- **Disinfect** the **Control Room**, **Meeting Room**…etc.
- **Wipe** all Doorknobs, Handles, Handrails, Security Locks, Buttons , Intercom Systems, Escalators Buttons and Switch Boxes.
- **Disinfect** the **Offices** and **Non-Critical Spaces** using a **Spray** and **Fogging System**.
- **Place Hand Sanitizer and Disinfectant Wipes** with disposal units throughout the entire facility, as well as signs to remind staff and visitors to use them frequently.
- **Train the Housekeeping Team** on how to maintain strict Cleaning Measures after the disinfection.

# Deep Cleaning Certification :
# ISO 14644-1:2015

**ISO 14644-1:2015** specifies the **Classification of Air Cleanliness** in terms of concentration of airborne particles in **Cleanrooms and Clean Zones**; and separative devices as defined in **ISO 14644-7.**

Only particle populations having cumulative distributions based on threshold (lower limit) particle sizes ranging from **0,1 μm to 5 μm** are considered for classification purposes.

The use of light scattering (discrete) airborne particle counters (LSAPC) is the basis for determination of the concentration of airborne particles, equal to and greater than the specified sizes, at designated sampling locations.



**CERTIFICATE OF CONFORMITY**

Day And Night
Company
Speolfioation Aohleved
**ISO 14644-1 2015 Class 7**
Plus all accessible surfaces free from dust.

| Specification Required: | Class 8 or better | |
|---|---|---|
| Date: | 04/06/2020 | This certifioate is valid for 1 year |
| Time: | 12:41 | |
| Tester: | Nafees Ahmed | |
| Test Instrument: | xxxx | |
| Area tested: | 27 | |
| Number of tests locations: | Random Spaces across the room | |
| Sample protocol: | 0.01 m³ | |
| Sample volume: | 21s | |
| Sample time: | Non Directional | |
| Air flow: | Operational | |
| Occupancy state: | 0.5μm, 1.0μm, 5.0μm | |
| Particle sizes tested: | | |

**TEST RESULTS**

| Particle Size | particles/m³ | | CLASS 7 | | CLASS 8 |
|---|---|---|---|---|---|
| 0.5 mioron | 130,000 | PASS | 352,000 | PASS | 3,520,000 |
| 1.0 mioron | 32,500 | PASS | 83,220 | PASS | 832,200 |
| 5.0 mioron | 1,917 | PASS | 2,930 | PASS | 29,300 |

TEL: +966 11 4716 730  EMAIL: nafees@dayandnightco.com  WEB: www.dayandnightco.com
Ibn Al Amid As Sulay P.O.Box 63160 Riyadh 11516

# COVID19 - Uptime Institute Advisory Cleaning and Sanitization Recommendations

The **Uptime Institute** has released a new report on **Covid19** with list of recommendations on how to minimise the critical facility risks .

They highly recommend operators to :

- Use spray disinfection or fogging techniques where possible- these are more effective than simply wiping surfaces with disinfectant solutions, as the antiseptic mist coats surfaces for a longer period. Consult your cleaning contractor and equipment vendors to determine acceptable sanitizing systems for specific areas of the Datacentre.

- Research and adopt methods of deep cleaning a white space environment, considering the specifics of your facility (e.g., air exchange rate/volume, raised floors). Increase the frequency of both the standard cleaning operations (i.e., public spaces, equipment cabinet exteriors, etc.) and deep cleaning (full wipe down of all equipment, cleaning under raised floor and above suspended ceilings, disinfectant fogging, etc.).



UptimeInstitute®
INTELLIGENCE

RISK &
RESILIENCY

UI Intelligence report 37

**COVID-19: Minimizing critical facility risk**

Authors
Uptime Institute Intelligence team

This advisory report has been produced by Uptime Institute, with the assistance of its clients and members, to help operators of critical infrastructure facilities prepare for, and respond to, the impact of the novel coronavirus that causes COVID-19. The steps discussed in this report will also help operators develop strategies and procedures for future epidemics.

# COVID19 - Uptime Institute Advisory Cleaning and Sanitization Recommendations

- Consult specialist cleaning firms, design/engineering consultants and/or equipment manufacturers as appropriate

- Begin outreach to identify specialty cleaning vendors for technical space/equipment areas (White space, Data halls) for two scenarios:

  - **Precautionary:** Cleaning personnel uses specialty CDC-approved cleaners and cloths. All materials used in the cleaning are removed from the facility and disposed of as a bio-hazard once cleaning is complete.

  - **Confirmed COVID-19 case at the site:** Cleaning personnel uses bio-hazard suits, gloves, shoe coverings, etc. All are bagged and removed from the site once cleaning is complete.

Uptime Institute® INTELLIGENCE

RISK & RESILIENCY

UI Intelligence report 37

# COVID-19: Minimizing critical facility risk

Authors
Uptime Institute Intelligence team

This advisory report has been produced by Uptime Institute, with the assistance of its clients and members, to help operators of critical infrastructure facilities prepare for, and respond to, the impact of the novel coronavirus that causes COVID-19. The steps discussed in this report will also help operators develop strategies and procedures for future epidemics.

# Our Offices

**KSA Office**

Ibn Al Amid As Sulay

Riyadh  - Kingdom of Saudi Arabia

Telephone : +966 11 4716730

**Head office (New York)**

61 Eleanor Place, Staten Island, NY,

United States of America.

**For any inquiry , please call us on :  050 1255 015**

**or Email us on  : info@dayandnightco.com**