Cleanroom Safety Infographic

ANATOMY OF A CLEANROOM SUIT

Hood

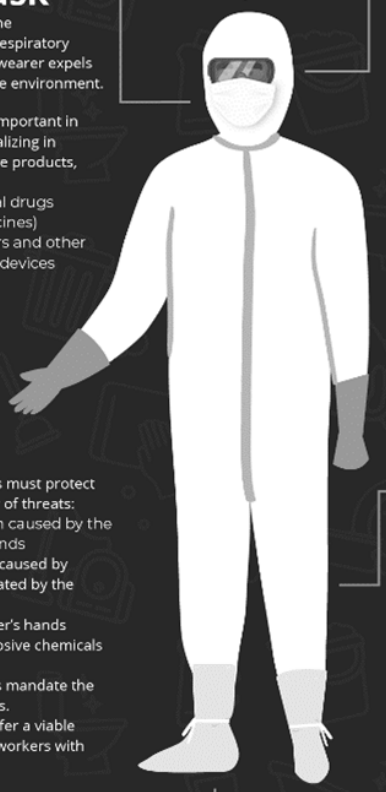
- Hoods are required for cleanrooms where full-body apparel is needed.
  - A well-designed and properly secured hood prevents particles generated by bodily movement from entering the cleanroom.
- Hoods are often mandated in ISO Class 3, 4, 5, 6 and 7 cleanrooms.

Face Mask

- Masks minimize the concentration of respiratory particles that the wearer expels into the immediate environment.
- This is especially important in cleanrooms specializing in extremely sensitive products, such as:
  - Pharmaceutical drugs (including vaccines)
  - Microprocessors and other tiny electronic devices

Goggles

- They primarily serve to prevent eyebrow hairs, skin cells and other contaminants from falling into product or onto sensitive surfaces.
- These are also intended to protect the wearer's eyes from chemicals and other hazards.
- Goggles specially made for cleanroom use typically come with a number of features to accommodate these environments:
  - Anti-fog lenses
  - Anti-linting straps
- Reusable goggles are designed to withstand repeated sterilization cycles without degradation of functionality.
- Goggles are often required in ISO Class 3, 4, 5 and 6 cleanrooms.



Gloves

- Cleanroom gloves must protect against a number of threats:
  - Contamination caused by the use of bare hands
  - Contamination caused by particles generated by the glove itself
  - Injury to the user's hands caused by corrosive chemicals
- Many cleanrooms mandate the use of latex gloves.
  - Nitrile gloves offer a viable alternative for workers with latex allergies.

Frock or Coverall

- Forming the largest component of the standard cleanroom uniform, frocks and coveralls cover the torso and lower body.
  - Frocks are generally used in less restrictive cleanrooms.
  - Coveralls, which have less air permeability, are generally for more restrictive cleanrooms.
- These are also intended to protect the wearer's eyes from chemicals and other hazards.
- This apparel should include cleanroom-friendly features such as:
  - Electrostatic discharge (ESD) protection
  - Anti-linting fabric
  - Flame and arc flash resistance
  - Comfort—to reduce perspiration that can enter the atmosphere

Boots

- In addition to providing comfort, cleanroom boots provide several important benefits.
  - Properly fitted boots prevent particulate matter from escaping into the immediate environment.
  - Ankle straps ensure a tight fit.
- Several sole options are available, including:
  - Molded soles - These are flat and comfortable to wear.
  - Hypalon soles - These are made from chemical-resistant non-skid material with a polyester substrate and anti-static coating.
- Alternatively, some cleanrooms use shoe covers that can be worn over normal footwear.
  - Shoe covers can sharply reduce the risk of cross-contamination.

Source: *https://www.prudentialuniforms.com*