

BLITZCLEAN® CLEANROOM LAUNDRY SERVICE

Process Flow

Cleanroom garments arriving at the laundry are firstly, sorted and visually inspected for damage and stains. Garments that are found to be damaged will immediately be removed from the servicing queue and repaired before the final laundry. However, if the uniforms are badly or severely torn, they will be returned to the customer for inspection. Garments that have stains will be treated for removal.

During sorting, the cleanroom garments (i.e. smocks, coveralls and hoods) will be segregated from the booties and shoe covers. Each customer's garments will be processed in a dedicated load and will not be mixed with other customer's garments. An identification tag indicating the company name and department or section will be attached to the load to identify the garments.

The use of PLC-controlled chemical dispensers ensure that the necessary chemicals/detergents are dosed at programmed intervals during the washing cycle, which ranges from 30-40 minutes at a predetermined water flow rate.

After washing, the garments are transferred to a different cleanroom with a better cleanliness (class) level. The uniforms are then placed in a dryer for about 40 minutes at 140°F for drying and 10 minutes for cooling. The air supplied to the dryer is filtered and conforms to Class 10 based on Federal Standard 209E.

After drying, the garments are then randomly tested (as an option) based on international standards. Two of the common tests conducted are:

- The Helmke Drum particle generation test
- Static-decay test

Lastly, the garments are then folded and packed into transparent plastic bags, thermally sealed, which are placed into the various collection bags for delivery to the customer.

Water Purification Options

At Esco, we offer varying grades of water for the processing of your cleanroom garments.

Option 1

To produce and supply the washing machines with water filtered through the following stations:

5 micron filter station, activated carbon bed station, 1 micron filter station

Option 2

To provide and supply the washing machines with water quality having a resistivity of 18 Megohm, filtered through the following stations:

5 micron filter station, activated carbon bed station, 1 micron filter station, reverse osmosis system, mixed bed station, UV sterilizer, 0.45 micron absolute filter, 0.20 micron absolute filter, Super Q station, Ultrastak station

Quality Assurance Options

We provide the following optional tests for processed garments, prior to the final packing, on a random basis.

- Testing of particle generation from cleanroom garments (Helmke Drum test method)
- Testing of the surface resistivity of cleanroom garments

Facilities Maintenance

The following tests are carried out regularly within our cleanroom facilities to ensure quality and consistency.

- Testing of Class 10 cleanroom (drying/packing area)
- Monitoring of temperature/humidity in the Class 10 cleanroom
- Testing of contamination in dryer

In addition to testing, periodic maintenance is carried out according to a strict program as drawn out Esco's internal laundry operations manual and the operating guidelines of the individual equipment according to its manufacturer. Esco also offers turnkey RFID (Radio Frequency Identification) and/or barcode tracking systems that can allow our customers to track the status of any individual garment anytime, anywhere on the Internet.

