



CLEAN ROOM LAUNDRY SERVICE



The specialist of clean room service ...by

True+Plus Industry Co.,Ltd

Process : Clean Suit cleaning

Date : Jan.25,2021



Customer : General

Process Flow	Process Name	Environment	Quality Control	Procedure
	Receiving			Receiving & Delivery Slip
	Pre inspection	Normal Room	100% inspection	Separate dirty garment for scrubbing Pre-inspect all garment to make sure that there will no pen, tweezer or forieng parts remain in pocket Prepare garment for washing load, approx 45 sets of suit per load
	Washing	Clean room Class 100	DI resistivity 16 ~ 18 MQ Separate bucket of garment before and after washing	Washing proecess consists of one main wash with detergent & four rinsing with ultra pure water Approx. total washing time is 50 minutes Water temperature setting at 60 C
	Drying	Clean room Class 100		Temperature setting at approx. 70 ~ 75 C Approx, drying time is 45 minutes and cool down time 5 minutes
	Final Inspection & Folding	Clean room Class 100	100% inspection	Sampling garment for trumbling test per IEST- RP CC003.2 Final inspect every garment Fold garment as per each Customer specification.
	Packing	Clean room Class 100	Heat Sealing	Put garment in a plastic bag, vacuum & heat seal Transfer packed garment out from clean room through pass box
	Delivery			Deliver to Customer with a delivery Slip

Class 100 Cleanroom Laundry *Process & Quality Control*



Pre-Inspection and
Barcode Scanning of
Incomming Soiled
Garment

Washing in a fully
programmable
control cleanroom
washer



Final inspection & packing
in Class 100 cleanroom

Drying in a
cleanroom dryer



Quality Control



Surface Particle & Fiber Testing
Using microscopic technique for fiber counting per ASTM F51-68

Air Particle Testing

Using Helmke Trumble Drum per IEST-RP-CC003.2

Total particle size 0.5 micron & greater is below 1200 particle/cu.ft



Liquid Particle Testing

Using laser liquid particle counter for product qualification



Cleaning Protocol

Product : Re-Used Nitrile Glove



Process	Procedure	Environment
1 Receiving		
2 Pre-Inspecon	Separate dirty glove & torn glove (Glove flipping & air leak test)	Normal Room
3 Washing	Wash with neutral detergent Rinse out by DI water (16~18 MΩ)	Clean Room
4 Drying	Apply low temp (60°C)	Clean Room
5 Inspection & Packing	Inspection per Customer Specification Double Bag Vacuum Sealed	Clean Room

Specification :

Cleanroom	Class 100
DI Water	Resistivity 16 ~ 18 MΩ
Visual Inspection Criteria	No obvious dirty No writing on glove
Packing Standard	100 gloves per bag 10 x 100 gloves per box

Letter of certification from factory
Performed per as below condition

Cleanroom Environment

Class 100

Detergent

Liquid Neutral Detergent

Water

DI water resistivity 16~18 mega-Ohm

Garment Cleanliness

**Total air particle count from cleansuit
(size 0.5 micron and larger) by Helmke
Trumbling Drum is below 1200
particles/cu.ft/min**

**Testing method is referring to standard
IEST-RP-CC003.2**

Service for Cleanroom Luandry....

- Jumpsuit
- Jumpsuit with hood
- Smock
- Smock with hood
- Jacket & Slack
- Hood & cap
- Bag
- Bootie
- Anti static bootie
- Anti static shoes
- Conductive shoes





Contact with :

Trueplus industry CO.,Ltd
29/490 M.2 t.Klongsam, A. Klong luang, pathumthani
12120

K.Kullapornpat(June)/K.Sasitorn(Koy)

T: 6687-3348927 f : 662 832 8354

E-mail: trueplus@hotmail.co.Th

junnee2005@Hotmail.com

www.trueplusindustry.com