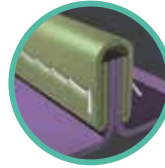


Sales Success Guide

CleanMax™ Cleanroom Apparel



Bound Seams

CleanMax™ garments feature bound seams, which are precisely sewn with an additional outer binding. This increases seam strength and provides a better barrier from particulates than simple serged seams.



Tunneled Elastic

Non-particulating, additional comfort, greater integrity during donning and doffing.

Specifications	
Fabric:	Microporous Film Laminate/55 gsm Spun-bonded Polypropylene Substrate
Color:	White
Configurations:	Clean Manufactured Clean Sterile
Sterility Assurance:	Clean Sterile - level of 10 ⁻⁶ SAL
Cleanroom Compatibility:	ISO Class 5-8 Cleanrooms and all controlled environments
Testing:	Recommended Practice by the Institute of Environmental Sciences & Technology
Standard Features:	Tunneled elastic Latex free Silicone free

CleanMax™ Physical Properties

Physical Property	Test Method	Units	Test Results
Basis Weight	ASTM D3776	oz/y2	1.55 oz/y2
Grab Tensile MD	ASTM D5034	lbs.	22.0 lbs.
Grab Tensile XD	ASTM D5034	lbs.	14.0 lbs.
Trapezoidal Tear MD	ASTM D1117	lbs.	9.0 lbs.
Trapezoidal Tear CD	ASTM D1117	lbs.	5.8 lbs.
Ball Burst	ASTM D3787	lbs.	19.0 lbs.
Air Permeability	ASTM D737	cfm	<0.562 cfm/ft2
Water Vapor Transmission	ASTM 96-80	g/m ² -24hrs	663.38
Bacterial Filtration Efficiency	ASTM F2101	%	99.99%
Particle Filtration Efficiency	ASTM F2299	%	99.99%

Applications for CleanMax™ Cleanroom Apparel

Cleanmax™ Sterile

- Aseptic or Terminally Sterile Cleanroom Environments
- ISO Class 5-8 Cleanroom

Cleanmax™ Clean Manufactured

- ISO Class 5-8 or Below Non-Aseptic Cleanrooms or Controlled Environments

Advantages of Using CleanMax™ Over A Reusable Cleanroom Garment

CleanMax™	Reusables
Mean Pore Size is 0 (the lower number the less particles emitted from the operator)	Mean Pore Size 1-2 to 8-12 or larger
Single use, no degradation risk	Bacterial filtration efficiency declines after each washing
Unmatched value	Expensive laundering process, i.e. loss and damage fees.
Convenient and accessible to any location	Laundering facilities may not be in close proximity to the cleanroom
No contracts	Long term contracts (3 -5 years) with hefty exit fees
No fear of cross contamination	Very high risk of cross contamination during laundering process
No cost of change fees	High cost for garment re-labeling

CleanMax™ vs. Reusables... which is better?

Each time a cleanroom garment is handled, a chance of contamination occurs. A reusable garment goes through steps in the laundering process leading to greater risk of contamination.



Clean Sterile Garments and Packaging

- Individually packaged to maintain cleanliness
- Folded in a way that promotes easier gowning, with less excursions. Wearer can handle only inside of garment during donning progress
- Clean manufactured and folded so garments are less wrinkled

Questions You May Be Asked

Is CleanMax™ Similar to Tyvek®?

Tyvek® is a licensed product of the DuPont Corporation. It is similar to Tyvek in that they are both non-woven barrier fabrics. However, CleanMax is constructed with a microporous fabric that provides a better overall barrier than Tyvek and is essentially the same in terms of breathability without the premium price.

What is the difference between Clean Manufactured and Sterile?

All CleanMax™ apparel is clean manufactured. CleanMax™ Sterile, goes to a contract irradiation facility for sterilization after it has been manufactured and packaged. Sterilization is obtained through a validated dose of gamma irradiation. Each case and each individual item has a gamma indicator dot on it as a visual indication that the product has been exposed to gamma radiation. CleanMax™ Sterile packages will also have a lot number and date of irradiation on the packaging.

Why do the coveralls and frocks only come with zippers?

Zippers add greater barrier protection, as there are no "gaps" for particulate break through. In addition, end users do not typically gown properly when wearing garments with snaps. There is a tendency not to snap all the way up or they skip snaps during the gowning process.

Key Attributes of CleanMax™

- CleanMax™ offers chemical penetration resistance to oils, bleach and 50% sodium hydroxide
- CleanMax™ is resistant to blood and body fluid penetration
- Resistant to viral penetration
- Resistant to Blood Borne Pathogens.
- Garments are folded to allow easier donning
- Garments are individually packaged without excessive wrinkling
- Packages contain an easy open strip allowing for less handling when donning

Questions to Ask Customers

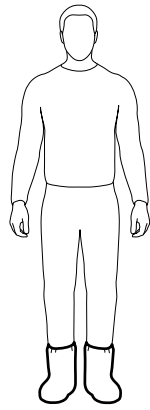
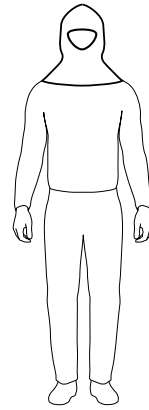
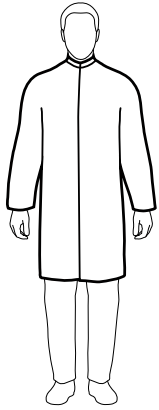
- What is their cleanroom classification?
- Do they do aseptic or terminally sterile processing?
If yes to either above question, they will require CleanMax™ Sterile.
- What does their current gowning program entail?
- How many changes per day does the average employee make?
- Does the cleanroom apparel you are currently using have bound seams?"
- Does your company ever shut down for maintenance or certification?"

Garment Configurations

Apparel	ISO 8	ISO 7	ISO 6	ISO 5 Non-Sterile	ISO 5 Sterile (Aseptic)	ISO 4	ISO 3	ISO 1 & 2
Hair cover (bouffant)	R	R	R	R	R	R	R	AS
Barrier gloves	AS	AS	AS	AS	R	R	R	R
Facial cover	AS	AS	AS	R	R	R	R	AS
Hood	AS	AS	AS	R	R	R	R	AS
Frock	R	R	AS	AS	NR	NR	NR	NR
Coverall	AS	AS	R	R	R	R	R	R
Shoe cover	R	R	AS	AS	NR	NR	NR	NR
Boot	AS	AS	R	R	R	R	R	R
Typical Frequency of Change*	2X/week	2X/week	3X/week	1X/day	Per Entry	Per Entry	Per Entry	Per Entry

Chart shows Lakeland garments relevant to ISO 5. Recommendations from IEST-RP-CC003.

R = Recommended, **NR** = Not Recommended, **AS** = Application Specific



Clean Manufactured Garments

Frock – CTL191CM

Clean Manufactured in Silicone Free Environment

- Latex free
- Mandarin collar
- Zipper closure
- No pockets
- Tunneled elastic wrists with thumb loops
- For critical environments
- Individually bagged

Sizes: S – 5X
Case Pack: 30

Coverall – CTL417CM

Clean Manufactured in Silicone Free Environment

- Latex free
- Zipper closure
- Tunneled elastic on wrists (with thumb loops), ankles, and back half of waist
- For critical environments
- Individually bagged

Sizes: S – 5X
Case Pack: 25

Coverall – CTL428CM

Clean Manufactured in Silicone Free Environment

- Latex free
- Zipper closure
- Attached hood
- Tunneled elastic on wrists (with thumb loops), ankles, and back half of waist
- For critical environments
- Individually bagged

Sizes: S – 5X
Case Pack: 25

Hood – CTL713CM

Clean Manufactured in Silicone Free Environment

- Latex free
- Covers shoulders
- One size
- Ties to customize fit
- For critical environments
- Individually bagged

Case Pack: 100

Boot Cover – CTL903CM

Clean Manufactured in Silicone Free Environment

- Latex free
- Tunneled elastic top
- 19" high
- Non-skid PVC sole
- For critical environments
- Individually bagged

Sizes: S/M, L/XL, 2X
Case Pack: 50 pair

Clean Sterile Garments

Coverall – CTL417CS

Clean Sterile in Silicone Free Environment

- Latex free
- Zipper closure
- Tunneled elastic on wrists (with thumb loops), ankles, and back half of waist
- For critical environments
- Individually bagged
- Certificate of radiation included
- Gamma radiation indicator dots on each package
- IPA resistant ink

Sizes: S – 5X
Case Pack: 25

STERILE Irradiation Sterilization

Coverall – CTL428CS

Clean Sterile in Silicone Free Environment

- Latex free
- Zipper closure
- Attached hood
- Tunneled elastic on wrists (with thumb loops), ankles, and back half of waist
- For critical environments
- Individually bagged
- Certificate of radiation included
- Gamma radiation indicator dots on each package
- IPA resistant ink

Sizes: S – 5X
Case Pack: 25

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- Gamma radiation indicator dots on each package
- IPA resistant ink

Sizes: S/M, L/XL, 2X
Case Pack: 50 pair

STERILE Irradiation Sterilization



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