

Centrales de Esterilización

Consideraciones generales: Ventilación, Mantenimiento, suministros, Instalación, seguridad y monitoreo ambiental.




Seguridad y Mantenimiento

- Eliminación y monitoreo de perdidas
 - Formaldehido
 - EtO
 - Peróxido de Hidrogeno
 - NO₂
- Sistemas de seguridad
 - Diseño y análisis de riesgo
 - Calibración periódica con certificados
- Re certificación- Extensión de vida útil.



SEGURIDAD: DISEÑO: Análisis de riesgo, HAZOP, WHAT-IF

- Reducción de riesgos a niveles aceptables
 - Rediseño de equipos
 - Rediseño de procesos
 - Rediseño de Lay-Out
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SEGURIDAD: Análisis de riesgo

Probability	Severity
Despreciable (A)	Negligible (1)
Improbable (B)	Marginal (2)
Remote (C)	Critical (3)
Occasional (D)	Serious (4)
Probable (E)	Catastrophic (5)
Frequent (F)	




ANALISIS DE RIESGO

- **Probability:**

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- Despreciable: According to Quetzal records, is unlikely to occur in the life of the product and there is no historical experience to suggest it will occur.
- Improbable: According to Quetzal records, similar events are unlikely to occur, but have historically occurred in this type of product in Quetzal experience.
- Remote: According to Quetzal records, it is not likely but may occur.
- Occasional: According to Quetzal records, this particular scenario is likely to occur during the life of this specific type of product.
- Probable: According to Quetzal records, this particular scenario will almost certainly occur during the life of this specific type of product.
- Frequent: According to Quetzal records, this particular scenario is certainly to occur during the life of this specific type of product.
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- **Severity:**

- - Despreciable: No property damage, no environmental impact or no injuries.
 - Marginal: Low property damage, minor onsite injuries (Lesiones) or minor environmental impact.
 - Critical: Moderate property damage, moderate environmental impact or moderate injuries.
 - Serious: Loss of production, significant property damage, adverse public reaction, significant environmental impact or significant injuries.
 - Catastrophic: Significant public concern reaction, possible fatality, loss of production from 10 times base level, serious environmental impact or equipment destruction.
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ANALISIS DE RIESGO

Frequent (F)	F1	F2	F3	F4	F5
Probable (E)	E1	E2	E3	E4	E5
Occasional (D)	D1	D2	D3	D4	D5
Remote (C)	C1	C2	C3	C4	C5
Improbable (B)	B1	B2	B3	B4	B5
Incredible (A)	A1	A2	A3	A4	A5
	Negligible (1)	Marginal (2)	Critical (3)	Serious (4)	Catastrophic (5)

MANTENIMIENTO: CONSIDERACIONES GENERALES





MANTENIMIENTO

- CRITERIOS
 - CORRECTIVO
 - PREVENTIVO
 - PREDICTIVO
 - REGISTROS
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MANTENIMIENTO EQUIPOS

- CONDICIONES AMBIENTALES
- ESPACIO NECESARIO
- ILUMINACION
- ACCESOS

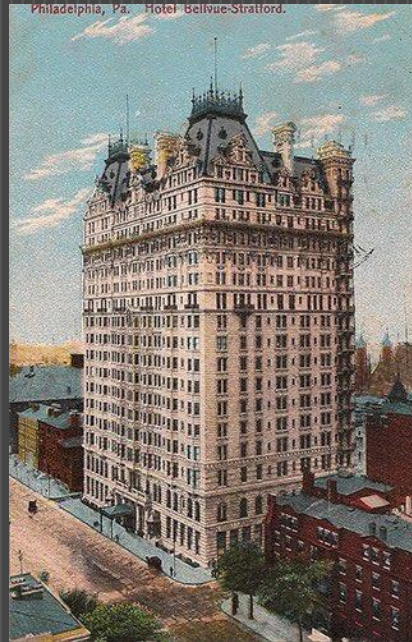


Monitoreo ambiental

- EtO:
 - TWA: 1 ppm
 - STEL: 5 ppm
- Peróxido de Hidrogeno
 - TWA: 1 ppm
- Formaldehido
 - TWA: 0,75 ppm
 - STEL: 2 ppm
- NO₂
 - TWA: 1 ppm
 - STEL: 1ppm

VENTILACION: IMPORTANCIA

- Convención de legionarios en EE.UU 1976
- **Hotel Bellevue Stratford (Filadelfia)**





VENTILACION:

- REGULACIONES / RECOMENDACIONES
 - CDC: Centers for Disease Control and prevention
 - JC: Joint Commission (Certificadora)
 - AIA: American Institute of Architects
 - AAMI/ISO: Association for the Advancement of Medical Instrument
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VENTILACION: PRINCIPIO DE FUNCIONAMIENTO

- Presiones en cascada:
 - Recepción de material sucio
 - Desmontaje y limpieza
 - Lavado y desinfección
 - Preparación y empaque
 - Zona de equipos
 - Almacenamiento de material estéril



FINAL DE PRESENTACION

MUCHAS GRACIAS