COMPONENT STORAGE AND HANDLING GUIDELINES 2024

COMPONENT STORAGE AND HANDLING GU

NaviFloor Robotics, Inc.

Effective Date: January 1, 2024

Document ID: OPS-CSH-2024-001

1. PURPOSE AND SCOPE

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1. This document establishes mandatory guidelines for the storage, handling,

2. These guidelines apply to all NaviFloor Robotics facilities, employees, co

2. DEFINITIONS

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1. "Sensitive Components" refers to LiDAR sensors, optical systems, calibra

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2. "Storage Area" means any designated space within NaviFloor facilities us

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3. "ESD-Sensitive" refers to components susceptible to damage from electro

3. ENVIRONMENTAL CONTROL REQUIREMENTS

1. Temperature Control

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Primary storage areas must maintain temperature between 18°C and 24°C (6

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Temperature variation shall not exceed ±2°C within any 24-hour period

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Continuous monitoring and logging required with automated alerts for out-of

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2. Humidity Control

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Relative humidity must be maintained between 35% and 65%

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Maximum humidity variation of ±10% within any 24-hour period

Desiccant cabinets required for moisture-sensitive components

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3. Clean Room Standards

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Class 1000 (ISO 6) clean room conditions required for optical component ha

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HEPA filtration system maintenance schedule per Appendix A

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Monthly particulate testing and documentation required

4. STORAGE CLASSIFICATION AND SEGREGATIO

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1. Components must be segregated and stored according to the following cla

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Class A: High-value LiDAR and optical systems

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Class B: Electronic control modules and circuit assemblies

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Class C: Mechanical components and structural elements

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Class D: General inventory and non-sensitive items

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2. ESD Protection Requirements

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ESD-protected workstations with continuous monitoring

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Mandatory use of grounded wrist straps and ESD-safe footwear

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Quarterly testing of all ESD protection systems

5. HANDLING PROCEDURES

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1. Personnel Requirements

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Completion of Component Handling Certification Program required

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Annual recertification and quarterly safety reviews

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Documented training on specific handling procedures for each component cl

2. Transportation Guidelines

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Use of designated ESD-safe carts and containers

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Maximum stacking heights per component type (reference Appendix B)

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Mandatory use of shock indicators for sensitive components

6. QUALITY CONTROL AND DOCUMENTATION

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1. Receiving Inspection

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Visual inspection requirements per component class

Documentation of shipping condition and packaging integrity

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Verification of environmental exposure indicators

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2. Storage Documentation

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Daily environmental condition logs

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Component location tracking system maintenance

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Monthly inventory reconciliation requirements

7. EMERGENCY PROCEDURES

1. Environmental Control Failure

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Immediate notification to Facility Manager and Quality Control

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Implementation of backup environmental control systems

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Component assessment and documentation procedures

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2. Contamination Events

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Containment and assessment protocols

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Documentation and reporting requirements

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Decontamination procedures per component class

8. COMPLIANCE AND AUDIT

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1. Internal Audits

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Quarterly storage condition audits

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Semi-annual handling procedure compliance reviews

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Annual comprehensive system audit

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2. Documentation Retention

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Environmental monitoring records: 3 years

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Training certifications: Duration of employment plus 2 years

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Incident reports: 5 years

9. LEGAL DISCLAIMER

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10. DOCUMENT CONTROL

Version: 2024.1

Approved By: Richard Torres, COO

Approval Date: December 15, 2023

Next Review Date: December 15, 2024