

OSHA COMPLIANCE DOCUMENTATION - ROBOTIC SYSTEMS

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NaviFloor Robotics, Inc.

Last Updated: December 15, 2023

Document Reference: OSHA-2023-R17

1. PURPOSE AND SCOPE

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1. This documentation establishes NaviFloor Robotics, Inc.'s ("Company") c

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2. This documentation covers all robotic systems manufactured, deployed, and

2. APPLICABLE STANDARDS AND REGULATIONS

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1. The Company's robotic systems comply with the following OSHA standards

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29 CFR 1910.212 (General Requirements for All Machines)

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29 CFR 1910.147 (Control of Hazardous Energy)

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29 CFR 1910.333 (Selection and Use of Work Practices)

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ANSI/RIA R15.06-2012 (Industrial Robots and Robot Systems Safety Requirements)

3. ROBOTIC SYSTEM SAFETY FEATURES

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1. Emergency Stop Systems

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Redundant emergency stop circuits on each AMR unit

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Wireless emergency stop capability through central control system

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Maximum response time of 300 milliseconds for all stop commands

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Compliance with Performance Level 'e' per ISO 13849-1

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2. Collision Avoidance Systems

- - 3 -

Multi-layer LiDAR detection zones (2m warning, 1m protective field)

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360-degree perception coverage

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Dynamic speed adjustment based on environmental conditions

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Automatic deceleration in human-occupied zones

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3. Safety-Rated Monitored Stop

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Automated pause when humans enter collaborative workspace

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Resume operations only after defined clearance parameters are met

- - 4 -

Safety-rated soft axis and space limiting

4. RISK ASSESSMENT AND MITIGATION

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1. The Company conducts comprehensive risk assessments for:

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Each new AMR model prior to deployment

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System software updates affecting safety parameters

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New deployment environments

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Modified operational parameters

- - 5 -

2. Risk Assessment Documentation

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Maintained for 5 years from assessment date

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Updated annually or upon significant system modifications

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Available for OSHA inspection upon request

5. TRAINING AND CERTIFICATION

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1. Required Personnel Training

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Initial operator safety training (8 hours minimum)

- - 6 -

Annual refresher training (4 hours minimum)

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Emergency response procedures

-

Maintenance safety protocols

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2. Training Documentation

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Digital records maintained in Company's LMS

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Certification tracking and expiration monitoring

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Compliance with 29 CFR 1910.147(c)(7)

6. MAINTENANCE AND INSPECTION

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1. Scheduled Maintenance

-

Monthly safety system verification

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Quarterly comprehensive safety audit

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Semi-annual firmware safety updates

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Annual third-party safety certification

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2. Documentation Requirements

- - 8 -

Maintenance logs retained for 3 years

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Inspection checklists with safety-critical items

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Non-conformance reports and resolution records

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Calibration certificates for safety sensors

7. INCIDENT REPORTING AND INVESTIGATION

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1. All safety-related incidents must be:

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Reported within 24 hours

- - 9 -

Investigated within 72 hours

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Documented in the Company's Safety Management System

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Reviewed by Safety Committee within 5 business days

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2. OSHA Reporting Requirements

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Immediate reporting of fatalities (within 8 hours)

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Reporting of hospitalizations within 24 hours

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Maintenance of OSHA 300 logs

- - 10 -

Annual submission of OSHA 300A summaries

8. COMPLIANCE VERIFICATION

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1. Internal Audits

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Quarterly safety compliance audits

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Documentation review and validation

-

Employee interview protocols

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Corrective action tracking

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2. External Certification

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Annual third-party safety certification

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OSHA consultation program participation

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Industry safety standard conformity assessment

9. CERTIFICATION

The undersigned hereby certifies that all robotic systems operated by NaviFlo Robotics, Inc. comply with applicable OSHA regulations and safety standards of the date below.

Dated: ~~December 12~~ December 15, 2023

By: _

Richard Torres

Chief Operating Officer

NaviFloor Robotics, Inc.

By: _

Elena Kovacs, Ph.D.

Chief Research Officer

NaviFloor Robotics, Inc.

10. DISCLAIMER

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