EQUIPMENT OPERATING INSTRUCTIONS - STATION 1-5

EQUIPMENT OPERATING INSTRUCTIONS -

NaviFloor Robotics, Inc.

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1. PURPOSE AND SCOPE

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1. This document establishes mandatory operating procedures for NaviFloor

2. These instructions apply to all personnel authorized to operate or maintain

2. SAFETY REQUIREMENTS

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1. All operators must complete NaviFloor's Advanced Equipment Safety Tra

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2. Personal Protective Equipment (PPE) Requirements:

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ESD-compliant footwear

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Safety glasses with side shields

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Level 2 cut-resistant gloves during component handling

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Clean room suits when accessing the sensor calibration area

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3. Emergency Protocols:

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Red emergency stop buttons are located at each corner of the station

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Yellow emergency phone at Station 3 connects directly to facility security

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Fire suppression system activation points are marked in blue

3. PRE-OPERATION PROCEDURES

1. System Verification:

a) Verify green status indicators on all power distribution units

b) Confirm calibration certificates are current for all testing equipment

c) Check emergency stop system functionality

d) Verify environmental controls are within specified parameters:

- Temperature: 68-72°F (20-22°C)
- Humidity: 45-55% RH
- Particulate count: Class 1000 or better

2. Software Validation:

a) Confirm NaviFloor Diagnostic Suite version 4.2.1 or higher is running

b) Verify connection to central testing database

c) Load appropriate test profiles for scheduled production batch

4. OPERATING PROCEDURES

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1. Station 1 - Initial Assembly

a) Load chassis according to specification NT750-AS-001

b) Install primary navigation module using torque sequence NT750-TQ-103

c) Connect main power harness following diagram EL-NT750-001

d) Perform initial power-on test sequence

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2. Station 2 - Sensor Integration

a) Mount LiDAR array using calibrated mounting fixture MF-201

b) Install depth sensors according to placement guide NT750-SN-002

c) Connect sensor fusion processor

d) Perform preliminary sensor alignment check

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3. Station 3 - Software Loading

a) Connect diagnostic interface cable to port P1

b) Upload firmware package NT750-FW-421

c) Initialize system configuration

d) Perform basic movement test in safe mode

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4. Station 4 - Calibration

a) Place unit on calibration platform CP-301

b) Execute full sensor calibration sequence

c) Verify accuracy against golden sample

d) Record calibration data in central database

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5. Station 5 - Final Testing

a) Execute comprehensive test suite TS-NT750-FINAL

b) Verify all parameters meet specification SP-NT750-001

c) Generate final test report

d) Apply QC approval marking

5. QUALITY CONTROL REQUIREMENTS

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1. All operations must be logged in the NaviFloor Manufacturing Execution

2. Quality checkpoints require sign-off by authorized quality personnel at:

- Component verification (Station 1)

- Sensor alignment (Station 2)

- Calibration completion (Station 4)

- Final acceptance (Station 5)

3. Non-conformance handling:

a) Immediately stop operation

b) Tag unit with red hold tag

c) Create non-conformance report in MES

d) Notify shift supervisor

6. MAINTENANCE REQUIREMENTS

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1. Daily Maintenance:

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Clean all work surfaces

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Verify calibration fixtures

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Check diagnostic cable integrity

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Empty ESD collection containers

2. Weekly Maintenance:

- Calibrate torque tools

- Clean sensor alignment fixtures

- Update software packages

- Verify emergency systems

7. DOCUMENT CONTROL

- 1. This document is controlled by NaviFloor Robotics Quality Management S

2. Reviews required annually or upon significant process changes.

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3. Distribution limited to authorized personnel only.

8. LEGAL NOTICES

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1. This document contains proprietary and confidential information belongin

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2. Compliance with these instructions is mandatory for maintaining product v

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Approved by:

Richard Torres

Chief Operating Officer

NaviFloor Robotics, Inc.

Date: _