

# QUALITY INSPECTION CHECKPOINTS DOCUMENT

## QUALITY INSPECTION CHECKPOINTS DOCUMENT

**NaviFloor Robotics, Inc.**

*Effective Date: January 15, 2024*

*Document ID: QIC-2024-001*

*Version: 2.0*

### 1. PURPOSE AND SCOPE

-

1. This Quality Inspection Checkpoints Document ("QIC Document") establishes

- - 1 -

2. This document applies to all production units, prototype systems, and field

## **2. DEFINITIONS**

-

1. "Critical Components" means essential hardware and software elements in

-

2. "Quality Control Station" or "QCS" means designated inspection points w

-

3. "Inspection Protocol" means the sequence of tests, measurements, and ver

## **3. MANDATORY INSPECTION CHECKPOINTS**

- - 2 -

### 1. Pre-Assembly Inspection

- a) Component verification against approved supplier list
- b) Visual inspection of all Critical Components
- c) Verification of firmware versions and calibration certificates
- d) Documentation of component serial numbers and batch codes

-

### 2. Assembly Stage Inspections

- a) Torque verification of all mechanical connections
- b) Electrical systems continuity testing
- c) Sensor alignment and calibration verification
- d) Internal cable routing and connection verification
- e) Environmental seal integrity checks

- - 3 -

### 3. System Integration Testing

- a) Power-up sequence verification
- b) Communication systems check
- c) Sensor array initialization testing
- d) Navigation system basic functionality verification
- e) Emergency stop system validation

## **4. QUALITY CONTROL PROCEDURES**

-

1. Each AMR unit shall undergo comprehensive testing at designated Quality Control facilities.
  - a) Multi-surface navigation capability verification
  - b) Obstacle detection and avoidance testing

c) Path planning algorithm validation

d) Load capacity and stability testing

e) Battery performance verification

-

## 2. Testing Environment Requirements

a) Temperature:  $20^{\circ}\text{C} \pm 2^{\circ}\text{C}$

b) Humidity: 45% - 55% RH

c) Illumination: 500-750 lux

d) Test surface variations as per Specification Sheet TD-2024-003

# 5. DOCUMENTATION REQUIREMENTS

-

## 1. Quality Control Records

- a) Inspection checklists completion
- b) Test result documentation
- c) Non-conformance reports
- d) Corrective action records
- e) Calibration certificates

-

## 2. Digital Documentation System

- a) Real-time data logging
- b) Electronic signature capture
- c) Automated timestamp recording
- d) Secure data storage and backup

## **6. NON-CONFORMANCE HANDLING**

- - 6 -

1. Any deviation from specified parameters shall trigger:

- a) Immediate production hold
- b) Quality control supervisor notification
- c) Root cause analysis
- d) Corrective action implementation
- e) Re-inspection requirements

## **7. CERTIFICATION AND RELEASE**

-

1. Final Quality Certification requires:

- a) Completion of all checkpoint inspections
- b) Verification of test results within specified parameters

c) Documentation review and approval

d) Quality control supervisor sign-off

## **8. REVISION AND CONTROL**

-

1. This document shall be reviewed annually and updated as required to maintain

a) Industry standards

b) Regulatory requirements

c) Company quality objectives

d) Product specifications

## **9. LEGAL COMPLIANCE**



- 8 -

1. This document complies with:

- a) ISO 9001:2015 requirements
- b) Applicable ANSI/RIA R15.06 standards
- c) CE marking requirements
- d) UL certification standards

## **AUTHORIZATION**

APPROVED AND ADOPTED by NaviFloor Robotics, Inc.

**By:**

Dr. Sarah Chen

CEO & Co-founder

**By:**    - 9 -

Richard Torres

Chief Operating Officer

Date: January 15, 2024

## **DISCLAIMER**

This document contains confidential and proprietary information of NaviFlo Robotics, Inc. Unauthorized reproduction or distribution is strictly prohibited. All rights reserved.

