OEM/ODM SUP Quality Control & Inspection Standard

MANUFACTURER: QINGDAO VATRAD GROUP CO., LTD.

00. EXECUTIVE QUALITY ARCHITECTURE

This document outlines the standardized English quality documentation pack and inspection protocol designed to minimize third-party inspection costs, eliminate ambiguity, and guarantee end-to-end traceability for custom Inflatable Stand-Up Paddle Board (SUP) manufacturing.

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PROJECT QUALITY DOCUMENTATION LINKAGE:
Project Code → Customer PO → Product / SKU → Production Batch → Specification Revision
→ BOM Revision → Artwork Revision → Packaging Revision → Inspection Report No. → Shipment
Release No.
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01. STANDARDIZED DOCUMENT PACK INDEX

FOLDER	DOCUMENT CATEGORY	CORE CONTENT & FUNCTION
00_	Project Index & Document Register	Single-page master document navigation, version control, and current release status.
01_	Approved Product Specification	Technical dimensions, tolerances, pressure limits, construction details, and standards.
02_	Approved Sample & Golden Reference	Golden sample metadata, approved deviation log, physical location, and photo reference.
03_	Customer Approval BOM	Itemized kit configuration (board, pump, paddle, fin, leash, bag, repair kit).
04_	Approved Artwork & Packaging	PDF inspection references for board graphics, deck pad layout, manual, and carton markings.
05_	Quality Inspection Plan (QIP)	Inspection stages, criteria, testing methods, AQL levels, and non-conformance protocols.
06–08_	In-Process & Air-Tightness Records	IQC material records, First Article Inspection (FAI), 24h/48h pressure tests, FQC logs.
09_	Packing & Pre-Shipment Inspection	Barcode verification, carton strength, drop test, packing quantity, and shipping marks.
10_	NCR, Rework & Re-Inspection Pack	Quarantine logs, non-conformance reports, approved rework instructions, and re-test proof.
11_	Third-Party Inspection Brief	1-2 page operational instruction summary specifically generated for inspector on-site use.
12_	Shipment Release & Traceability	Final authorization summary confirming all criteria met and batch released for dispatch.

02. STANDARD QUALITY INSPECTION PLAN (QIP)

INSPECTION STAGE	INSPECTION ITEM	ACCEPTANCE CRITERIA	METHOD / SAMPLING	RECORD REF.
Incoming (IQC)	Valve & PVC Fabric	Matches approved BOM specs; tensile & air seal check	Visual + Pressure / AQL S-2	`IQC-VALVE-01`
In-Process (IPQC)	EVA Placement & Seam	Alignment ±2mm, zero glue overflow or bubbles	Visual + Gauge / 100%	`IPQC-EVA-01`
Air-Tightness (FQC)	Pressure Retention	15 PSI inflated for 24h; pressure drop ≤ 0.5 PSI	Digital Pressure Gauge / 100%	`FQC-AIR-24H`
Kit Assembly	Accessories Completeness	Full set (Board, Fin, Paddle, Pump, Leash, Bag, Kit)	Counting + Checksheet / 100%	`PKG-KIT-CHK`
Pre-Shipment (PSI)	Carton Markings & Barcodes	Matches 04C_Carton-Marking reference & 100% scannable	Visual + Barcode Scanner / AQL G-II	`PSI-PACK-01`

03. THIRD-PARTY INSPECTION BRIEF (TEMPLATE SAMPLE)

THIRD-PARTY INSPECTION BRIEF — PROJECT REFERENCE: PRJ-2026-SUP01

Factory Contact: Qingdao Vatrad Group Co., Ltd. Quality Dept. | **Inspection Window:** Pre-Shipment
Order Qty: 1,000 Units | **Available Qty:** 1,000 Units | **Packed Qty:** 1,000 Cartons
Applicable Documents: TS-2026-SUP01 Rev B, BOM-2026-SUP01 Rev C, ART-2026-SUP01 Rev B

Critical-to-Quality (CTQ) Mandatory Checks:

- Verify 100% air-tightness certification records for current production batch.
- Conduct inflation test on sample size (AQL Level II): Hold at 15 PSI for 4 hours minimum.
- Verify accessory matching against `03_Customer Approval BOM` (Pump pressure rating, Fin lock mechanism).
- Scan carton barcodes and master carton shipping marks against `04C_Carton-Marking`.

04. BATCH TRACEABILITY & NON-CONFORMANCE PROTOCOL

To prevent defective items from reaching final packing or export, Qingdao Vatrad Group Co., Ltd. enforces a strict 7-step Non-Conformance Containment and Batch Isolation Protocol.

STEP	ACTION	OPERATIONAL PROCEDURE	STATUS CONTROL
01. Identify	Defect Detection	Non-conformance logged with Product, SKU, Batch, and Process Stage.	HOLD
02. Label	Physical Tagging	Affix physical status tag (HOLD / REWORK / REJECTED) directly to unit.	HOLD
03. Quarantine	Physical Isolation	Move affected units to designated locked Quarantine Area.	QUARANTINED
04. Assess	Scope Evaluation	Review material lot, operator shift, tooling, and document revision scope.	UNDER REVIEW

STEP	ACTION	OPERATIONAL PROCEDURE	STATUS CONTROL
05. Rework	Controlled Correction	Execute authorized rework instruction sheet. No unapproved repairs.	REWORK
06. Re-Inspect	Secondary Verification	Re-test against original QIP criteria. Log results in NCR report.	RE-TEST PASS
07. Release	Authorized Authorization	QA Manager signs Pre-Shipment Release Summary for dispatch.	RELEASED

05. PRE-SHIPMENT RELEASE SUMMARY (SAMPLE TEMPLATE)

PRE-SHIPMENT RELEASE SUMMARY

Project Code: PRJ-2026-SUP01	**Customer PO:** PO-US-2026-889
Product / **SKU:** SUP-TOURING-126	**Order** / **Packed Qty:** 1,000 Sets / 1,000 Cartons
Production Batch: BATCH-202608-01	**Spec** / **BOM Rev:** Rev B / Rev C

Inspection Completion Verification:
[✔] Incoming Material Records (IQC) [✔] In-Process Inspection (IPQC) [✔] 24-Hour Air-Tightness Test (100% Pass)
[✔] Final Product Quality (FQC) [✔] Packing & Barcode Scan [✔] Open Non-Conformances: NONE

FINAL RELEASE DECISION: RELEASED FOR SHIPMENT

Authorized QA Sign-off: *Qingdao Vatrad Group Co., Ltd. Quality Assurance Department*

CONTROLLED DOCUMENT: This standard quality documentation guide is maintained under ISO9001 strict revision controls. Printed or exported copies are for project evaluation and operational setup only.