

Nachias Shirt Manufacturing Company

Quality Control Report

Report Date: September 26, 2025
Inspector Name: Alex Rivera

Client: Internal Production Run
Product Description: Men's Cotton Dress Shirts (Style: Classic Button-Down)
Item Number: SHIRT-001
Inspection Type: Pre-Shipment Quality Control
Specification Sheet Reference: Nachias STD-SHIRT-V2.1 (attached)

Report Number: QC-2025-0926
Inspection Location: Nachias Production Facility, Line A (Shirt Assembly)
Supplier: Nachias Fabric Suppliers Inc.
Product Order Number: ORD-2025-045

Order Quantity: 1,000 units
Sampling Standard: AQL 2.5 (ANSI/ASQ Z1.4) - 80 samples inspected

1 Executive Summary

This Quality Control (QC) Report documents the inspection of 80 sampled units from a batch of 1,000 men's cotton dress shirts produced on September 25, 2025. The inspection focused on visual, dimensional, and functional checks to ensure compliance with Nachias quality standards, including fabric integrity, stitching precision, and accessory functionality.

Overall Results:

- Pass Rate: 92.5% (74/80 samples passed all criteria)
- Major Defects: 4 (5%) - Primarily uneven stitching on collars
- Minor Defects: 2 (2.5%) - Slight color shade variations
- Critical Defects: 0
- Recommendation: Batch approved for shipment with minor rework on affected units (estimated 20 shirts). No production halt required.

Statistical Overview (based on sampled imperfections):

Metric	Value
Daily Average Mean Imperfections	1.5
Sample Mean (All Inspections)	1.2
Standard Deviation	0.8
Sample Standard Deviation	0.6
Lower Control Limit	0.2
Upper Control Limit	2.2
Desired Perfection Level	95%

The batch performance is within control limits, indicating stable production processes.

2 Detailed Inspection Results

2.1 Style and Color Conformity (Visual Inspection)

Criteria: Matches approved design specs; no shade variations $> \Delta E$ 1.0; correct accessory placement (buttons, collars, cuffs).

Samples Checked: 80

Passed: 78 (97.5%)

Defects Found:

- Minor: 2 samples with slight collar shade mismatch (fabric batch variation).

Notes: Colors verified against Pantone 11-0601 TCX (Navy). No incorrect materials detected.

2.2 Measurement Check (Dimensional Accuracy)

Criteria: Collar: 15.5–16 in; Sleeve: 32–33 in; Chest: 42–44 in; Hem tolerance ± 0.25 in. Measured at key points using calipers.

Samples Checked: 80

Passed: 80 (100%)

Defects Found: None

Notes: All hand-sewn elements (e.g., cuffs) within tolerance. No sizing errors observed.

2.3 Quantity Check

Criteria: Matches order qty; packed/unpacked counts align with reference numbers.

Samples Checked: Full batch audit (1,000 units)

Passed: 1,000 (100%)

Defects Found: None

Notes: 950 packed, 50 unpacked for final trim. All tagged with correct SKU.

2.4 Marking, Label, and Packaging

Criteria: Labels include care instructions, size, material (100% cotton); compliant with EU REACH and US CPSIA; polybag packaging with hang tags.

Samples Checked: 80

Passed: 80 (100%)

Defects Found: None

Notes: All labels machine-stitched securely; packaging moisture-proof.

2.5 Physical and Functional Tests

- Pull Test: Accessories (buttons, snaps) pulled with 10N force for 10 seconds.
 - Samples Checked: 20 (25% subsample)
 - Passed: 20 (100%)
 - Defects: None. No detachment or damage.
- Fatigue Test: Zippers/buttons cycled 50 times (N/A for button-down style; simulated on cuffs).
 - Samples Checked: 20
 - Passed: 20 (100%)
 - Defects: None. Full functionality retained.
- Stretch Test: Elastic elements (cuffs/waistband - N/A for this style; spot-checked fabric elasticity).
 - Samples Checked: 10

- Passed: 10 (100%)
- Defects: None. Fabric recovery >95% after 5 stretches.
- Buttonhole Test: Check for even sizing, no fraying, complete stitching.
 - Samples Checked: 80
 - Passed: 76 (95%)
 - Defects: 4 major (uneven holes on collars, requiring restitch).

3 Non-Conformities and Corrective Actions

Defect ID	Description	Severity	Root Cause	Corrective Action	Responsible	Target Completion
DEF-001	Uneven collar stitching (4 samples)	Major	Machine tension misalignment	Recalibrate sewing machines; rework 20 units	Sewing Supervisor	09/27/2025
DEF-002	Minor color shade variation (2 samples)	Minor	Fabric lot inconsistency	Isolate affected batch; approve with client sign-off	Fabric QC Lead	09/26/2025
N/A	No critical issues	–	–	N/A	–	–

CAPA Summary: No open Corrective and Preventive Actions (CAPA) from prior reports. All actions tracked in Nachias QMS database.

4 Control Chart Summary

The following represents a simplified control chart for daily imperfections over the past 5 production days (including this inspection). Imperfections were low and stable, with no points exceeding upper control limits.

Date	Daily Imperfections	Upper Control Limit	Lower Control Limit	Target (0)
09/22	1	2.2	0.2	0
09/23	2	2.2	0.2	0
09/24	0	2.2	0.2	0
09/25	1	2.2	0.2	0
09/26	1.5	2.2	0.2	0

Chart Description: This line chart plots daily imperfections (green line) against control limits (dashed orange lines) and target (dashed blue line). All data points remain within limits, confirming process stability.

5 Conclusion and Sign-Off

The inspected batch meets Nachias Shirt Manufacturing Company's quality thresholds with minor adjustments. Production processes remain efficient, with a focus on sewing calibration for future runs to achieve 98%+ pass rates.

Approved By:

Inspector: _____ Date: _____

QC Manager: _____ Date: _____

Attachments:

- Full specification sheet (STD-SHIRT-V2.1)
- Sample photos of defects (if any)
- Raw data spreadsheet