

A top-down view of a dark wooden desk. In the upper right, a silver pen with gold accents lies diagonally. Below it, a black smartphone is positioned horizontally. To the right, the corner of a silver laptop is visible, showing a portion of its keyboard with keys like 'fn', 'ctrl', 'alt', 'command', and arrow keys. The background is a dark, textured wooden surface.

# GENERAL OVERVIEW OF QUALITY ASSURANCE AND QUALITY CONTROL

**STARS** DESIGN GROUP 





# QUALITY

- NOUN
- THE STANDARD OF SOMETHING AS MEASURED AGAINST OTHER THINGS OF A SIMILAR KIND; THE DEGREE OF EXCELLENCE OF SOMETHING; "QUALITY OF LIFE".
- THE GENERAL EXCELLENCE OF STANDARD OR LEVEL: "QUALITY BEERS".



# MEASUREMENT

- MOST IMPORTANTLY EACH CLIENT DEFINES QUALITY DIFFERENTLY AND ALTHOUGH THERE ARE CONSTANTS IN QUALITY WHICH WE WILL DISCUSS LATER, THERE ARE VARIABLES OF EXPECTATIONS AND WHAT EACH BRAND IS WILLING TO INCORPORATE INTO ITS PRODUCT AS A DIRECT REFLECTION OF VALUE AND PRICE POINT TO THE CLIENT.
- INFORMATION SUCH AS THIS HELPS TO DEFINE CRITERIA AND MANUFACTURING TO ENSURE SATISFACTION.



# STARS LEGACY

- STARS EXECUTIVES HAVE PRODUCED AND SERVED AS CONSULTANTS OR EMPLOYEES OF MAJOR APPAREL AND ACCESSORY COMPANIES OVER THE PAST 30 YEARS.
- OUR TEAM HAS EFFECTIVELY DONE BUSINESS IN OVER 58 COUNTRIES GLOBALLY.
- THE STARS FACTORY NETWORK IS BENCHMARKED TO BE MODERATE TO BETTER DEPENDING ON THE CLIENT'S DESIRE.
- EMPLOY YEARS OF EXPERIENCE TO DEFINE A PRODUCTION PLAN AND INDEPENDENT QA PROGRAM WITH UNITED LABORATORIES (1894) TO ENSURE PRODUCT COMPLIANCE.
- ANNUAL UNIT SHIPPING GLOBALLY IS IN THE MULTIPLE MILLIONS OF UNITS, AND SINCE THE EMPLOYMENT OF UL OVER FOUR YEARS AGO, COMPANY DILUTION DUE TO QUALITY ISSUES IS LESS THAN 4/10 OF ONE PERCENT.
- STARS HAS SHIPPED TO MULTIPLE CLIENTS TENS OF MILLIONS OF UNITS SINCE THE IMPLEMENTATION OF OUR GLOBAL CONTRACT IN 2008 WITH UL-STR WITH LESS THAN 4/10 OF ONE PERCENT IN RETURNS DUE TO THE QUALITY.
- OUR RELATIONSHIPS WITH CLIENTS ARE LONG TERM, DURING THESE LONG PERIODS SOME FACTORIES AND MILL'S PERFORMANCE CAN DETERIORATE AND CAUSE ISSUES WITH PRODUCT AND DELIVERY. TYPICALLY THIS IS CAUGHT EARLY IN THE PROCESS OR OCCASIONALLY IN THE EXAM STAGES. STARS DESIGN GROUP IS NIMBLE TO WORK SOLUTIONS WITH ITS CLIENT PARTNERS IN MANUFACTURING TO WORK THROUGH THE RARE OCCURRENCE.
- PRODUCTION GLOBALLY IS NOT PERFECT, AND EVEN WITHIN THE PERCENTAGE LISTED ABOVE, AND DESPITE ALL THE STEPS TO ENSURE QA, ISSUES HAVE OCCURRED, AND STARS AND ITS FACTORY NETWORK HAVE STOOD BEHIND THE PRODUCT TO RESOLVE ANY ISSUES.





# QA ASSURANCE

- UNITED LABORATORIES AND STARS DESIGN GROUP HAVE ENJOYED A CLOSE WORKING RELATIONSHIP SINCE 2008.
- STARS HAS UNITED LABORATORIES INSPECT 100% OF ALL STYLES THAT LEAVE FOREIGN PORTS, UNDER MILITARY DESIGNED AQL SYSTEM AT 2.5/4.0 LEVEL.
- UNITED LABORATORIES PROVIDES STARS COMPREHENSIVE REPORTS PRIOR TO ANY PRODUCT LEAVING A MANUFACTURING FACILITY.
- A LARGE MAJORITY OF THE FABRIC IS ALSO TESTED THROUGH UL TO MEET CLIENT REQUIREMENTS.
- STARS PRE-PRODUCTION AND PRODUCTION PLAN FURTHER ENSURES THAT THE CUSTOMERS QUALITY EXPECTATIONS ARE MET.
  - APPROVAL SAMPLES IN THE CLOSEST AVAILABLE ARE PROVIDED TO REVIEW STITCHING DETAILS, PATTERN REVIEW, ADDITIONAL REINFORCING ELEMENTS DISCUSSED AND ADDED, ETC.
  - ALL ELEMENTS ARE SENT FOR APPROVAL - LAB DIPS, TRIMS, ACCESSORIES
  - PRE-PRODUCTION SAMPLES ARE SENT FOR OVERALL FINAL REVIEW TO CONFIRM THAT ALL ELEMENTS THAT HAVE BEEN APPROVED ALONG THE WAY ARE INCLUDED PRIOR TO PRODUCTION. (\*THIS IS NOT THE TIME FOR DESIGN, AS FABRIC IS SCHEDULED FOR CUTTING WITHIN DAYS.

INSPECTIONS TAKE PLACE FOLLOWING SPECIFIC STANDARDS AND CRITERIA CALLED OUT IN ANSI/ASQ A3534-2-1993 AND SPECIFIC INSPECTION CRITERIA OF ANSI/ASQ Z1.4-2008, GENERAL LEVEL (II). FOLLOWING IS SAMPLE SIZE CODE LETTERS FOR INITIAL CRITERIA TO ENSURE SAMPLE LOT SIZE REFLECTS FULL PRODUCTION LOT WITH SIMILAR RESULTS

CODE  
LETTERS

Table I—Sample size code letters

(See 9.2 and 9.3)

Lot or batch size	Special inspection levels				General inspection levels		
	S-1	S-2	S-3	S-4	I	II	III
2 to 8	A	A	A	A	A	A	B
9 to 15	A	A	A	A	A	B	C
16 to 25	A	A	B	B	B	C	D
26 to 50	A	B	B	C	C	D	E
51 to 90	B	B	C	C	C	E	F
91 to 150	B	B	C	D	D	F	G
151 to 280	B	C	D	E	E	G	H
281 to 500	B	C	D	E	F	H	J
501 to 1200	C	C	E	F	G	J	K
1201 to 3200	C	D	E	G	H	K	L
3201 to 10000	C	D	F	G	J	L	M
10001 to 35000	C	D	F	H	K	M	N
35001 to 150000	D	E	G	J	L	N	P
150001 to 500000	D	E	G	J	M	P	Q
500001 and over	D	E	H	K	N	O	R

Table II-A—Single sampling plans for normal inspection (Master table)

(See 9.4 and 9.5)

Sample size code letter	Sample size	Acceptance Quality Limits, <i>AQLs</i> , in Percent Nonconforming Items and Nonconformities per 100 Items (Normal Inspection)																											
		0.010	0.015	0.025	0.040	0.065	0.10	0.15	0.25	0.40	0.65	1.0	1.5	2.5	4.0	6.5	10	15	25	40	65	100	150	250	400	650	1000		
		Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re	Ac	Re
A															↓	0 1	↓		1 2	2 3	3 4	5 6	7 8	10 11	14 15	21 22	30 31		
B													↓	0	↑	↑	↓	1	1 2	2 3	3 4	5 6	7 8	10 11	14 15	21 22	30 31	44 45	
C													↓	0	↑	↑	↓	1	2 3	3 4	5 6	7 8	10 11	14 15	21 22	30 31	44 45	↑	
D	8												↓	0 1	↑	↑	↓	1 2	2 3	3 4	5 6	7 8	10 11	14 15	21 22	30 31	44 45	↑	
E	13												↓	0 1	↑	↑	↓	1 2	2 3	3 4	5 6	7 8	10 11	14 15	21 22	30 31	44 45	↑	
F	20											↓	0	↑	↑	↓	2 3	3 4	5 6	7 8	10 11	14 15	21 22	↑	↑	↑	↑	↑	
G	32											↓	0 1	↑	↑	↓	3 4	5 6	7 8	10 11	14 15	21 22	↑	↑	↑	↑	↑	↑	
H	50										↓	0 1	↑	↑	↓	2 3	3 4	5 6	7 8	10 11	14 15	21 22	↑	↑	↑	↑	↑	↑	
J	80										↓	0 1	↑	↑	↓	2 3	3 4	5 6	7 8	10 11	14 15	21 22	↑	↑	↑	↑	↑	↑	
K	125										↓	0 1	↑	↑	↓	3 4	5 6	7 8	10 11	14 15	21 22	↑	↑	↑	↑	↑	↑	↑	
L	200										↓	0 1	↑	↑	↓	3 4	5 6	7 8	10 11	14 15	21 22	↑	↑	↑	↑	↑	↑	↑	
M	315										↓	0 1	↑	↑	↓	3 4	5 6	7 8	10 11	14 15	21 22	↑	↑	↑	↑	↑	↑	↑	
N	500										↓	0 1	↑	↑	↓	3 4	5 6	7 8	10 11	14 15	21 22	↑	↑	↑	↑	↑	↑	↑	
P	800										↓	0 1	↑	↑	↓	3 4	5 6	7 8	10 11	14 15	21 22	↑	↑	↑	↑	↑	↑	↑	
Q	1250										↓	0 1	↑	↑	↓	3 4	5 6	7 8	10 11	14 15	21 22	↑	↑	↑	↑	↑	↑	↑	
R	2000										↓	0 1	↑	↑	↓	3 4	5 6	7 8	10 11	14 15	21 22	↑	↑	↑	↑	↑	↑	↑	

↓ = Use the first sampling plan below the arrow. If sample size equals, or exceeds, lot size, carry out 100 percent inspection

↑ = Use the first sampling plan above the arrow.

Ac = Acceptance number.

Re = Rejection number.



CRITICAL DEFECT: ANY DEFECT OR FEATURE OF THE PRODUCT THAT MAY POSE A SAFETY HAZARD TO THE CUSTOMER OR END-USER. ZERO TOLERANCE WILL BE APPLIED TO THE ACCEPTABLE QUANTITY OF CRITICAL DEFECTS FOUND WITHIN A SHIPMENT.

MAJOR DEFECT: ANYTHING THAT ADVERSELY AFFECTS THE APPEARANCE, PERFORMANCE INCLUDING FIT OR CUSTOMER SATISFACTION, TO A DEGREE THAT WOULD PROVIDE A DISCERNING CUSTOMER WITH JUSTIFICATION OF NON-PURCHASE, A RETURN, OR COMPLAINT.

MINOR DEFECT: ANY VARIATION FROM THE STANDARD THAT IS NOT SUFFICIENT IN DEGREE TO BE CLASSIFIED AS MINOR, AND THAT WOULD NOT PROVIDE A DISCERNING CUSTOMER WITH JUSTIFICATION FOR NON-PURCHASE, A RETURN, OR A COMPLAINT.

# DEFINITION OF DEFECTS IN INSPECTION





**APPENDIX B**  
**GARMENT AND FABRIC DEFECTS**

I.	<u>Fabric</u>	<u>MAJOR</u>	<u>MINOR</u>
	§ Substitution of body fabric	X	
	§ Flaws occurring (self color/ground color vs. contrasted) in focal point of garment	X	
	§ Different color threads not matching body color that are woven into garment	X	
	§ Slubs of any length of contrast color to garment is not acceptable	X	
	§ Slubs over 3" in length and runs over 1" in length are <u>not acceptable</u> in these areas of any garment:		
	Center front area of garment	X	
	Center back area of garment	X	
	Above the knee (pants / skirts) front	X	
	Above the thigh (pants / skirts / shorts) back	X	
	§ Slubs up to 3" in length and runs over 1" in length are <u>acceptable</u> in these areas of a garment		
	Side areas		X
	Under sleeve		X
	Inside pieces		X
	§ Dye streaks within fabric	X	
	§ Improper plaid matches and plaid balancing	X	
	§ Crocking of color	X	
	§ Holes in any location in garment	X	
II.	<u>Cleanliness</u>		
	§ Stains, soil, water spots	X *note 1	
	§ Markings, chalk, etc.	X	
	§ Odor, mildew, bacteria	X	
	§ Sewing machine oil spots	X	
	§ Grease of any kind	X	
III.	<u>Trimming</u>		
	§ Untrimmed threads / loose threads	X *note 2	
	§ Incorrect or substituted trim items	X	
	§ Loose or missing buttons on trim items (pearls, sequins, etc)	X	
	§ Thread color must match garment color	X	

\* Note 1: Depending on location, soil may be a minor defect.

\* Note 2: Depending on location and severity, loose threads may be a minor defect.

**APPENDIX B**  
**GARMENT AND FABRIC DEFECTS**

IV.	<u>Seams and Stitches</u>	<u>MAJOR</u>	<u>MINOR</u>
	§ Twisted, puckered or pleated seams	X	
	§ Open seams or broken stitches	X	
	§ Wrong color thread	X	
	§ Skip, cut or broken stitches	X	
	§ Excessively loose tension (such that seams permit "see-through" to body when worn)	X	
	§ Part of garment caught in any unrelated operation or stitching	X	
	§ Raw edges are never permitted (blind stitch hems must be over locked)	X	
V.	<u>Front and Back</u>		
	§ Front buttons and buttonholes out of alignment		X
	§ Fronts uneven at bottom in excess of ¼"		X
	§ Under facing shows on the top side of the garment		X
	§ Pockets conspicuously uneven in location, shape, or size		X
	§ Darts uneven in length by an excess of ¼"		X
	§ Hemline of skirt, dress, pant legs, shorts, if off from front to back or back to front by ½" or more		X
VI.	<u>Zippers</u>		
	§ Irregular stitching that results in obviously crooked opening over zipper teeth		X
	§ Crooked or uneven placket or fly top-stitching		X
	§ Broken zipper		X
VII.	<u>Buttons and Buttonholes</u> (parts placement or function)		
	§ Omitted		X
	§ Uncut buttonhole		X
	§ Misplaced		X
	§ Wrong style, color, size		X
	§ Out of alignment or improperly spaced such that distortion results		X
	§ Obvious buttonhole ragged edges caused by cutting with dull knife		X
	§ One or more broken stitches in one or more buttonholes		X
	§ Buttons not sewn on fully and securely		X
	§ Broken or damaged button		X



**APPENDIX B**  
**GARMENT AND FABRIC DEFECTS**

		<u>MAJOR</u>	<u>MINOR</u>
VIII.	<u>Belt Loops/Belts</u>		
	§ Omitted	X	
	§ Belt loop not fully secured	X	
	§ Conspicuously crooked belt loop	X	
	§ Uneven size or shape	X	
	§ Mis-sewn	X	
	§ Quantity must be as specified	X	
	§ Belt loops incorrectly placed in excess of ¼"	X	
IX.	<u>Patch Pockets</u>		
	§ Poorly shaped	X	
	§ Mis-aligned / hi-low pockets out of alignment more than ¼"	X	
	§ Wrong placement	X	
	§ Exposed drill holes	X	
X.	<u>Sleeves</u>		
	§ Reversed	X	
	§ Sleeve plackets must be even and uniform on both sleeves	X	
	§ Cuffs reversed	X	
XI.	<u>Plackets</u>		
	§ Must be centered	X	
	§ Button/button holes must be aligned properly	X	
XII.	<u>Labels</u>		
	§ Missing	X	
	§ Must be neatly and securely attached	X	
	§ Proper label per garment (care, content labels)	X	





# REVIEW STR REPORT

POLARIS BORREGO RACER TEE-NIKE  
CERTIFIED FACTORY





# BENCHMARKING AND DEFINING LEVELS

## LIFESTYLE APPAREL

- HAS BASIC COMPONENTS TO ENSURE QUALITY IS ACHIEVED FOR LIFESTYLE PRODUCTS.
- THE PRODUCT IS NOT OVER-ENGINEERED IN THIS AREA. IT IS ENGINEERED TO ACCOMPLISH THE NEED FOR GENERAL WEARING APPAREL.
- MORE EMPHASIS ON PROMOTING THE BRAND AND ITS LEGACY AND HERITAGE, NOT INTENDED FOR HIGH-PERFORMANCE USE.

## PERFORMANCE PRODUCT

- FUNCTION OVER FORM
- SPECIFIC TECHNICAL DETAILS IN THE DEVELOPMENT OF THE PRODUCT ARE CONSIDERED FOR THE CONDITIONS OF THE WEARING APPAREL.
- TYPICALLY A LOT OF FOCUS IS ON SPECIFIC THREADS, FABRICS, AND COMPONENTS TO ENSURE LONG-TERM USE IN THE SPECIFIC CLIMATES OR CONDITIONS OF THE PRODUCT'S FOCUSED USE ARENA.