

PAKISTAN NAVY SPECIFICATION 11/2021 PROMULGATION DATE: 31 AUGUST 2021

KHAKI CLOTH FOR DRESS KHAKI (FOR PNP, FIRE BRIGADE AND BOAT POOL PERSONNEL)

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PROMULGATION ORDER

- 1. This specification is hereby approved and promulgated for information, guidance and compliance by the relevant person.
- 2. The details contained in the specification are to be studied, interpreted and implemented with due regards to the interest of the Service.

SUGGESTIONS FOR AMENDMENT

1. The specification has been prepared to bring the test methods and procedures in line with up-to-date PN requirements and facilities held in Pakistan. CINS may request to amend any test requirement/ test procedure in light of the experience emanating from its inspection history, through the feedback form placed at Annex E. However, such an alteration will be effective when the amendment is promulgated by this Directorate, and will be effective on the contracts which materialize after the promulgation date of respective amendment.

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PN SPECIFICATION NO 11/2021 **RECORD OF CHANGES/ AMENDMENT**

Amd No	Date	Letter of amendment and description	Signature and Date
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PN SPECIFICATION 11/2021 (KHAKI CLOTH)

0101 **DESIGNATION**

Khaki Cloth for Dress Khaki.

0102 **USAGE**

1. Khaki Cloth is used for Khaki Dress of PNP Fire Brigade and Boat pool Personnel.

0103 **INTRODUCTION**

- 1. This specification is prepared by Directorate of Indigenous Technical Development, Karachi, to provide necessary guidance to the potential manufacturers/ suppliers of the items mentioned herein. This specification is to be used for testing and deciding upon acceptance, or otherwise, of the items mentioned. Any alteration or addition in this specification can be suggested to ITD wing (NRDI). However, it cannot be implemented without prior approval from DNS. This specification supersedes and replace PN Specification No PN/UNIFORM/07/2000 dated 13 Jul 00 and PN UNIFORM.SPECIFICATION 32 A & 32B/ 2004 dated 12 Aug 2004 and all other specifications promulgated earlier in relation to the item mentioned herein.
- 2. This specification booklet includes 05 Annexes and consists 22 pages, including the cover.

0104 **SCOPE**

- 1. This specification covers the technical/ manufacturing requirements of Khaki Cloth for Dress Khaki of PNP Fire Brigade and Boat Pool Personnel. It defines and lays down the quality standards, details of materials, workmanship and finish. It also defines briefly requirement and process of sampling, testing, inspection acceptance/ rejection, marking, preservation, packing and delivery etc.
- 2. The supplier/ manufacturer shall comply in every respect with the terms of this specification and ensure that the stores conform to it, in all respects.

0105 **RELATED DOCUMENTS**

1. The latest standards documents that have been referred to in this specification are:

a.	AATCC-20 A	Fiber Analysis –Qualitative.	
b.	AATCC-79:2007	Water absorbency (Drop test)	
C.	AATCC 128-2009	Method for calculating Wrinkle recovery	
d.	ISO 7211/2	Number of treads per unit length	
e.		Determination of linear density of yarn	
		removed from fabric.	
f.	ISO 3801	Determination of Mass per unit Length	
g.	ISO 13934-1	Determination of Tensile strength	

ISO 13937-1	Determination of Tear strength
ISO 9237	Determination of Air permeability
ISO 3071	Determination of PH level
ISO 105-E01	Colour fastness to water.
ISO 105 E02	Colour fastness to sea water
ISO 105 C-03	Colour fastness to washing
ISO 105 X 12	Colur fastness to Rubbing
ISO 105 E04	Colour Fastness To Perspiration
ISO 105-B02/BS 1006	Colour Fastness To Light
ISO 7211/1	Identification of Weave
ISO 6330	Dimensional stability
BS EN ISO-12945-2	Determination of fabric propensity to surface
	fuzzing and to pilling
BS EN ISO-12947-2	Determination of the abrasion resistance of
	fabrics
BS EN 22313-1992	Determination of Crease recovery
BS ISO-16322-1	Determination of Skewness
	ISO 3071 ISO 105-E01 ISO 105 E02 ISO 105 C-03 ISO 105 X 12 ISO 105 E04 ISO 105-B02/BS 1006 ISO 7211/1 ISO 6330 BS EN ISO-12945-2 BS EN 22313-1992

0106 TERMS & DEFINITIONS

1. Definitions for the terms used in this standard are given at Annex A of this specification.

0107 <u>TECHNICAL DETAILS OF KHAKI CLOTH FOR DRESS KHAKI</u>

1. The Technical Details of Khaki Cloth for Dress Khaki are mentioned at Annex B of this specification.

0108 MANUFACTURING GUIDE LINES OF KHAKI CLOTH FOR DRESS KHAKI

- 1. The Cloth of Dress Khaki shall be twill woven from 59 inch width, under uniform tension with firm and regular selvedges.
- 2. Yarn of Khaki Cloth for Dress Khaki should be manufactured from combed fibers.
- Khaki Cloth of Dress Khaki shall be free from weaving defects.
- 4. The amount of size shall be minimum possible and no weighting material shall be used.
- 5. The cloth of Dress Khaki shall be properly singed, desized, scoured and bleached before dyeing and said process should have no deleterious effect on cloth.
- 6. Fastness properties of Khaki Cloth for Dress Khaki is as per Annex B.
- 7. Scouring loss should not be more than 02%.
- 8. Khaki cloth for Dress Khaki should be mercerized and sanforised.

9. Fabric should be dyed with vat dyes and should comply OEKO Tex standards which are not harmful for human body having good fastness properties.

Note: Dyeing of the fabric should be done with the dyes having high fastness properties. Good quality of dyes from good manufacturer CIBA, Clariant, SDC or equivalent are to be used for dyeing of fabric.

0109. **QUALITY OF WORKMANSHIP AND FINISHING**

1. The Workmanship and finish of Khaki cloth for Dress Khaki shall be best in quality and to the entire satisfaction of the Inspector.

0110. **TESTING**

1. The stores/ material during manufacturing and after delivery shall be tested and examined as the Inspector may consider necessary in order to determine whether they conform to Annex B of this specification. Inspecting authority reserves the right to get any B/R samples tested from any reputable Laboratory other than PN. However, any test considered important by inspecting Authority.

0111 BULK REPRESENTATIVE SAMPLES OF KHAKI CLOTH FOR DRESS KHAKI

1. No of samples drawn from bulk quantity/ offered store are as per instruction of Inspecting Officer or according to following table for the Inspection/ testing:

Lot Size[(yards (0.91m)]	No. Sample x 02 meters each
300 ≥800	02
801≥22000	03
22001and over	05

0112 <u>ADVANCE SAMPLE OR PRE-PRODUCTION SAMPLE OR TENDER</u> SAMPLE

- 1. Advance sample or pre-production or tender sample, when required, shall be submitted in accordance with terms of the contract for inspection, as per Annex B, C and D and approved by CINS.
- 2. Whenever Tender, Advance or pre-production sample is not required, the suppliers/ manufacturer are advised in their own interest to submit to the Inspecting Officer or his representative an initial delivery of One % of the contract or 10 meters for inspection and testing.
- 3. The approval of advance or pre-production sample, authorizes the commencement of bulk production but does not relieve the suppliers/manufactures from compliance with all the provisions of this specification. One approved sample shall be properly sealed by INS and returned to the firm for guidance; rest of the approved sample shall be retained by INS for future use in bulk Inspection (if deemed necessary).

- 4. The Pre-production sample shall be manufactured by the manufacturer with the same facilities which will be used for manufacturing of the bulk items.
- 5. Firm shall provide advance sample along with quality verification reports from an accredited laboratory, whenever asked/ required by Inspecting authority to ensure compliance of quality assurance parameters during production/ final internal inspection.

0113. **INSPECTION**

- 1. Bulk representative sample (B/R) random sampling will be carried out as per rules in vogue.
- 2. Khaki Cloth for Dress Khaki shall be tested and examined during manufacturing/ stage inspection as Inspector may consider necessary, to determine whether they conform to PN specification or not.
- 3. <u>Inspection of Dress Khaki for PNP Fire Brigade and Boat Personnel.</u> The guidelines for Inspector w.r.t general defects are defined at Annex C. and Inspection Criteria is defined at Annex D. The Khaki Cloth for Dress Khaki shall be examined to ensure correctness of material, shade width evenness of dyes and other constructional details.
- 4. <u>Inspection/ Acceptance and Rejection of Stores</u>. Inspection/ acceptance is to be carried out to the entire satisfaction of Chief Inspector of Naval Stores or as per instruction/ procedure laid down in unit/ department Order.
 - a. Stamping of accepted stores: Each acceptable store shall be stamped with Inspectors individually acceptance mark close to contactor marking.
 - b. Stamping of rejected stores: The rejected stores shall be marked with inspectors rejection mark close to contractor marking to avoid resubmission by the supplier.
- 5. If on examination of 5% of any delivery, 20% of those examined from bulk supply are found NOT CONFORMING to this specification in respect of the pattern, dimensions, workmanship and finish, the whole consignment may be rejected without any compromise.
- 6. All stores and packing NOT fully in accordance with this specification shall be rejected.
- 7. **Responsibility for Inspection.** The supplier is responsible for the performance of all inspection requirements (examinations and tests) as specified herein. PN reserves the right to perform any of the inspections set forth in the specification where such inspections are deemed necessary to ensure supplies and services conform to prescribed requirements.
- 8. Responsibility for Compliance. The inspection set forth in this specification shall become a part of the supplier's overall inspection system or

quality program. The absence of any inspection requirements in the specification shall not relieve the contractor of the responsibility of ensuring that all products or supplies submitted to PN for acceptance comply with all requirements of the contract. Sampling inspection, as part of manufacturing operations, is an acceptable practice to ascertain conformance to requirements. However, this does not authorize submission of known defective material, either indicated or actual, nor does it commit PN to acceptance of defective stores (material).

- 9. **Replacement by the Contractor.** The supplier is responsible for replacement of the consignment or any part thereof, whenever it is found to be not conforming to this specification. The supplies so tendered in replacement, shall be subjected to testing/ Inspection and acceptance by the Inspecting Officer.
- 10. <u>Responsibility for Safety</u>. The supplier/ manufacturer is fully responsible for the safety of supplies during inspection, storage at firm's premises, proper packing, dispatch and delivery up to consignee.
- 11. The CINS is the authority in all matters pertaining to Inspection.

0114. **SPECIAL INSTRUCTIONS**

- 1. <u>Care Label Instructions</u>. Following care instructions in the form of leaflet OR attached with Khaki Cloth for Dress Khaki shall be provided in English and Urdu:
 - a. Washing procedure i.e. gentle cycle machine wash
 - b. Ironing procedure i.e. Warm iron
 - c. Drying procedure i.e. Air dry
 - d. Any prohibition i.e. Do not bleach and dry clean etc.

0115. PACKING AND PRESERVATION DETAILS

- 1. Quality of packing shall be examined/ tested as the Inspector may consider necessary in order to determine whether they conform to this specification.
 - a. **Packing** The store when ordered to be delivered 'PACKED' shall be distributed evenly in each bolt.
 - (1) Khaki Cloth for dress Khaki shall be delivered in the form of bolt.
 - (2) Cloth for Dress Khaki shall be packed in a neat, dry and clean condition in polyethylene bag of 0.005 (0.127 mm) prior delivery to Depo/ consignee.
 - (3) The Polythene shall be of sufficient size to ensure cloth of Dress Khaki are protected.
 - (4) Packing, marking and preservation will be done by the supplier as per specification and with adhesive tape of 10cm width of the best quality.

b. <u>Packing Slip.</u> A Packing Slip shall be enclosed in each package giving full details about the store packed i.e. Cat No. designation, quantity packed, contract No, Challan No and date I/Note No or Voucher No. and date, consignee, consignor, date of packing and packer's signature, Package No and weight of the individual Package.

0116. **IDENTIFICATION LABEL**

- 1. Khaki Cloth for Dress Khaki shall bear following clear and indelible information on both ends:
 - a. Item name/ item description with size and NSN/ patt no.
 - b. Contract number and Date.
 - c. Year of manufacture.
 - d. Firm's name, initials, or trade mark.
 - e. Batch no.

Note: The portion of Khaki Cloth for Dress Khaki, marked as per Identification Label will not be taken in to account while measuring length. Manufacturer should, therefore, mark all pieces weft way and nearest to the end.

0117. PACKING LIST

1. Firm is bound to provide a packing list of store offered for inspection along with the challan, which include complete details about the store i.e. Pattern No., Description of stores, size, quantity, contract No., and Date, Challan No. date and I/ Note No. or voucher no. and date, consignee, Manufacturer/ firm's name, date of packing and packer's signature, QA certificate/ Lab test report from any accredited lab.

0118. MARKING OF STORES

- 1. Each bolt of Khaki Cloth for Dress Khaki will stenciled with quick drying Black indelible ink/ print in clearly define characters as per followings:
 - a. On Front and Top:
 - Consignee Address.
 - (2) Contract No and date.
 - (3) Description of Stores Packed and NSN/Patt No.
 - (4) Stowage / Stacking Instructions.
 - (5) Quantity of the Item packed.
 - (6) Signature along with stamp of Packaging Manager/ rep of firm.
 - b. On Back:
 - (1) Manufacturers name / Firm's name.
 - (2) Voucher No. or Inspection note no. and date.
 - (3) The No. of individual Package and the total No of Packages
 - in the consignment joined by the word 'of 'e.g. 2 of 300.
 - (4) Weight of the package.
 - (5) Month and year of packing.
 - (6) Destination i.e. Railway station/ (Navy).

0119. **DELIVERY**

- 1. The consignment of store will be delivered in accordance with the terms of contract.
- 2. The store shall be delivered in Brand new, clean and dry condition.
- 3. The contractor/ manufacturer is fully responsible for the safety of the supplies during inspection, stage inspection, storage at firm's and consignee premises, proper packing, dispatch and delivery up to consignee.

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ANNEX A TO PN SPECIFICATION NO.11/2021 PROMULGATION DATE 31 AUG 21

TERMS & DEFINITIONS

- a. <u>CINS</u>: Chief Inspector of Naval Stores
- b. **DITD:** Directorate of Indigenous Technical Development
- c. **DNS**: Directorate of Naval Store.
- d. **PNCSD:** Pakistan Navy Clothing Store Depot
- e. **PNCTA**: Pakistan Navy Central Testing Authority
- f. **PNP**: Pakistan Naval police
- g. <u>Inspector</u>: The term inspector shall include the "inspection Authority", inspecting officer and their representatives, duly authorized for the purpose of discharging inspection duties involved.
- h. <u>Inspection Authority</u>: Chief Inspector of Naval Stores (CINS). His verdict in respect of Sealed Inspection matters is to be taken as final.
- j. <u>Inspecting Officer</u>: An officer nominated by the CINS for carrying out inspection of stores supplied by the supplier, against a specified contract or order, in accordance with the particulars stipulated therein.

ANNEX B TO PN SPECIFICATION NO 11/2021 PROMULGATION DATE 31 AUG 21

TECHNICAL DETAILS OF KHAKI CLOTH

<u>8</u> 1	<u>10</u>	<u>ITEM</u>	TEST	REQUIREMENT	<u>s</u>
	<u> </u>		<u>METHODS</u>		
1.	Bas	e Fabric		Shirt	Trouser
	a.	Material	AATCC 20A	100% Combed	100% Combed
				cotton	cotton
	b.	Shade/ Colour	Visual analysis	TCX: 16-0726	TCX: 16-0726
	C.	Weave	ISO 7211/1	2x1 Twill	3x1 Twill
	d.	Nature of Dyes	Chemical analysis	Vat dye	Vat dye
	e.	Weight (gm/sq.mtr)	ISO-3801	185 gm ± 10 gm	245 gm ± 10 gm
	f.	Finish	Chemical analysis	Mercerized & Sanforised	Mercerized & Sanforised
	g.	Finish width	Physical analysis	59" ± 1"	59" ± 1"
	h.	No of Thread/ 2.54 cm	ISO 7211/2		
		(1) Warp		84 ± 5	108 ± 5
		(2) Weft		54 ± 5	60 ± 5
	j.	Linear Density (Ne) (1) Warp	ISO 7211/5	20- 1 2	20- 1 2
		(1) Warp(2) Weft		20s ± 2 20s ± 2	20s ± 2 16s ± 2
2.	Bas	e Fabric Performance Testing	<u> </u>	Shirt	Trouser
	a.	Pilling resistance after 5,000 cycles	BS EN ISO- 12945-2	4 or better	4 or better
	b.	Abrasion resistance after	BS EN ISO-	No thread	No thread
		6,000 cycles	12947-2	breakage	breakage
	C.	Air permeability (mm/sec @ 100pa)	ISO 9237	Minimum 250	Minimum 100
	d.	PH level	ISO 3071	5-8	5-8
	e.	Water absorbency (Drop test)	AATCC- 79:2007	10 sec ± 01 sec	10 sec ± 01 sec
	f.	Appearance after 5-10	ISO 6330	GS: 4 or	GS: 4 or
		washes (3A) with tumble dry		Satisfactory	Satisfactory
	g.	Tensile strength (N)	ISO 13934-1-		
		(1) Warp	1999	1000 ± 100 N	1200 ± 100 N
		(2) Weft		550 ± 50 N	850 ± 50 N

	h.	Tear strength (N)	ISO 13937-1		
	11.	(1) Warp	130 13937-1	20 . F.N.	35 ± 5 N
		. ,		30 ± 5 N	35 ± 5 N
		(2) Weft	DC 100 40000	30 ± 5 N	
.	j.	Skewness	BS ISO-16322-	±2%	±2%
			1		
	k.	Dimensional stability after 3N	ISO 6330		
		(1) Warp		± 2%	± 2%
		(2) Weft		± 2%	± 2%
	l.	Wrinkle recovery	AATCC 128-	Minimum 2	Minimum 2
			2009		
	m.	Crease recovery	BSEN 22313-		
		(1) Warp	1992	60% ± 5%	60% ± 5%
		(2) Weft		60% ± 5%	60% ± 5%
	n.	Color Fastness		0070 = 070	
	•••				
		(1) To Water	ISO-105-E01		
		(a) Change in	130-103-201	4 or better	4 or better
		shade			
		(b) Staining			
		i. Wool		4 or better	4 or better
		ii. Acrylic		4 or better	4 or better
		iii. Polyester		4 or better	4 or better
		iv. Nylon		4 or better	4 or better
		v. Cotton		4 or better	4 or better
		vi. Acetate		4 or better	4 or better
		(2) To Sea Water	ISO-105-E02		
		(a) Change in		4 or better	4 or better
		shade			
		(b) Staining			
		i. Wool		4 or better	4 or better
		ii. Acrylic		4 or better	4 or better
		iii. Polyester		4 or better	4 or better
		iv. Nylon		4 or better	4 or better
		v. Cotton		4 or better	4 or better
	}	vi. Acetate	100 105 010	4 or better	4 or better
		(3) To Washing	ISO 105 C10	4 - 1 - 11	1 or bottor
		(a) Change in shade	C(3)	4 or better	4 or better
		(b) Staining			
		i. Wool		4 or bottor	4 or better
		ii. Acrylic		4 or better 4 or better	4 or better
		iii. Polyester		4 or better	4 or better
		iv. Nylon		4 or better	4 or better
		v. Cotton		4 or better	4 or better
		vi. Acetate		4 or better	4 or better
	}	(4) To Perspiration	ISO 105-E04	1 OI DOLLOI	
		(a) Change in	100 100-204		
		shade		4 or better	4 or better
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	(b) Staining i. Wool			
	ii. Acrylic iii. Polyester iv. Nylon v. Cotton vi. Acetate		4 or better	4 or better
			4 or better	4 or better
(5)	To Light	BS 1006-1990	4 or better	4 or better
(6)	To Rubbing	ISO-105-X12		
	(a) Dry (b) Wet		4 or better 4 or better	4 or better 4 or better

ANNEX C TO PN SPECIFICATION NO 11/2021 PROMULGATION DATE 31 AUG 21

GENERAL DEFECTS (ASTM D-3990)

S. No	<u>Defects</u>	<u>Definition</u>
FABRI	<u>C</u>	
a.	Abrasion Mark (bruise, Chafe Mark or rub)	An area of fabric damaged by friction Damaged due to abraded or uneven surface in a machine
b.	Baggy or wavy cloth	Cloth that will not lie flat on a Cutting Table Tight or loose yarn either in warp or filling (weft)
c.	Barré Mark	An unintentional, repetitive visual pattern of continuous bars and stripes usually parallel to the filling of woven fabric. Barré can be caused by physical, optical, or dye differences in the yarns, geometric differences in the fabric structure, or by any combination of these differences.
d.	Blotch,	An off colored area of any shape caused by grease or Oil. (Syn. oil spot). Cause due to leakage/slippage .from machine.
e.	Bow	A fabric condition resulting when filling yarns are displaced from a line perpendicular to the selvages and form one or more arcs across the width of fabric.
f.	Broken filament	In multifilament yarn, breaks in one or more filaments.
g.	Clip mark	An open place causing a streak of variable length approximately parallel of the length of width.
h.	Decanting Mark	A crease marks or impression extending across the cloth near the beginning or end of a piece Due to the thickness of the fabric leader seam.
j.	Double Pick	In woven fabrics, two picks wrongly place in the same shade.
k.	Draw Back	A weave distortion characterized by tight and stack places in the same warp yarn.
l.	End out	A void caused by a missing warp yarn.
m.	Float	In woven fabrics, the portion of a warp or filling yarn that extend unbound over two or more warp or filling yarns.

	T	
n.	Filling Band	In woven fabrics, visual defect across the width due to a change occurring in the yarn for a large
		number of picks.
p.	Frosting	A change in color in a limited area of fabric cause by abrasive wear.
q.	Hole	In fabric, imperfection, wear one or more yarn or
۹٠	Tiole	sufficiently damaged to create an aperture.
	F	
r.	Fuzzy	Characterized by a hair appearance due to
		protruding broken fibers or filaments.
S.	Let-off Mark	In woven fabrics, a corrugated defect pattern
		distributed across the fabric width.
t.	Loom fly	Waste fibers create during weaving that are woven
		into a fabric.
u.	Loop Salvage	An improperly woven salvage of uneven width or a
۵.	_cop calvage	salvage containing irregular filling loops extending
		beyond the outside edges.
	Messiness	
٧.	Wessiness	Surface distortion in a fabric characterized by
		objectionable unevenness due to many minor
		deformations.
W.	Pin Hole	In fabric, a very small hole, approximately the size
		of the across section of the pin.
X.	Pin Mark	A series of holes near the edge parallel with the
		lengthwise direction of a fabric caused by the
		holding devise on the pin tender frame.
у.	Read Mark	In woven fabric, a creak between groups of warn
у.	Read Mark	ends, either continues or at intervals.
_	Spollened Solvege	
Z.	Scalloped Salvage	An abrupt, narrow indentation in the salvage.
aa.	Salvage Mark	In finished cloth, a lengthwise crease mark along
		the salvage caused by an edge being folded or
		doubled.
ab.	Shiner	A streak, usually short caused of a lustrous section
		of filament yarn.
ac.	Smash	In woven fabrics, relatively large hole
		characterized by broken warn ends and floating
		picks.
ad.	Skew	A fabric condition resulting when filling yarns are
uu.	CROW	angularly displace from a line perpendicular to the
	0	edge or side of the fabric.
ae.	Snag	In fabrics, a yarn or part of a yarn pulled or plucked
		from the surface.
af.	Thin Place	In fabric, an intentionally in a fabric appearance
		characterized by a small area of loosely placed
		yarn or by a congregation of thin yarn as compared
		to the adjacent construction.
ag.	Tight Salvage	In woven fabrics, salvage yarn shorter than warp
_g.	9	yarn in the body of the fabric.
ah.	Streak	An extended unintentionally strips narrow width,
an.	Jugan	often a single yarn.
		Ulicii a siliyic yalli.

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aj.	Tram Mage	In woven crepes, a puckered area in which a filling
		yarn has twist running in the same direction for
		several picks instead of alternating S and Z twist.
ak.	Temple Mark	In woven fabrics, small holes or distortions
		adjacent to the salvage.
al.	Tender Mark	A visible deformation on the side edge or body of
		a fabric due to pressure for clips or pins.

ANNEX D TO PN SPECIFICATION NO 11/2021 PROMULGATION DATE 31 AUG 21

INSPECTION CRITERIA TEXTILES

- 1- The contracts will almost invariable stipulates a specification against which the store is to be inspected. Textiles and allied products not normally be accepted against DPL-15.
- 2- The following tests must be carried out before accepting a store:
 - a. Visual examination.
 - b. Full inspection
 - c. Physical tests.
 - d. Dve fastness tests
 - e. Other tests as specified
 - f. Bulk inspection (either 100% or part percentage of the supplies)
- 3. As textiles cannot be made flawless, tolerances are given for which allowances are claimed. These are listed below:
 - a. <u>Marking Allowance:</u> The manufacturer usually marks his cloth on both ends. This marked length will not be accounted for. Nevertheless the specification will stipulate the marking allowance the length of the piece/ bolt is immaterial).
 - b. **Short Piece Allowance:** Standard lengths of piece goods i.e, bolts of cloth are given below:
 - (1) Cotton- 40, 60, 80 yards ± 5%.
 - c. In case the offered bolts of cloth are below standard length, a short piece allowance will be claimed as under:
 - (1) For Cotton:
 - (a) For 30 to 39 yards, 1% allowance
 - (b) For 20 to 29 yards 2% allowance
 - (2) Lengths less than 12 yards will not be accepted
 - d. The above allowances are applicable to only 5% of the total quantity on order: i.e 95% of the offered supplies must be of standard length or above. In exceptional short piece allowance claimed will be doubled.
 - e. <u>Flag Allowance:</u> Manufacturing defects i.e. weaving and spinning flaws, handling flaws etc are almost invariably present. These flaws are marked with red thread during the course of bulk inspection. The red thread makers are called "flags"

A limited number of these "flags" are tolerated but allowance is claimed against each one major defect entails one flag.

- f. Single, minor defects, which affect appearance only but are barely discernable, are:
 - (1) Broken ends and pick: loose, stack, light, missing ends and pick: coarse ends and pick; knots, slubs, snorts, floats, light stains due to direct, oil grease, rust, etc. temple marks, shade bars.
 - (2) TWO MINOR DEFECTS = ONE MAJOR DEFECT
- g. Major defects which affect appearance and serviceability durability are;
 - (1) A multiple (i.e. 2 or more) combination of minor defects as listed **or** those that are prominent and readily apparent. To this list is added: Thick/ thin place, smash marks, damaged selvedge, cracks, and weak spots.
- h. A maximum of eight flags per piece of 40 yards will be permitted for 70% of the material offered, a maximum of 12 flags per piece 40 yards for the remaining 30% of the offered quantity. The number of flags permissible will be in direct proportion to the length of each piece e.g. for an 80 yard bolt 16 flags will be permissible.
- j. An allowance of 4 $\frac{1}{2}$ inches per flag will be claimed for the first eight flags, and 9 inches or flag for the next flags up to a maximum of 12 flags- dependent upto the actual length of the piece.
- k. On completion of bulk inspection the stores is to be packed and marked in accordance with specifications and relevant rules.
- I. Complete details of the inspection results are to be recorded on examiners slip/inspection report. This will include a list of bolts inspected their serial numbers, defects noted and allowance claimed.
- m. B/R samples are invariably to be retained fully documented and securely sealed.

ANNEX E TO PN SPECIFICATION No 11/2021 PROMULGATION DATE 31 AUG 21

FEED BACK FORM

Unit Name:	
Item Description#:	
Issue/Problem occurred:	
PN SPEC #:	
Possibility to resolve Issue:	
Any Other Remarks:	
Note:	

- It's good to give feedback for improvement in any clothing Item.
- Recurring problem will also be intimated through this form.

Name Stamp

COUNTERSIGNED By CO/Admin Authority

Name Stamp

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