



PAKISTAN NAVY SPECIFICATION 05/2023
PROMULGATION DATE: 30 OCTOBER 2023

SHOES WHITE LEATHER

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PROMULGATION ORDER

1. This specification is hereby approved and promulgated for information, guidance and compliance by all concerned.
2. Details contained in the specification are to be studied and implemented with due regard to 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 G. 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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RECORD OF CHANGES/ AMENDMENT

[illegible]

PN SPECIFICATION NO 05/2023 (SHOES WHITE LEATHER)

0101. **DESIGNATION**

1. Shoes White Leather.

0102. **USAGE**

1. These shoes will be used by Officers and CPOs for general purpose.

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 Directorate. However, it cannot be implemented without prior approval of DNS. This specification supersedes and replaces PN Specification ITD/Specs/Shoes White Leather (Oxford Style) with PVC Sole for Officers/02/09 & ITD/Specs/Shoes White Canvas (Oxford Style) with Rubber Sole for PN Officer/01/09 dated 14 Jan 2009 and PN Specifications 07/2019 dated 15 Oct 19.

2. This specification booklet includes **07** Annexes and consists of **23** pages, including the cover.

0104. **SCOPE**

1. This specification covers the technical/ manufacturing requirements of Shoes White Leather to be used by Pakistan Navy. It defines and lays down the quality, standard and details of materials, workmanship and finish. It also lays down briefly the requirement of sampling, testing, inspection/ rejection, marking, preservation, packing and delivery etc. of shoes white leather.

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 standards and documents that have been referred in this specification are:

| | | |
|----|-----------------|--|
| a. | AATCC-20 | Determination of fiber quality. |
| b. | BS 3144 | Test method to determine the thickness of leather |
| c. | BS 5131 | Test method to determine Tensile Strength |
| d. | SATRA TM 92 | Resistance of footwear to flexing. |
| e. | SATRA AM 4 | Sole Adhesion tester. |
| f. | SATRA STM 461 | Circular Rub Fastness Tester. |
| g. | BS ISO EN 20345 | Dynamic water resistance |
| h. | ISO 3801 | Determination of mass per unit length and area. |
| j. | ISO-48-2;2018 | Determination of Hardness of sole |
| k. | ASTM D 158 | Test method to determine material composition of metal |
| l. | ASTM D 523 | Standard test method for Specular gloss. |

| | | |
|----|------------|---------------|
| m. | ISO 7211/5 | Count of yarn |
|----|------------|---------------|

0106. **DEFINITIONS & ABBREVIATIONS**

1. Definitions of the used terms are given at Annex A to this specification.

0107. **TECHNICAL DETAILS OF SHOES WHITE LEATHER**

2. The Technical Details of Shoes White leather are mentioned at Annex B to this specification.

0108. **MANUFACTURING DETAILS OF SHOES WHITE LEATHER**

1. **Construction.** Shoes White Leather shall be manufactured as per shape and design defined at Annex B to D.
2. Measurement schedule of shoes/ last are indicated at Annex C to this specification.
3. Leather used in making upper shall be of good quality full Chrome Cow corrected Leather. The minimum thickness of various components of upper should be as that mentioned at Annex B to this specifications.
4. Lining used in vamp shall be of suede/ soft leather with cotton drill cloth and are bonded to the thermoplastic toe cap.
5. Good quality cotton/ polymeric material (Nylon or Polyester) round laces of 3mm thickness with plastic tip and dimensions as mentioned at Annex B should be used.
6. Insole should be permanently attached and it shall not be possible to remove it without damaging the footwear. Full socks made up of EVA/ foam sheet covered with leather/ Rexene be used that could be detachable & washable and gives cushioning effect as per medicated sole.
7. All seams should be properly hammered off and all loose ends secured properly.
8. The upper components shall be properly skived and fitted. Skiving on the grain side is prohibited and closed by lock stitching.
9. Five pairs of Eyelets of Brass White shall be fitted on each side / facing which will clinch properly without being distorted or de-shaped.
10. The counter stiffeners shall be skived properly so that no ridge is formed in the finished shoes. They shall be reinforced and made hard.
11. The insole shall be properly feathered, snuffed and molded to the bottom shape (contour) of the last.
12. The shoes shall remain on the last at least for 24 Hours.
13. Flash and spew on edge of the molding last and the surplus material on the sole and heel shall be properly trimmed off/ removed. Shoe should be oil resistant.
14. The vamp shall not develop wrinkles after pressing.

15. Edges of collar should be manufactured from turning /folding of upper leather. No binding shall be used on edges.
16. No of stitches are 09 per 2.25 cm.
17. All sizes of last should be equal to those mentioned at Annex C to this specification. While manufacturing the shoes a hard material of 3.2 mm thick is to be added on the bottom of the last in order to provide a space for inserting a detachable sock.
18. The suppliers/ manufacturer must intimate the size roll of the last/ molding foot in their possession conforming to the specified particulars and must get approval from the Inspecting Authority.
19. Details of dimensions of the specified last of various sizes i.e. from 40 to 48 are given at Annex C to this specification.

Note: A spare pair of round laces cotton (103 cm long) with plastic tip shall be supplied with each pair of shoes. Finish of tips shall be good. Moreover, Usage of nails in manufacturing of shoes White Leather shall be strictly prohibited.

0109. **QUALITY OF WORKMANSHIP AND FINISHING**

1. Workmanship and finish of the Shoes White Leather with Rubber Sole shall be equal to the approved sample/ sealed pattern. It shall be the best of its class and to the entire satisfaction of the Inspector. The Shoes White Leather with Rubber Sole shall confirm the parameters define at Annex B of this Specification and also in respect of all properties and qualities which may not be defined in this specification.

0110. **TESTING**

1. The material shall be subjected to tests laid down in this specification at Annex B and related documents. At least three pair of shoes of same or different sizes will be required to complete relevant tests mentioned at Annex B of this specification. The material may also be subjected to such tests which are deemed necessary by the Inspection Authority in order to determine their suitability. Inspecting Authority reserves the right to get the B/R samples tested from any reputable Laboratory other than PN. However, any test considered important by Inspecting Authority other than Annex B i.e. PH value, chromium VI content, Wrinklo- meter test, lasting test (grain crack), flexing, oil & fats, tear strength of leather etc. may also be conducted in order to check its suitability.

0111. **TENDER SAMPLE**

1. Tender sample to be approved by TSR Committee.
2. For each contract following material shall be supplied by the manufacturer at the time of tendering:

| | | |
|----|--------------------------------------|----------------------------|
| a. | Shoes (White Leather) | 05 in No.(different sizes) |
| b. | Manufacturing last | One pair |
| c. | Pattern (cut component complete set) | One set of same size |
| d. | Leather for uppers | 1' x 1' (03 pieces) |
| e. | Thread for upper closing | 50 gms |
| f. | Eyelets | 10 in number |

| | | |
|----|--------------------------------|----------------------------|
| g. | Laces | 05 in No. |
| h. | Lining Material | 02 meters |
| j. | Sole | 03 Pairs (different sizes) |
| k. | Socks | 03 Pairs (different sizes) |
| l. | Insole | 03 Pairs (different sizes) |
| m. | Toe puff and counter Stiffener | 03 Pairs (different sizes) |

0112. **ADVANCE SAMPLE**

1. Advance sample or pre-production sample, when required, shall be submitted in accordance with terms of the contract for inspection and testing as per Annex B, D, E and F and approved by CINS. The minimum quantities required are 03 pairs alongwith samples of materials used in manufacturing of White Leather shoes for inspection as mentioned above.
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 01% of the contract or ten pairs, whichever are more alongwith samples of materials for Inspection.
3. The approval of the sample mentioned in Para 11 & 12 authorizes the commencement of bulk production but does not relieve the suppliers/ manufacturers from compliance with all the provisions of this specification. One approved sample after rectification of all observations highlighted by Inspecting Officer 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 of shoes from an accredited laboratory quality must be assumed i.a.w PN Specifications.

Note: Dimension mentioned in drawing at Annex D are varied w.r.t to sizes, therefore its variation ratio must be intimated to Inspecting authority prior inspection/ advance sample/ bulk production or as per the requirement/ demand of Inspecting officer.

0113. **INSPECTION**

1. **Bulk representative sample.** B/R random sampling will be carried out as per rules in vogue.
2. **Bulk Inspection.** Bulk inspection will be carried out after satisfactory completion of Visual Examination and Testing of B/R Sample as per Annex B, C and D.
3. **Inspection of Shoes.** 100% of the offered store shall be inspected. The guide lines for such examination/ inspection are listed at Annex E or Inspection criteria determined by Inspecting Authority. Stage inspection of Shoes White leather may be carried out by CINS (if deemed necessary).
4. **Inspection/ Acceptance and Rejection of Stores.** Inspection/ acceptance is to be carried out to the satisfaction of Chief Inspector Naval Stores.

- a. The shoes shall be examined for the correctness of material, shape, design, dimension, size, workmanship and finish.
- b. All shoes shall be inspected in pairs and shall be accepted and rejected as pairs. Defective lasting, moldings and damages to upper and insoles during molding are to be especially checked.
- c. CINS reserves the right to reject the whole supply in case, upon examination, material or packing of any sample or portion of the consignment is found NOT CONFORMING to this specification.
- d. 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 material, pattern, dimensions, workmanship and finish, the whole consignment may be rejected without any compromise.
- e. All stores and packing NOT fully in accordance with this specification shall be rejected.
- f. Shoes with major defects as described in Annex E of this specification will be rejected.

5. 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.

6. Replacement by the Contractor. The supplier/ manufacturer 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.

7. Responsibility for Safety. The supplier/ manufacturer is wholly responsible for the safety of supplies during inspection, storage at firm's premises, packing, dispatch and delivery up to consignee.

0114. **STAMPING OF ACCEPTED/ REJECTED STORES BY THE INSPECTOR**

1. Following instructions are to be followed:

- a. Stamping of Accepted Stores. The acceptable shoes shall be stamped with Inspector's Individual Acceptance Mark's. The stamping shall be legible.
- b. Stamping of Rejected Stores. The rejected shoes shall be marked with Inspector's Rejection Mark's to avoid re-submission by the supplier.
- c. The Inspector is the authority in all matters pertaining to inspection.

0115. **SPECIAL INSTRUCTIONS**

1. Care Label Instructions. Shoes White leather is capable of being cleaned by using conventional means to maintain smart & functional appearance. Following care instructions in the form of leaflet shall be provided in English and Urdu with each pair of shoe:

- a. Clean the shoes with a damp cloth using a solution of water and mild soap.
- b. To extend the life and maintain suppleness of the upper apply a shoe care product appropriate to the upper.
- c. The sole of shoes shall be cleaned frequently when feel necessary using conventional means to maintain smart and functional appearance.

Note: Firm shall provide usage warranty of one year at the time of Inspection.

0116. PACKING DETAILS

1. The store when ordered to be delivered 'PACKED' shall be packed as follows:
 - a. The pair of shoes shall be packed in a wrapping paper in a neat, dry and clean condition. Each pair of shoe further packed in standard packaging card board, Shoe box is placed in paper bag for carrying.
 - b. Ten pairs of Shoes of one size only shall be packed in a thick corrugated carton. Packing of mixed sizes shall be avoided and shall not be permitted. Each carton is to be closed by strong masking tape.
 - c. The empty spaces if any shall be filled with suitable cushioning materials.
 - d. Strapping material and way of strapping should be done accordance with standard trade practice for safe handling store or as per instruction of Inspecting Authority (CINS).
 - e. The total weight of package shall not exceed 35kg.
 - f. Each Box Board packing shall be securely and properly packed.

0117. IDENTIFICATION LABEL/ MAIN LABEL

1. Size of shoe shall be embossed on sole as indicated in drawing at Annex D with contractors name and year of manufacture and batch no. on socks. Following minimum information shall be printed on the shoe box:
 - a. Item name/ item description with size and NSN No.
 - b. Contract number and Date.
 - c. Year of manufacturing.
 - d. Contractor's name, initials, or trade mark.
 - e. Batch no.

0118. PACKING LIST

1. Firm is bound to provide a packing list of store offered for Inspection alongwith the challan, which include complete details about the store i.e Pattern No. Description of store, size, quantity, contract No, and Date, Challan No. and Date. A packing list shall

be enclosed after completion of inspection with each packed box giving full details about the stores packed i.e. Pattern No. Description of store, size, quantity, contract No, and Date, I/Note No. or voucher No. and date, consignee, Firms name, Date of packing and packer's signature.

0119. **MARKING OF STORES**

1. In addition to any special marking required by contract or order, the marking of packages shall be stenciled with quick drying White ink/ Paint in accordance with Specification No. NS/MISC/002/80 with clearly defined characters as described below:

a. On Front and Top:

- (1) Consignee Address.
- (2) Contract No and date.
- (3) Description of Stores Packed and NSN/ Patt no.
- (4) Quantity of the Item packed.

b. On Back:

- (1) Manufacturers name / Firm's name.
- (2) Voucher No. or inspection note no. and date.
- (3) 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.

0120. **DELIVERY**

1. The consignment of store will be delivered i.a.w 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, storage at firms premises proper packing, dispatch and delivery up to consignee.

XXXXXXSDXXXXX

M YASSAR YAHYA
Captain Pakistan Navy
Director

Annexes:

| | | |
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| A. | Definitions & Abbreviation | 8 |
| B. | Technical Details of Shoe White Leather | 9 |
| C. | Measurements and Dimensions of Shoe White Leather | 12 |
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| G. | Feedback Form | 18 |

ANNEX A TO**PN SPECIFICATION NO.05/2023****PROMULGATION DATE 30 OCT 23****DEFINITIONS & ABBREVIATION**

1. Inspection Authority. Chief Inspector of Naval Stores (CINS). His verdict in respect of inspection matters is to be taken as final.
2. Inspecting Officer. An officer nominated by the Chief Inspector of Naval Stores (CINS) for carrying out inspection of stores supplied by the supplier, against a specified contract or order, in accordance with the particulars stipulated therein.
3. Inspector. The term inspector shall include the "Inspection Authority", inspecting officer and their representatives, duly authorized for the purpose of discharging inspection duties involved.
4. Sealed Pattern. It denotes a pattern, sealed and signed by the DNS/competent Authority & held in custody of CINS /PNCSD, and represents the standard of store in respect of materials, dimensions, design, workmanship and finish, etc.
5. Ball Girth. It is the circumference/ measurement around the widest part of the ball of the foot area.
6. Catastrophic. Damage mark on shoes upper (leather).
7. Corrected Grain Leather. Corrected grain leather refers to hides that have been buffed or sanded on the grain surface in order to remove marks or imperfections.
8. Flay cut. It means to strip off the skin or surface of skin.
9. Skiving. It refers to cut off (a material, such as leather or rubber) in thin layers or pieces.
10. Puckering. It means to tighten skin or cloth until small folds appear or (of skin or cloth) to form small folds.
11. Instep Girth. It is the measurement/ circumference of foot's instep. It is the area where the foot tends to curve upward.

ANNEX B TO
PN SPECIFICATION NO.05/2023
PROMULGATION DATE 30 OCT 23

TECHNICAL DETAILS OF SHOES WHITE LEATHER

| S NO | ITEM | TESTING STANDARD | REQUIREMENT |
|------------------------------------|--|---|---|
| 1. <u>SHOE DESIGN</u> | | | |
| a. | Make, shape and design | Visual analysis/ BS EN ISO 20344 | Oxford Style/ Low ankle height |
| b. | Color | Visual analysis | White |
| c. | Weight per pair of shoe | Physical analysis/ ISO 3801 | 1000 ± 200 gms |
| d. | Height of Upper | BS EN ISO 20345 | 60 ± 2 mm |
| e. | Finish | Physical analysis | Buckskin cow leather |
| 2. <u>UPPER</u> | | | |
| a. | Toe/ Vamp (1) Material (2) Thickness | Visual analysis BS 3144 | Cow semi-aniline white/ Buckskin 1.5 ± 0.5 mm |
| b. | Quarter (1) Material (2) Thickness | Visual analysis BS 3144 | Leather (Cow CG White) 1.5 ± 0.5 mm |
| c. | Counter (1) Material (2) Thickness | Visual analysis BS 3144 | Leather (Cow CG White) 1.5 ± 0.5 mm |
| d. | Tongue (1) Material (2) Thickness | Visual analysis BS 3144 | Leather (Cow CG White) 1.5 ± 0.5 mm |
| 3. <u>GLOSS % OF UPPER LEATHER</u> | | | |
| a. | 20 ⁰ | ASTM D523 & data color | 0.02-0.05 |
| b. | 60 ⁰ | | 2.5-3 |
| c. | 85 ⁰ | | 6.5-7 |
| 4. <u>LINING MATERIAL</u> | | | |
| a. | Vamp (1) Material (2) Wt/ Sq.m (3) Color | AATCC 20A visual analysis/ ISO 3801 Visual/ chemical analysis | Cotton drill cloth 210 ± 10 GSM Undyed |
| b. | Counter (1) Material (2) Thickness (3) Color | AATCC 20A BS 3144 Visual analysis | Leather 1 ± 0.2 mm Brown |
| c. | Quarter/Tongue (1) Material (2) Thickness (3) Color (4) Finish | AATCC 20A BS 3144 Visual analysis Physical analysis | Leather (Drum dyed for quarter) 1 ± 0.2 mm Brown Thin Boxide |

| | | | |
|---|---|---|--|
| 5. COUNTER COLLAR | | | |
| a. | Vamp and Quarter (1) Material (2) Width | AATCC – 20 Visual analysis | Padding of foam 12mm |
| 6. SOCKS PADDING EVA | | | |
| a. | Material | Visual analysis | EVA + Leather |
| b. | Thickness | BS 3144 | EVA: 2 ± 0.5 mm Leather: 1 ± 0.5 mm Complete: 3 ± 0.5 mm |
| 7. TOE PUFF / COUNTER STIFFENER | | | |
| a. | Material | Burning method (Identification of plastic) | Thermoplastic |
| b. | Thickness | BS 3144 | 1.5 ± 0.5 mm |
| 8. STITCHING THREAD | | | |
| a. | Material | AATCC – 20 | Polyester/ Nylon |
| b. | Count | ISO 7211/5 | 3/217 (Denier) or 150/3 |
| 9. EYELETS | | | |
| a. | Diameter | Physical analysis | Inner dia: 4 ± 0.5 mm Outer dia: 8 ± 0.5 mm |
| b. | Material | ASTM D-158 | Zinc: $40\% \pm 5\%$ Copper: $60\% \pm 5\%$ |
| c. | Coating | Visual analysis | White |
| 10. LACES | | | |
| a. | Material | AATCC – 20 | Cotton with plastic tipped Nylon |
| b. | Length | Physical analysis | $40'' \pm 2''$ |
| c. | Diameter | Physical analysis | 5 ± 1 mm |
| d. | Tensile Strength | BS 5131 | 350 ± 50 N |
| 11. INSOLE | | | |
| a. | Material | Visual analysis | Fiber board |
| b. | Thickness | BS 3144 | 2 ± 0.5 mm |
| 12. SOLE | | | |
| a. | Material | Burning (identification of rubber) | TPR (Thermoplastic Rubber) |
| b. | Color | Visual analysis | Brown |
| c. | Thickness of fore part | BS 3144 | Heel: 28 ± 5 mm Toe: 10 ± 2 mm |
| 13. SHANK | | | |
| a. | Thickness | BS 3144 | 1.2 ± 0.2 mm |
| b. | Dimension (1) Length (2) Width (3) Thickness | Physical analysis | 100 ± 5 mm 10 ± 2 mm 1.3 ± 0.2 mm |
| c. | Material | ASTM D-158 | Iron: 95% |
| 14. PERFORMANCE TESTING WHOLE FOOTWEAR | | | |
| a. | Slip resistance requirement | ASTM 144 & ISO-20344 (1) Ceramic tile Dry (a) Toe (b) Heel | 1 ± 0.2 1 ± 0.2 |

| | | | |
|----------------------------|---|---|--|
| | | (2) Ceramic tile Wet (a) Toe (b) Heel | 0.5 ± 0.2 0.8 ± 0.1 |
| b. | Flexing Resistance after 80,000 cycles | SATRA TM 92 | No crack marks observed on the surface of the upper |
| c. | Dynamic water resistance | ISO 20345 | Satisfactory |
| 15. <u>UPPER</u> | | | |
| a. | Circular rub fastness test after 50 cycles in wet and dry conditions | SATRA TM 461 | Dry: 4/5 Wet: 4/5 |
| 16. <u>OUT SOLE</u> | | | |
| a. | Upper/outsole bond strength (1) At Toe (Minimum) (2) At Heel | SATRA AM 4 | R-15 ± 5 Kg L-15 ± 5 Kg R-20 ± 5 Kg L-20 ± 5 Kg |
| b. | Hardness | ISO-48-2: 2018 | L. 70 ± 10 IRHD R. 70 ± 10 IRHD |

ANNEX C TO**PN SPECIFICATION NO.05/2023****PROMULGATION DATE 30 Oct 2023****MEASUREMENTS AND DIMENSIONS**

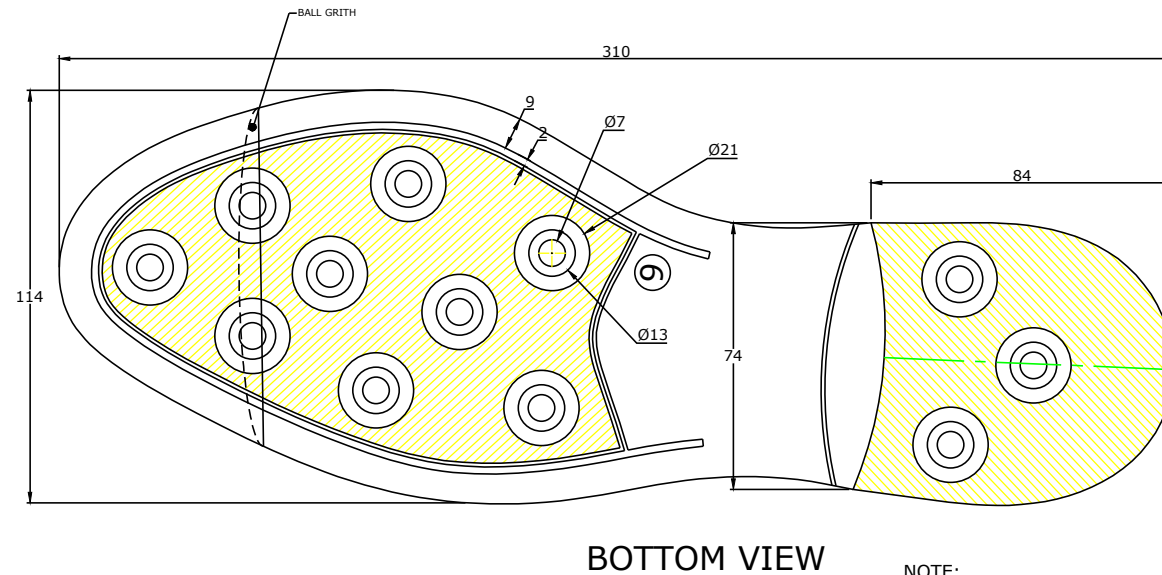
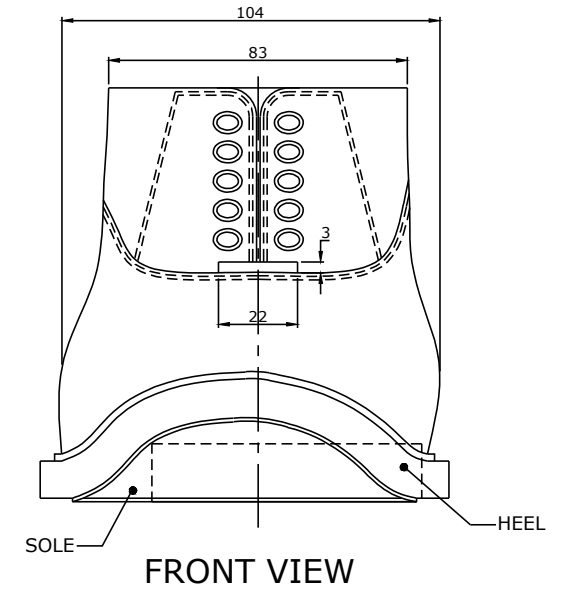
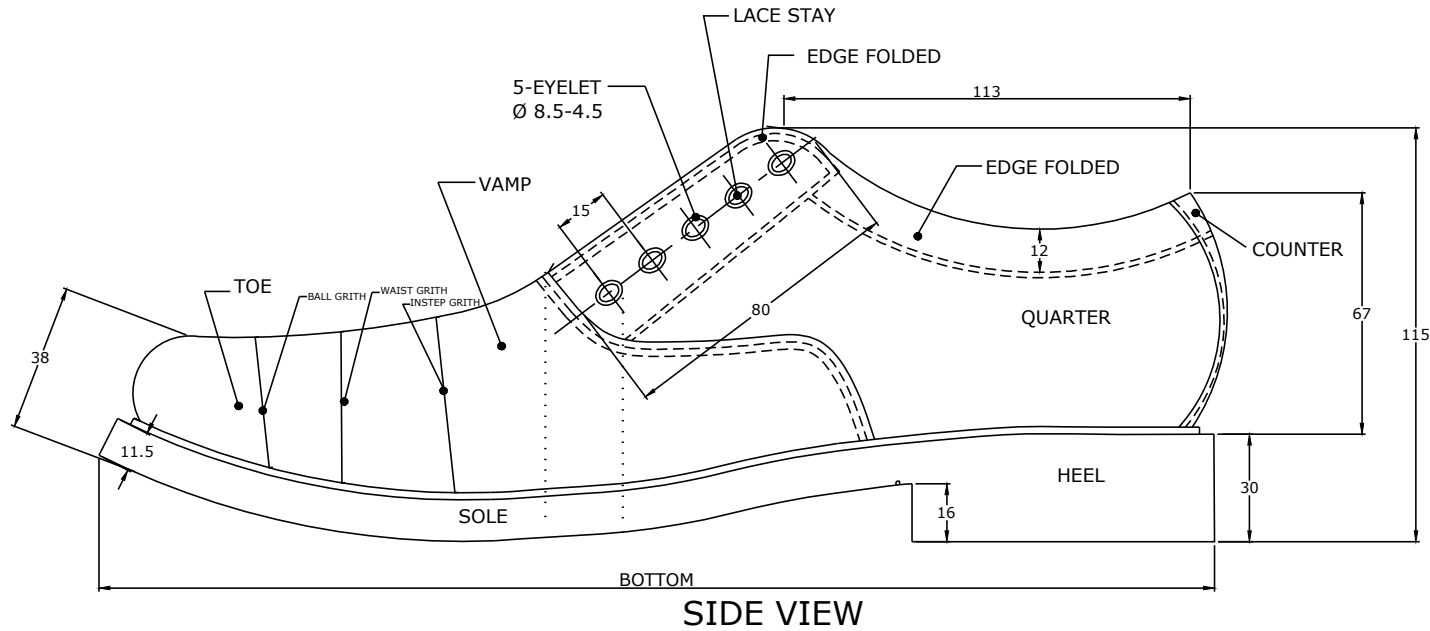
| English Size | French Size | Ball Girth | Joint Girth | Instep Girth | Bottom Length | Length on size |
|--------------|-------------|------------|-------------|--------------|---------------|----------------|
| 4 | 36 | 225 ± | 230 ± | 235 ± | 250 ± | 254 ± |
| 4.5 | 37 | 230 ± | 235 ± | 240 ± | 256 ± | 260 ± |
| 5 | 38 | 235 ± | 240 ± | 245 ± | 262 ± | 266 ± |
| 6 | 39 | 240 ± | 245 ± | 250 ± | 268 ± | 272 ± |
| 6.5 | 40 | 245 ± | 250 ± | 255 ± | 274 ± | 278 ± |
| 7 | 41 | 250 ± | 255 ± | 260 ± | 280 ± | 284 ± |
| 8 | 42 | 255 ± | 260 ± | 265 ± | 286 ± | 290 ± |
| 9 | 43 | 260 ± | 265 ± | 270 ± | 292 ± | 296 ± |
| 9.5 | 44 | 265 ± | 270 ± | 275 ± | 298 ± | 302 ± |
| 10 | 45 | 270 ± | 275 ± | 280 ± | 304 ± | 308 ± |
| 11 | 46 | 275 ± | 280 ± | 285 ± | 311 ± | 314 ± |
| 12 | 47 | 280 ± | 285 ± | 290 ± | 317 ± | 321 ± |
| 13 | 48 | 285 ± | 290 ± | 295 ± | 324 ± | 327 ± |

Note:

1. All dimensions are in 'mm'.
2. Tolerance limit is ± 1.5 mm.
3. Ball girth/ joint girth & instep girth are measured on last of the shoe.
4. Bottom length is to be measured on the last.

TECHNICAL DRAWING

ANNEX D TO
REVISED PN SPECIFICATION NO. 05/2023



1475

| MDITD NRDI | | |
|---|--------------------------------------|--|
| TITLE: SHOES WHITE LEATHER (SIZE:42) | | |
| DWG.NO. TD-2667 / 2022 | DIMENSIONS: mm | |
| DATE: 22-11-2022 | SCALE: NTS | |
| RIVISION NO: 00 | RIVISION DATE: - - - | |
| DRAWN BY | CHECKED BY | APPROVED BY |
| XXXXSDXXXX | XXXXSDXXXX | XXXXSDXXXX |
| HDM M.ASGHAR I/c DWG | LT CDR SANA KANWAL KHAN SO.TEX | CAPTAIN M YASSAR YAHYA DIRECTOR ID |

NOTE:
FOR FURTHER DETAILS SEE STOCK/APPROVE SAMPLE

ANNEX E TO
PN SPECIFICATION NO.05/2023
PROMULGATION DATE 30 OCT 23

| <u>GUIDELINES FOR INSPECTION – GENERAL DEFECTS</u> | | | |
|---|--|--------------|--------------|
| Defect | Description | Major | Minor |
| Pairing | Not properly paired i.e. right and left not of the same size and fitting | X | |
| | Wide variation in appearance of color | X | |
| Color cleanliness and finish | Not specified color | X | |
| | Color not uniform, spots and stains clearly noticeable at a distance of 3 feet (914mm) | X | |
| | Color not uniform, spots and stains not plainly visible at a distance of 3 feet (914mm) | | X |
| | Sole and heel edges not properly finished | | X |
| Design, pattern size | Not as specified | X | |
| | Foreign Object Damage (FOD) free as same can cause catastrophic damage particularly while working in confined areas | X | |
| | Incorrectly lasted upper | X | |
| Material | Any components or items not fabricated from the specified materials | X | |
| Upper leather | Leather not chrome Cow corrected Leather deeply snuffed i.e. fiber structure damaged | X | |
| | One or more of the following imperfections: Grub or tick marks opened or badly healed scratches, flay cut, loose, wrinkles or other inferior leather | X | |
| | Wrinkles not seriously affecting appearance or serviceability | | X |
| | Stretchy vamp | X | |
| | Stiff tongue | X | |
| | Flesh side with rough fiber | X | |
| | Skiving not done or excessively done | X | |
| | Damage to upper compounds | X | |
| Construction and workmanship | Any Component or assembly misplaced. Operation committed or not properly performed seriously affecting serviceability or appearance | X | |
| | Components poorly positioned | X | |
| | Excessive roughness | X | |
| Sole | Poor sole adhesion | X | |
| | Improper trimming of molded surface | X | |
| | Damaged outer sole design | X | |
| | Improper /wrong size marking | X | |
| Laces & stitching | Any open seam | X | |
| | Stitching omitted where required | X | |
| | Loose tension resulting in puckering or damaging the leather | X | |
| | Stitching incorrectly finished off | X | |
| Counters | Soft counter (Stiffeners) | X | |
| Toe puff and Stiffener | Toe soft on top and sides | X | |
| | Ridges formed on the inside affecting comfort of | X | |

| | | | |
|----------------------|---|---|---|
| its Back seam | wearer | | |
| Inner sole | Insoles not properly feathered, not likely to affect comfort | | X |
| Eyelets | Not the same number of eyelets in each row | X | |
| | Eyelets not properly Spaced within the row or misalignment between the rows to an extent interfering proper locking | X | |
| | Number of eyelets less than specified but each row having the same number | X | |
| | Not specified size | X | |
| Marking | Poor quality of eyelets | X | |
| | Missing incomplete, incorrect, and illegible | X | |
| Laces | Special instructions are missing | X | |
| | Missing | X | |
| | Spare pair of laces missing | X | |
| Identification label | Rough and substandard | X | |
| | Missing | X | |

ANNEX FTO
PN SPECIFICATION NO.05/2023
PROMULGATION DATE 30 OCT 23

Acceptable Quality Levels (AQLS)-Materials and Finished Shoes

1. Acceptable Quality Level (AQL) is maximum average defective items in a lot or limit / percentage of defective items in product /offered store. It is expressed in a percentage. Number of average defective items is determined by following formula:

$$\text{Average defective item} = \frac{\text{No.of defective item found during inspection}}{\text{Total no.of item to be inspected}} \times 100$$

2. AQL process: it is used for inspection of finished product by the QC professionals. AQL standard is depend on the quality of the product to be inspected, random sampling, and experience of inspector Following AQL table is used to determine lot size/ offered store quantity, least No. of sample to be inspected, AQL %, and acceptance & rejection points:

| <u>Lot/Batch Size</u> | <u>Sample Size</u> | <u>Materials</u> | | <u>Finished Shoes</u> | | | | | |
|------------------------------|---------------------------|-------------------------|------------------|--|------------------|-----------------------------|------------------|-----------------------------|------------------|
| | | | | <ul style="list-style-type: none"> • Acceptable/ Allowable defective sample (Ac) • Rejected /Exceed allowable limit of defective item (Re) | | | | | |
| | | | | <u>Critical Defects</u> | | <u>Major Defects</u> | | <u>Minor Defects</u> | |
| | | <u>Ac</u> | <u>Re</u> | <u>Ac</u> | <u>Re</u> | <u>Ac</u> | <u>Re</u> | <u>Ac</u> | <u>Re</u> |
| 2 - 8 | 2 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 |
| 9 ~ 15 | 3 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 |
| 16 ~ 25 | 5 | 0 | 1 | 0 | 1 | 1 | 2 | 1 | 2 |
| 26 ~ 50 | 8 | 0 | 1 | 0 | 1 | 1 | 2 | 1 | 2 |
| 51 ~ 90 | 13 | 1 | 2 | 1 | 2 | 1 | 2 | 2 | 3 |
| 91 ~ 150 | 20 | 1 | 2 | 1 | 2 | 2 | 3 | 3 | 4 |
| 151 ~280 | 32 | 2 | 3 | 2 | 3 | 3 | 4 | 5 | 6 |
| 281 ~ 500 | 50 | 3 | 4 | 3 | 4 | 5 | 6 | 7 | 8 |
| 501 ~ 1200 | 80 | 5 | 6 | 5 | 6 | 7 | 8 | 10 | 11 |
| 1201 ~ 3200 | 125 | 7 | 8 | 7 | 8 | 10 | 11 | 14 | 15 |
| 3201 ~ 10000 | 200 | 10 | 11 | 10 | 11 | 14 | 15 | 21 | 22 |
| 10001 ~ 35000 | 315 | 14 | 15 | 14 | 15 | 21 | 22 | 21 | 22 |
| 35001 ~ 150000 | 500 | 21 | 22 | 21 | 22 | 21 | 22 | 21 | 22 |
| 150001 ~ 500000 | 800 | 21 | 22 | 21 | 22 | 21 | 22 | 21 | 22 |
| 500001 ~ Over | 1250 | 21 | 22 | 21 | 22 | 21 | 22 | 21 | 22 |

3. If the inspector have time constrain then AQL is beneficial/ helpful in inspection of whole lot/ offered store. It save time, cost and give effective/ statistical result of product /offered store.

e.g. If inspector needs 5 minutes to check the item , the quantity to be inspected is 2,500 items then it took 208 hours to check the whole consignment/ offered store. It means 26 days approx. for one store. Calculation is as follows:

$$\frac{5 \text{ min} \times 1 \text{ hr}}{1 \text{ item} \times 60 \text{ min}} \times 2,500 \text{ items} = 208.33 \text{ hrs} \cong 26 \text{ days}$$

After Implementing AQL standard so the sample taken from the lot/ offered store is 200 items/ sample:

$$\frac{5 \text{ min} \times 1 \text{ hr}}{1 \text{ item} \times 60 \text{ min}} \times 2,00 \text{ items} = 16.66 \text{ hrs} \cong 02 \text{ days}$$

4. Quality parameters/ AQL limits may be defined by Inspecting Authority (if deemed appropriate) and communicate to the manufacturer, so the manufacturer set their quality levels (AQL limits) accordingly for their internal audit. Therefore, good quality product is ready for inspection.

ANNEX G TO
PN SPECIFICATION No 05/2023
PROMULGATION DATE 30 OCT 23

FEEDBACK 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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