



**TITLE:**  
**SPECIFICATION FOR PERSONAL  
PROTECTIVE EQUIPMENT (PPE)  
FOR  
MOTORCYCLE RIDERS**

Part 2: Footwear

Doc. No.	KP1/6C/13/TSP/01/009-2
Issue No.	1
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**ANNEX A:** *Guaranteed Technical Particulars (to be filled and signed by the Manufacturer and submitted together with relevant copies of the Manufacturer's catalogues, brochures, drawings, technical data, sales records, four customer reference letters, the manufacturer's experience and copies of complete test reports for tender evaluation, all in English Language)*

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**0.1 Circulation List**

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## FOREWORD

This specification has been prepared by the Standards Department in collaboration with Human Resource & Administration Department; Safety, Health & Environment Department (SHE) of The Kenya Power and Lighting Company Limited (KPLC/Kenya Power) and The Kenya Electrical Trade & Allied Workers Union. The specification lays down requirements for personal protective equipment (PPE) – footwear for motorcycle riders. It is intended for use by Kenya Power in purchasing the items.

The supplier shall submit information which confirms satisfactory service experience with products which fall within the scope of this specification

## 1. SCOPE

- 1.1. This specification applies to protective footwear for motorcycle riders for use while riding motorcycles for on or off road activities.
- 1.2. It also specifies the requirements for protection, ergonomic characteristics, innocuousness, mechanical properties, marking and information for users. It also describes the appropriate test methods.
- 1.3. The specification stipulates the minimum requirements for personal protective equipment (PPE) for motorcycle riders in the company and it shall be the responsibility of the supplier to ensure adequacy of the design, good engineering practice, adherence to the specification and applicable standards and regulations as well as ensuring good workmanship in the manufacture of the items for The Kenya Power & Lighting Company.
- 1.4. The specification does not purport to include all the necessary provisions of a contract.

## 2. REFERENCES

The following standards contain provisions which, through reference in this text constitute provisions of this specification. Unless otherwise stated, the latest editions (including amendments) apply.

ISO 17075: Leather – Chemical tests – Determination of chromium (VI) content

ISO 4045: Leather – Chemical tests -- Determination of pH

ISO 11642: Leather tests – Colour fastness – Colour fastness to water

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- ISO 7730: Ergonomics of the thermal environment -Analytical determination and interpretation of thermal comfort using calculation of the PMV and PPD indices and local thermal comfort criteria
- ISO 4649: Rubber - Determination of abrasion resistance using a rotating cylindrical drum device.
- EN 13595: Protective clothing for professional motorcycle riders. Jackets, trousers and one piece or divided suits – Part 2: Test method for determination of impact abrasion resistance.—Part 4: Test methods for the determination of impact cut resistance.
- EN ISO 20344: Personal protective equipment — Test methods for footwear
- BS EN 13634: Protective footwear for professional motorcycle riders. Requirements and test methods.

**3. TERMS AND DEFINITIONS**

For the purpose of this specification, the definitions given in the reference standards shall apply

**4. REQUIREMENTS**

**4.1. Service Conditions**

The footwear for motorcycle riders shall be suitable for use outdoors in tropical climate with average ambient temperature of +30°C with a minimum of -1°C and a maximum of +40°C.

**4.2. Design and Construction**

The footwear shall be designed, manufactured and tested in accordance with BS EN 13634 and EN ISO 20344:2004 and the requirements of this specifications

**4.2.1. Height of upper**

The height of the upper measured in accordance with EN ISO 20344:2004, 6.2 shall be as given in Table 1.

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**Table 1 – Height of upper**

Footwear size		Min height	Height (B)
Paris Point	UK	mm	mm
36 and below	Up to 3½	162	44
37 and 38	4 to 5	165	46
39 and 40	5½ to 6½	172	48
41 and 42	7 to 8	178	50
43 and 44	8½ to 10	185	52
45 and above	10½ and above	192	53

**4.2.2. Whole upper**

**4.2.2.1. pH value**

When leathers are tested in accordance with EN ISO 4045, the pH value shall be not less than 3.2 and, if the pH is less than 4, the difference figure shall be less than 0,7. All individual leathers shall be assessed.

**4.2.2.2. Chromium VI content**

4.2.2.2.1. The quantity of Chromium VI in footwear containing leather shall not exceed 3.0 mg/kg when determined according to the test method described in EN ISO 17075:2007.

4.2.2.2.2. If the footwear includes different types of leather, whether in contact with the skin or not, each leather type shall be tested separately and comply with the requirement in clause 4.2.2.2.1. At least two samples shall be taken from different items of footwear for each leather type.

**4.2.2.3. Dye fastness**

Footwear shall not be manufactured from material containing dyes which will readily migrate when it becomes wet with water. When any inner surfaces of the upper that will be adjacent to the wearer's foot or hose (unnecessary if not coloured) are tested in accordance with EN ISO 11642, the change in colour of any component of the multi-fibre fabric shall be not worse than Grey Scale rating 3.

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**4.2.2.4. Abrasion resistance**

When the full thickness of the upper (i.e. upper + lining) is tested in accordance with the procedure in EN 13595-2, the abrasion resistance shall be classified as below.

**Table 2 - Requirements for upper resistance to abrasion**

Minimum abrasion resistance		
Areas (see Figure 2 and Table 3)	Level 1	Level 2
A	1.5 s	2.5 s
B	5 s	12 s

**Table 3 - Dimensions for Impact Zones and Material Areas shown in Figure 2**

(Dimensions in millimetres)

Size(Paris Points)	Size(English)	A	B	C	D	E	F
		min.	min.	min.	max.	min.	max.
38 and below	5 and below	70	45	80	17	40	120
39 to 42	5.5 to 8	75	50	90	19	50	125
43 and above	8.5 and above	80	55	95	21	55	130

In order to accommodate different ergonomic requirements for different riding disciplines small deviations of Area A material are permitted in Area B provided the total infiltration is not greater than 8 cm<sup>2</sup> per boot.

The lower tangent of zone 2 is used to define the lower limits for measurements E & F. Zone 2 is located by centering point X over the natural centre of the ankle as felt through the footwear worn by an appropriate subject.

**4.2.2.5. Impact cut resistance**

When the full thickness of the upper (i.e. upper + lining) is tested in accordance with the procedure in EN 13595-4, the impact cut resistance of the upper shall be classified as below. All material type combinations shall be tested and the upper classified on the lowest result (see Table 4)

**Table 4 - Requirements for upper resistance to impact cut**

Areas (see Figure 2 and Table 2)	Level 1	Level 2
A	Impact speed 2.0 m/s, maximum knife penetration 25 mm	Impact speed 2.0 m/s, maximum knife penetration 25 mm

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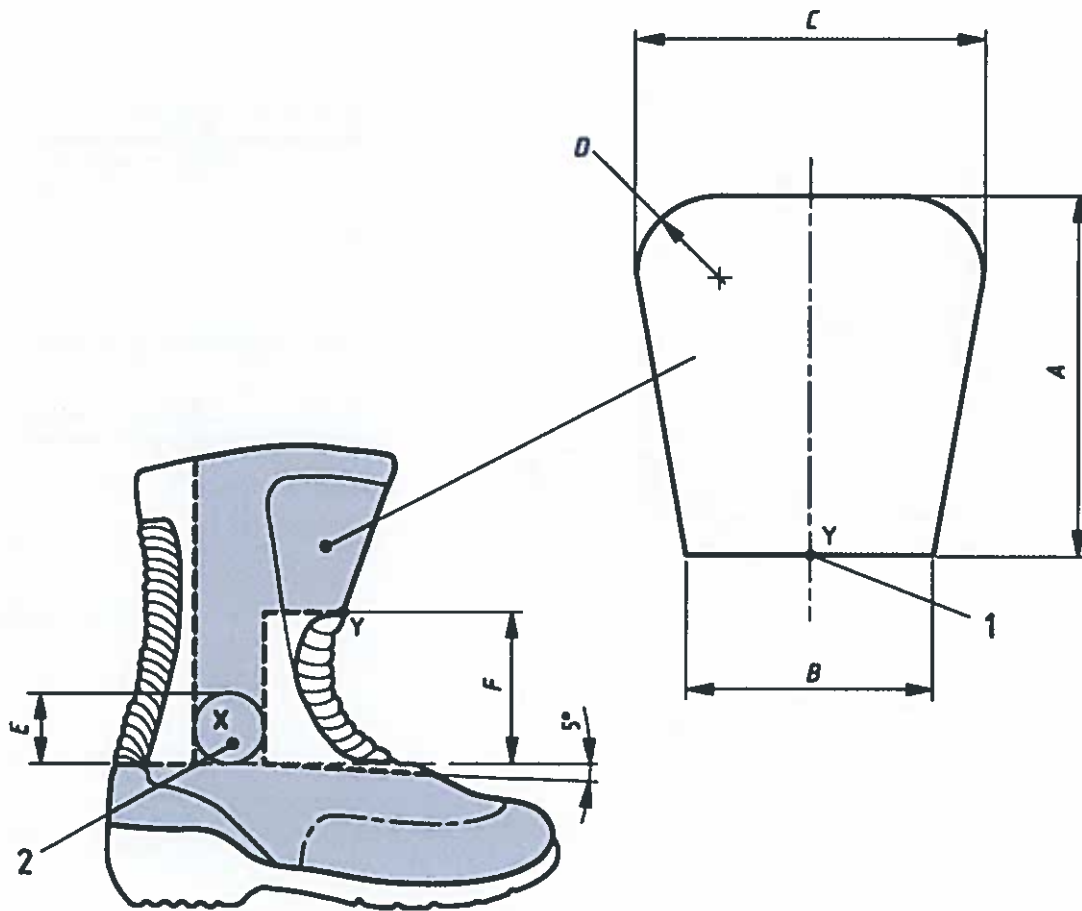
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Areas (see Figure 2 and Table 2)	Level 1	Level 2
B	Impact speed 2.8 m/s, maximum knife penetration 25 mm	Impact speed 2.8 m/s, maximum knife penetration 15 mm



**Key**

- 1 = Zone 1 shin region  = Area A
- 2 = Zone 2 ankle region  = Area B

**Figure 2 - Impact zones and material areas (see Table 3)**

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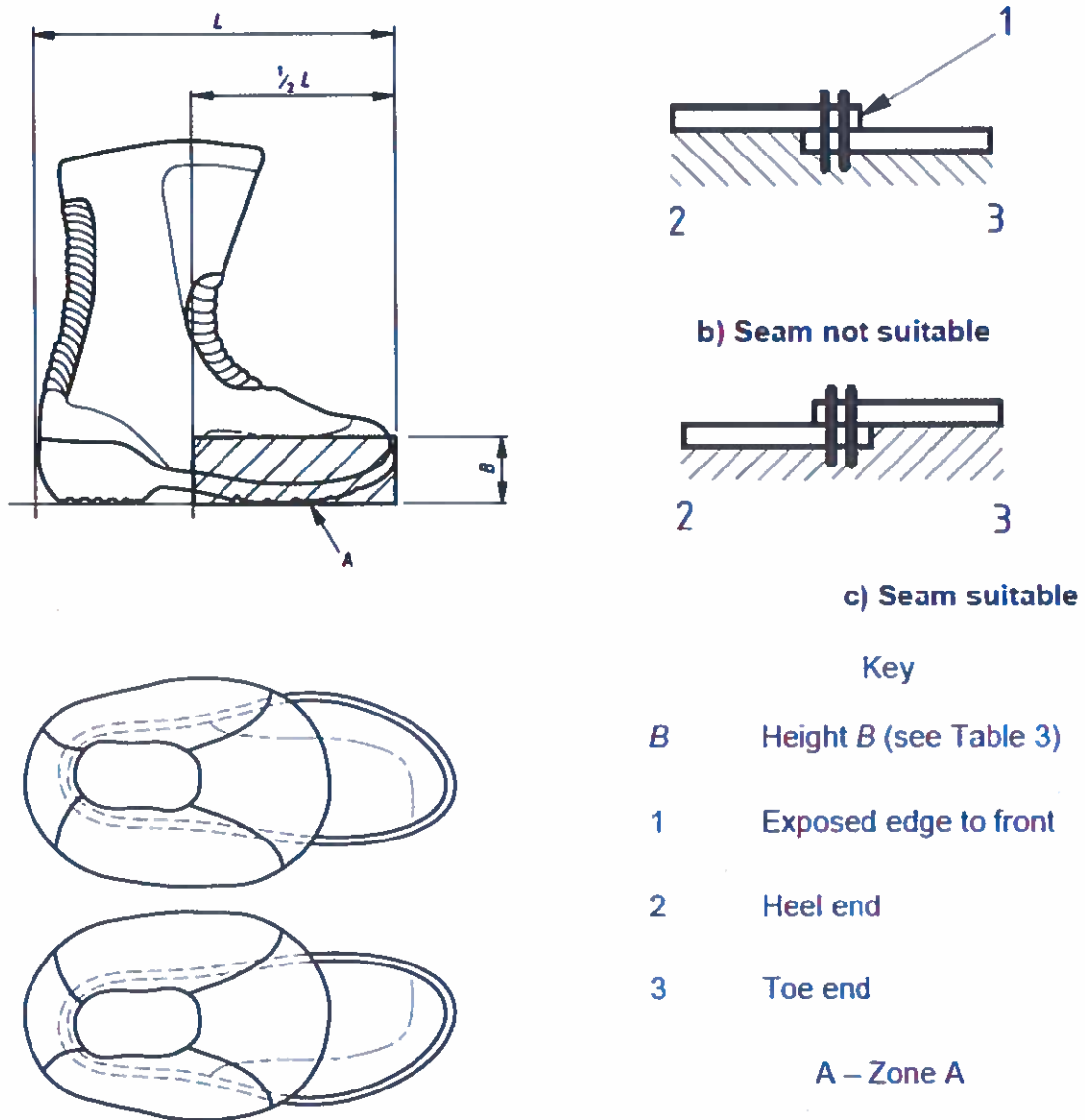


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**4.2.3. Seams**

Where present, overlapping constructional seams on the outer side of the forepart of the boot in Zone A (defined in Figure 2 a) as below height B and less than 0.5 x L from the toe end) shall be constructed such that the exposed edge of the material overlap is not facing the front of the boot, see Figures 2 b) and 2 c)



**a) Zones where seam types to be checked**

**Figure 3 - Seams**

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#### 4.2.4. Linings

All lining materials shall conform to the following requirements.

##### 4.2.4.1. Tear strength

The tear strength of the lining shall be in accordance with EN ISO 20345:2004, 5.5.1.

##### 4.2.4.2. Abrasion resistance

When tested in accordance with EN ISO 20344:2004, clause 6.12, the wearing surface of the lining shall not develop any holes before the following number of cycles has been performed:

- (i) Dry: 25 600 cycles;
- (ii) Wet: 12 800 cycles.

##### 4.2.4.3. pH value

When leather linings are tested in accordance with EN ISO 4045 the pH value shall be not less 3.2 and, if the pH is less than 4, the difference in value shall be less than 0.7. All individual leathers shall be assessed.

##### 4.2.4.4. Chromium VI content

The quantity of Chromium VI in footwear containing leather shall not exceed 3.0 mg/kg when determined according to the test method described in EN ISO 17075:2007. If the footwear includes different types of leather, whether in contact with the skin or not, each leather type shall be tested separately and comply with the above requirement. At least two samples shall be taken from different items of footwear for each leather type.

##### 4.2.4.5. Dye fastness

Footwear shall not be manufactured from material containing dyes which will readily migrate when it becomes wet with water. When any inner surfaces of the lining that will be adjacent to the wearer's foot or hose (unnecessary if not coloured) are tested in accordance with EN ISO 11642, the change in colour of any component of the multi-fibre fabric shall be not worse than Grey Scale rating 3.

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**4.2.5. Insole and insock**

**4.2.5.1. Water absorption and desorption**

When tested in accordance with EN ISO 20344:2004, 7.2, the water absorption of the layer of material adjacent to the foot shall be not less than 70 mg/cm<sup>2</sup> and the water desorption shall be not less than 80 % of the water absorbed. Footwear fitted with non-absorbent insoles, e.g. solid plastic type materials, are acceptable if covered provided that the covering meets the requirements for water absorption and desorption.

**4.2.5.2. Abrasion resistance**

**4.2.5.2.1. Insoles**

When non-leather insoles are tested in accordance with EN ISO 20344:2004, clause 7.3, the abrasion damage shall be not worse than that exhibited by the reference test piece from the same family of materials after 400 cycles(see EN ISO 20344:2004, clause 7.3.6). This requirement also applies to any coverings over non-absorbent insoles.

**4.2.5.2.2. Insocks**

When non-leather insocks are tested in accordance with EN ISO 20344:2004, clause 6.12, the wearing surface shall not develop any holes before the following number of cycles has been performed.

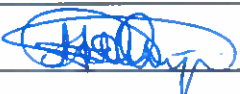

- (i) Dry: 25 600 cycles;
- (ii) Wet: 12 800 cycles.

**4.2.5.3. pH value**

When leather insoles are tested in accordance with EN ISO 4045, the pH value shall be not less than 3.2 and if the pH is less than 4, the difference figure shall be less than 0.7.

**4.2.5.4. Chromium VI content**

The quantity of Chromium VI in footwear containing leather shall not exceed 3.0 mg/kg when determined according to the test method described in EN ISO 17075:2007. If the footwear includes different types of leather, whether in contact with

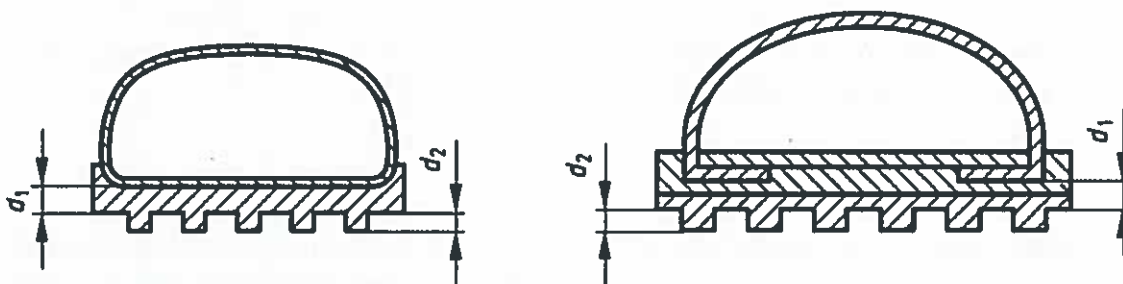
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the skin or not, each leather type shall be tested separately and comply with the above requirement. At least two samples shall be taken from different items of footwear for each leather type

**4.2.6. Outsoles**

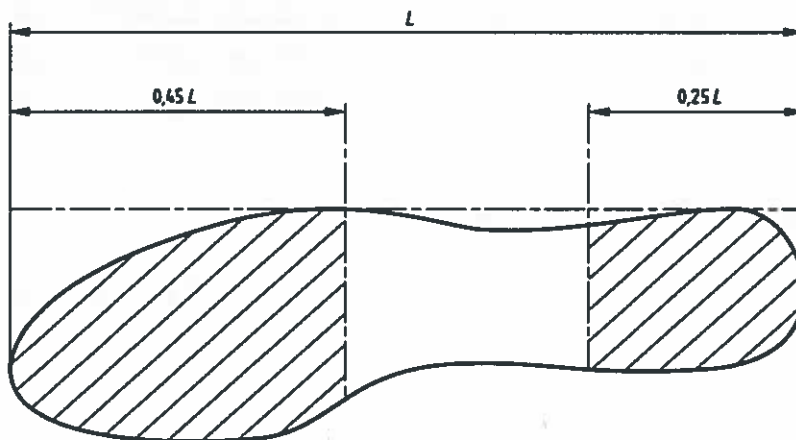
**4.2.6.1. Thickness and cleat height**

When measured in accordance with EN ISO 20344:2004, 8.1.2 excluding any cavities, the thickness of outsoles shall be not less than 4 mm ( $d_1$ ), see Fig.4a. When cleated outsoles are used, the cleat height shall be not less than 2.5 mm ( $d_2$ ), see Fig. 4a, and the shaded area as shown in Fig.4b shall have cleats which are open to the side.



- Key**
- $d_1$  Minimum thickness
  - $d_2$  Minimum cleat height

**Fig. 4a - Thickness of outsole**



**Figure 4b - Cleated area**

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**4.2.6.2. Abrasion resistance**

When non-leather outsoles are tested in accordance with Method A of ISO 4649:2010 (with a vertical force of 10 N over an abrasion distance of 40 m), the relative volume loss shall be not greater than 250 mm<sup>3</sup> for materials with a density of 0.9 g/ml or less and not greater than 150 mm<sup>3</sup> for materials with a density higher than 0.9 g/ml. Test pieces may be taken from anywhere on the sole.

**4.2.6.3. Hydrolysis**

When polyurethane outsoles are tested in accordance with the method described in ISO 5423:1992, Annex C, after being prepared and conditioned as described in Annex E of that standard, the cut growth shall be not greater than 6 mm before 150 000 flex cycles. The thickness of the test piece shall be (3.0 ± 0.2) mm and conditioning at ambient temperature shall be carried out at (23 ± 2) °C.

**4.2.6.4. Interlayer bond strength**

When tested in accordance with EN ISO 20344:2004, clause 5.2, the bond strength between the outer or cleated layer and the adjacent layer shall be not less than 4.0 N/mm unless there is tearing of any part of the sole, in which case the bond strength shall be not less than 3.0 N/mm.

**4.2.7. Ergonomics**

When tested in accordance with the method described in Annex A of BS EN 13634, the assessor shall be able to carry out all the defined movements without any significant problem being encountered. None of the questions in Annex A shall receive a negative response and the footwear will remain secure on the foot whilst undertaking the defined movements.

**4.2.8. Transverse rigidity of the whole footwear**

When tested according to the method given in clause 6.1 of BS EN 13634, all footwear samples shall meet and be classified as Level 1 with peak value of load not less than 1.0 kN;

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### 4.3. Additional requirements

#### 4.3.1. Impact protection to the shin and ankle

The footwear shall offer impact protection to the shin or ankle and shall have a transmitted force of less than 5 kN when tested in accordance with the method given in clause 6.2 of BS EN 13634. The footwear shall also comply with the requirement for impact protection to the ankle and shall be marked with the code "IPA" and with the requirement for impact protection to the shin and shall be marked with the code "IPS", see Clause 9 of BS EN 13634.

#### 4.3.2. Resistance to water penetration

The footwear shall be resistant to water penetration and shall meet the requirements of EN ISO 20345:2004, clause 6.2.5; shall be marked with the code "WR", see Clause 9 of BS EN 13634.

#### 4.3.3. Resistance to fuel oil of outsole

The footwear outsoles shall be resistant to fuel oil and shall meet the requirements of EN ISO 20345:2004, clause 5.8.7 and shall be marked with the code "FO", see Clause 9 of BS EN 13634.

#### 4.3.4. Slip resistance of outsole

4.3.4.1. The footwear outsoles shall also be slip resistant (Category 2) and shall meet the requirements for slip resistance as detailed in Table 2 of ISO 20345:2004 and ISO 13287:2012. The footwear shall be marked with code "SRC" – Slip Resistance on Ceramic tile floor with Sodium Lauryl Sulphate (SLS) solution and steel floor with glycerol as detailed in Table 2 of ISO 20345:2004.

4.3.4.2. The coefficient of friction (CoF) values shall be as per Table 5.

**Table 5: Coefficient of Friction values for safety footwear as per ISO 13287:2012**

Surface	Coefficient of Friction Values (CoF)	
	Heel	Flat
Ceramic Soapy water	0.28	0.32
Steel with Glycerol	0.13	0.18

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**4.3.5. Permeable uppers**

The footwear uppers shall be permeable to water vapour and shall meet the requirements of EN ISO 20345:2004 clauses 5.4.6 and 5.5.3 and shall be marked with the code "B", see Clause 9 of BS EN 13634

**4.4. QUALITY MANAGEMENT SYSTEM**

- 4.4.1. The supplier shall submit a quality assurance plan (QAP) that will be used to ensure that the requirements for protection, ergonomic characteristics, innocuousness, mechanical properties, marking of the protective footwear for motorcycle riders, will fulfill the requirements stated in the contract documents, standards, specifications and regulations.
- 4.4.2. The Manufacturer's Declaration of Conformity to applicable standards and copies of quality management certifications shall be submitted with the tender for evaluation.

**5. TESTS AND INSPECTION**

- 5.1. The protective footwear for motorcycle riders shall be inspected and tested in accordance with BS EN 13634, EN ISO 20344, EN 13595-2 & 4, ISO 4649, ISO 7730, ISO 11646, ISO 4045, ISO 17075 and the requirements of this specification. It shall be the responsibility of the supplier to perform or to have performed all the tests specified.
- 5.2. Copies of previous **Test Reports confirming conformity to clause 4 for the protective footwear for motorcycle riders issued by a third party testing laboratory that is accredited to ISO/IEC 17025** shall be submitted with the tender for the purpose of technical evaluation. The accreditation certificate for the third party testing laboratory shall also be submitted with the tender (all in English Language).
- 5.3. Test Reports for the protective footwear for motorcycle riders to be supplied under the contract shall be submitted to The Kenya Power & Lighting Company for approval before shipment/delivery.
- 5.4. The protective footwear for motorcycle riders shall be subject to acceptance tests at the manufactures' works before dispatch. Acceptance tests (routine & sample tests) will be witnessed by at least two (2) Tender Processing Committee (TPC) members appointed by The Kenya Power and Lighting Company Limited (KPLC). Routine and sample test reports for the protective footwear for motorcycle riders to be supplied shall be submitted to KPLC for approval before shipment of the goods.

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5.5. On receipt of the boots KPLC will inspect them and may perform or have performed any of the relevant tests in order to verify compliance with the specification. The supplier shall replace without charge to KPLC, boots which upon examination, test or use fail to meet any of the requirements in the specification.

**6. MARKING AND PACKING**

**6.1. Marking**

Each item of motorcycle footwear shall be clearly and permanently marked, for example by embossing or branding, with the following:

- a) Size designation;
- b) Manufacturer's identification mark;
- c) Manufacturer's type designation;
- d) Year of manufacture and at least the quarter;
- e) Number and year of the Standards, i.e. EN 13634:2010;
- f) Pictogram in Clause 9 of BS EN 13634 including the performance levels achieved in the testing;
- g) Additional properties in clause 4.3 e.g. impact protection, water resistance and oil resistance; shall be noted by reference to the marking codes as given in Clause 5 and Figure 7 of BS EN 13634.
- h) The letters, "Property of KPLC", either in a label attached to the tongue or moulded on the uncleated area of the sole.

NOTE: To aid clarity, the markings for e) to g) shall be adjacent to one another.

**6.2. Packing**

The motorcycle footwear shall be packed in a clean, sound and dry containers made of a material, which does not affect the product it protects from excessive loss of moisture and contamination.

**7. DOCUMENTATION**

7.1. The bidder shall submit its tender complete with technical documents required by Annex A (Guaranteed Technical Particulars) for tender evaluation. The technical documents to be submitted (all in English language) for tender evaluation shall include the following:

- a) Guaranteed Technical Particulars signed by the manufacturer;
- b) Copies of the Manufacturer's catalogues, brochures, drawings and technical data;
- c) Sales records for the last five years and at least four customer reference letters;
- d) Details of the manufacturer's experience;

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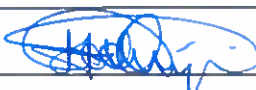

- e) Copies of required test reports by a third party testing laboratory accredited to ISO/IEC 17025 and a copy of accreditation certificate to ISO/IEC 17025 for the third party testing laboratory;
- f) Manufacturers letter of authorization, QMS certificate and other technical documents required in the tender.
- g) Packaging details (including packaging materials).

7.2. The successful bidder (supplier) shall submit the following documents/details to The Kenya Power & Lighting Company for approval before manufacture:

- a) Guaranteed Technical Particulars signed by the manufacturer;
- b) Design Drawings with details of the motorcycle footwear to be manufactured for KPLC.
- c) Quality assurance plan (QAP) that will be used to ensure that the design, material; workmanship, tests, service capability, maintenance and documentation will fulfil the requirements stated in the contract documents, standards, specifications and regulations. The QAP shall be based on and include relevant parts to fulfil the requirements of ISO 9001:2008
- d) Detailed test program to be used during factory testing;
- e) Marking details and method to be used in marking the motorcycle footwear;
- f) Manufacturer's undertaking to ensure adequacy of the design, good engineering practice, adherence to the specification and applicable standards and regulations as well as ensuring good workmanship in the manufacture of the motorcycle footwear for The Kenya Power & Lighting Company;
- g) Packaging details (including packaging materials).

7.3. The footwear for motorcycling shall be supplied with information and instructions for use to KPLC store. Instructions shall be precise, comprehensible and in English language. They shall contain at least the following information:

- (i) the information required in Clause 7;
- (ii) the full address of the manufacturer or his authorized representative;
- (iii) a statement of the intended use of the footwear;
- (iv) an explanation of the protection provided under the standard of manufacture and details of the extent of protective material and zones of specific impact protection provided;
- (v) a warning about the limits of protection provided by the footwear;
- (vi) a warning about any environmental conditions or misuse that would seriously reduce the protection provided;
- (vii) instructions on how to clean and care for the footwear;
- (viii) instructions on how to examine the footwear for signs of wear and degradation;
- (ix) the suggested lifetime of the footwear; instructions on actions to be taken when wear or damage is apparent to identify footwear which are no longer suitable to use;
- (x) the significance of any markings on the footwear such as the pictograms and any special marking codes - see Figure 7 of BS EN13634:2010 ;

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**TITLE:  
SPECIFICATION FOR PERSONAL  
PROTECTIVE EQUIPMENT (PPE)  
FOR  
MOTORCYCLE RIDERS**

Part 2: Footwear

Doc. No.	KP1/6C/13/TSP/01/009-2
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- (i) An explanation of the performance levels detailed in EN 13634:2010 – This shall consist of either the wording given below or a similar suitable alternative “European standard EN 13634:2010 includes two performance levels in terms of the protection afforded. The degree of risk or hazard that a motorcyclist will face is closely linked to the type of riding and the nature of the accident. Within standard EN 13634:2010 ‘Level 1’ performance is deemed as the minimum level required in order for the footwear to provide useful protection in an accident, and offers footwear with an optimum comfort level to suit all riding types. Where riders feel that their riding style or sport exposes them to an increased accident risk ‘Level 2’ has been provided which offers increased performance – however it is likely that this additional level of protection has an increased penalty for the weight and comfort, so may not be acceptable to all riders”.

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Kenya Power

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**ANNEX A: Guaranteed Technical Particulars** (to be filled and signed by the Manufacturer and submitted together with relevant copies of the Manufacturer's catalogues, brochures, drawings, technical data, sales records, four customer reference letters, the manufacturer's experience and copies of complete type test reports for tender evaluation, all in English Language)

Tender No. ....

Clause number	KPLC requirement		Bidder's offer (indicate full details of the offered for the footwear for motorcyclists)
Manufacturer's Name and address			Specify
Country of Manufacture			Specify
Model or type designation as per catalogue			Specify
1.	Scope		Specify
1.1-1.3			
2.	Manufacturing standards		Specify
3.	Terms & Definitions		Specify
4.	<b>REQUIREMENTS</b>		
4.1	Service Conditions		Specify
4.2	Design & Construction		
4.2.1	Height of the upper	As per table 1	Specify
4.2.2	<b>Whole upper</b>		
4.2.2.1	pH value	As per EN ISO 4045	Specify and attach a test report
4.2.2.2	Chromium VI content	< 3.0 mg/kg	
4.2.2.3	Dye fastness	not worse than Grey Scale rating 3	
4.2.2.4	Abrasion resistance	As per table 2	
4.2.2.5	Impact cut resistance	As per table 4	
4.2.3	Seams		Specify
4.2.4	<b>Lining</b>		
4.2.4.1	Lining Tear strength	As per EN ISO 20345:2004, 5.5.1.	Specify and attach a test report
4.2.4.2	Lining Abrasion resistance	EN ISO 20344:2004, clause 6.12	
4.2.4.3	Lining pH value	As per EN ISO 4045	
4.2.4.4	Lining Chromium VI content	< 3.0 mg/kg	
4.2.4.5	Dye fastness	Not worse than Grey Scale rating 3	
4.2.5	<b>Insole and insock</b>		
4.2.5.1	Water absorption	>70mg/cm <sup>3</sup> for material adjacent to the foot	Specify and attached a test report

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Clause number	KPLC requirement		Bidder's offer (indicate full details of the offered for the footwear for motorcyclists)
	water desorption	>80% of water absorbed	
4.2.5.2	Abrasion resistance		
	4.2.5.2.1	Insole Tested in accordance with EN ISO 20344:2004, clause 7.3	
	4.2.5.2.2	Insock Tested in accordance with EN ISO 20344:2004, clause 6.12	
4.2.5.3	pH value	>3.2	
4.2.5.4	Chromium VI content	< 3.0 mg/kg	
4.2.6	<b>Outsole</b>		Specify and attach a test report
4.2.6.1	Outsole thickness	Shall be not less than 4 mm	
	cleat height	Shall be not less than 2.5 mm	
4.2.6.2	Outsole abrasion resistance	Tested in accordance with Method A of ISO 4649:2010	
4.2.6.3	Outsole hydrolysis	Cut growth shall be not greater than 6 mm before 150 000 flex cycles	
4.2.6.4	Outsole interlayer bond strength	>4.0 N/mm or > 3.0N/mm in case of tearing part.	
4.2.7	Ergonomics	As per Annex A of BS EN 13634	
4.2.8	Transverse rigidity of the whole footwear	Classified as Level 1 with peak value of load > 1.0 kN;	
4.3	<b>Additional requirements</b>		
4.3.1	Impact energy protection ankle / shin	Transmitted force of less than 5 kN	Specify and attach a test report
4.3.2	Water resistance	As per EN ISO 20345:2004, clause 6.2.5 and marked with the code "WR"	Specify and attach a test report
4.3.3	Resistance to fuel oil	As per EN ISO 20345:2004, clause 5.8.7 and shall be marked with the code "FO"	Specify and attach a test report
4.3.4	Slip resistance of outsoles	As per EN ISO 20345:2004, clause 5.8.7 and shall be marked with the code "FO"	Specify and attach a test report
4.3.4	Permeable uppers	As per EN ISO 20345:2004 clauses 5.4.6 and 5.5.3 and shall be marked with the code "B"	Specify and attach a test report
4.4	Quality Management System		Provide
	Quality Assurance Plan		Provide
	Copy of ISO 9001:2008 Certificate		Provide
	Manufacturer's experience		Provide

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Clause number	KPLC requirement	Bidder's offer (indicate full details of the offered for the footwear for motorcyclists)
	Manufacturing Capacity (units per month)	Provide
	List of previous customers	Provide
	Customer reference letters	Provide
5.1	Test standards and responsibility of carrying out tests	Provide
5.2	Copies of Type Test Reports submitted with tender	Provide
5.3	Acceptance tests to be witnessed by KPLC at factory before shipment	Provide
5.4	Test reports to be submitted by supplier to KPLC for approval before shipment	Provide
5.5	Replacement of rejected footwear	Provide
6.1	Markings	Provide
6.2	Packing	Provide
7.1	Documents submitted with tender	Provide
7.2	Documents to be submitted by supplier to KPLC for approval before manufacture	
7.3	General instruction manual contents	
8.0	Statement of compliance to specification	Provide

.....  
**Manufacturer's Name, Signature, Stamp and Date**

**NOTE:**

*The **Guaranteed Technical Particulars (GTP)** shall form the basis of technical tender evaluation. Bidders shall ensure that the offered values for the item conform to the values in the test reports and their certificates, catalogue references and/or brochures. Failure to adhere by this requirement shall lead to automatic disqualification at the technical evaluation stage.*

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