



Kenya Power

TITLE:
**SPECIFICATION FOR
PERSONAL PROTECTIVE
EQUIPMENT: Part 8: Hand
Protectors**

Doc. No.	KP1/3CB/TSP/01/003-8
Issue No.	1
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Page 9 of 9	

ANNEX B: Designs of Hand Protectors *(to be attached by Kenya Power)*

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TITLE:
**SPECIFICATION FOR
PERSONAL PROTECTIVE
EQUIPMENT: Part 1:
Industrial Safety Helmet**

Doc. No.	KP1/3CB/TSP/01/003-1
Issue No.	1
Revision No.	0
Date of Issue	2012-12-14
Page 1 of 7	

TABLE OF CONTENTS

0.1 Circulation List

0.2 Amendment Record

FOREWORD

1. SCOPE
2. REFERENCES
3. TERMS AND DEFINITIONS
4. REQUIREMENTS
5. TESTS AND INSPECTION
6. MARKING, LABELLING AND PACKING

ANNEX A: *Guaranteed Technical Particulars (to be filled and signed by the Supplier and submitted together with copies of the manufacturer's catalogues, brochures, drawings, technical data, copies of previous test reports, list of customers and reference letters from four previous customers for tender evaluation)*

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TITLE:
**SPECIFICATION FOR
PERSONAL PROTECTIVE
EQUIPMENT: Part 1:
Industrial Safety Helmet**

Doc. No.	KP1/3CB/TSP/01/003-1
Issue No.	1
Revision No.	0
Date of Issue	2012-12-14
Page 2 of 7	

0.1 Circulation List

NO.	COPY HOLDER
1	Research & Development Manager
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3	Staff Benefits & Relations Manager
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5	Kenya Electrical Trade & Allied Workers Union
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KP1/3CB/TSP/01/003-1 Issue 1 Rev 0	2012-12-14	Cancels and replaces KP1/3CB/TSP/01/003 Issue 3 Rev 0 dated 2011-08-08 and all previous issues.	S. Kimiti 	G. Owuor

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Kenya Power

TITLE:
**SPECIFICATION FOR
PERSONAL PROTECTIVE
EQUIPMENT: Part 1:
Industrial Safety Helmet**

Doc. No.	KP1/3CB/TSP/01/003-1
Issue No.	1
Revision No.	0
Date of Issue	2012-12-14
Page 3 of 7	

FOREWORD

This specification has been prepared by the Research and Development Department in collaboration with the Benefits & Staff Relations Department, Distribution Division and Safety, Health & Environment Department all of The Kenya Power and Lighting Company Ltd (Kenya Power) and The Kenya Electrical Trade & Allied Workers Union. The specification lays down requirements for Industrial Safety Helmet. 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.

1.0 SCOPE

- 1.1 This specification is for Industrial Safety Helmet for use in Industrial Work (Electrical and Mechanical) by company employees.
- 1.2 The specification stipulates the minimum requirements for Industrial Safety Helmet acceptable for use in the company and it shall be the responsibility of the Supplier to ensure adequacy of the design, adherence to applicable standards, good workmanship and good engineering practice in the manufacture of the helmets for The Kenya Power & Lighting Company Ltd.

2.0 REFERENCES

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

BS EN 397: British Standard Specification for Industrial Safety Helmets.

3.0 TERMS AND DEFINITIONS

- 3.1 The definitions given in the reference standard shall apply.
- 3.2 Kenya Power Logo – As per sample available with Human Resource & Administration Division, Kenya Power.

4.0 REQUIREMENTS

4.1 Operating Conditions

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Kenya Power

TITLE:

**SPECIFICATION FOR
PERSONAL PROTECTIVE
EQUIPMENT: Part 1:
Industrial Safety Helmet**

Doc. No.

KP1/3CB/TSP/01/003-1

Issue No.

1

Revision No.

0

Date of Issue

2012-12-14

Page 4 of 7

The Industrial Safety Helmet shall be suitable for use in Electrical and Mechanical Work, outdoors in Tropical Climate with temperatures between -1 to +45 degrees Centigrade.

4.2 Design and Construction

- 4.2.1 The safety helmet shall be industrial safety helmet type designed and manufactured to BS EN 397 and shall be suitable for industrial use.
- 4.2.2 It shall provide protection to the wearer against falling objects and consequential brain injury and skull fracture. It shall also provide protection to the wearer against impact.
- 4.2.3 When tested as per BS EN 397 the leakage current shall not exceed 1.2mA.
- 4.2.4 The helmet shall provide protection to the wearer against short term, accidental contact with live electrical conductors at voltages upto 440V ac.
- 4.2.5 The helmet shall consist of a rigid shell and a fully adjustable internal harness, nape strap, chin strap and comfort band. It shall also have ventilation holes and peak (an extension of the shell above the eyes).
- 4.2.6 The rigid shell shall be one piece molded high-density polyethylene or similar material having high dielectric strength for non-conduction of electrical currents. The shell shall be lightweight and balanced for all day wearing comfort.
- 4.2.7 The helmet shall be Yellow Pantone 7406 PC in colour.
- 4.2.8 The suspension shall be adjustable (as per approved sample) and capable of supporting the shell away from the head to provide clearance between top of the head and the shell.
- 4.2.9 The comfort band shall cover the inner front surface of the headband for a length of not less than 100 mm each side of the centre of the forehead and shall be 30-35mm wide.
- 4.2.10 Each helmet shall be fitted with adjustable chinstrap 10-25mm wide complete with all relevant accessories and adjustable nape strap (as per approved sample). Webbing and thread elements shall be made from synthetic fibres (polyamide or polyester) suitable for the use intended.

5.0 TESTS AND INSPECTION

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Kenya Power

TITLE:
**SPECIFICATION FOR
PERSONAL PROTECTIVE
EQUIPMENT: Part 1:
Industrial Safety Helmet**

Doc. No.	KP1/3CB/TSP/01/003-1
Issue No.	1
Revision No.	0
Date of Issue	2012-12-14

Page 5 of 7

5.1 Tests and inspection for the materials used and standard of manufacture shall be done in accordance to BS EN 397 and 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 issued by a third party laboratory that is accredited to ISO/IEC 17025 shall be submitted with the tender for the purpose of technical evaluation. The accreditation certificate for laboratory shall also be submitted with the tender.

The copies of previous test reports to be submitted with the tender for evaluation shall include all the mandatory requirements as per clause 5 of BS EN 397 and electrical properties as listed below:

- a) Shock absorption
- b) Resistance to penetration
- c) Flame resistance
- d) Chin strap anchorages
- e) Label
- f) Electrical properties

5.3 Every batch of Industrial Safety Helmet shall be subject to inspection by Kenya Power staff at the place of manufacture and tests/inspection carried out on samples picked at random in their presence. Test reports shall be completed (by the manufacturer) and made available by the supplier to Kenya Power for approval before delivery of the items.

5.4 On receipt of the Industrial Safety Helmet, Kenya Power 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 Kenya Power, Industrial Safety Helmets which upon examination, test or use fail to meet any or all of the requirements in the specification.

6.0 MARKING, LABELLING AND PACKING

6.1 Each helmet shall carry moulded or impressed marking giving the following information (as per BS EN 397):

- a) Standard of manufacture (BS EN 397);
- b) Name or identification mark of the manufacturer;
- c) Date of manufacture;
- d) Type of helmet (manufacturer's designation). This shall be marked on both the shell and the harness;

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**SPECIFICATION FOR
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EQUIPMENT: Part 1:
Industrial Safety Helmet**

Doc. No.

KP1/3CB/TSP/01/003-1⁰¹

Issue No.

1

Revision No.

0

Date of Issue

2012-12-14

Page 6 of 7

- e) Size or size range (in centimetres). This shall be marked on both the shell and the harness;
- f) Abbreviation for the material of the shell;
- g) Electrical insulation/voltage;
- h) The Kenya Power & Lighting Company logo in blue colour (at the top).

All marking shall be done at the factory during manufacture.

- 6.2 A label shall be attached to each helmet giving user's instructions and information, required by clause 7.2.1 of BS EN 397 provided precisely and comprehensively in English language.
- 6.3 The following information, provided precisely and comprehensibly in English language shall accompany each helmet (as per BS EN 397):
 - a) The name and address of the manufacturer.
 - b) Instructions or recommendations regarding adjustment, fitting, use, cleaning, disinfection, maintenance, servicing and storage. Substances recommended for cleaning, maintenance or disinfection shall have no adverse effect on the helmet and shall not be known to be likely to have any adverse effect upon the wearer, when applied in accordance with the manufacturer's instructions.
 - c) Details of suitable accessories and appropriate spare parts.
 - d) The significance of the optional requirements complied with and given in accordance with BS EN 397, and guidance regarding the limits of use of the helmet, corresponding to the respective risks.
 - e) Guidance regarding the obsolescence deadline or period of obsolescence of the helmet and its components parts.
 - f) Guidance regarding details of the type of packaging suitable for transportation of the helmet.

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EQUIPMENT: Part 1:
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Doc. No.	KP1/3CB/TSP/01/003-1
Issue No.	1
Revision No.	0
Date of Issue	2012-12-14
Page 7 of 7	

ANNEX A: Guaranteed Technical Particulars (to be filled and signed by the Supplier and submitted together with copies of the manufacturer's catalogues, brochures, drawings, technical data, copies of previous test reports, list of customers and reference letters from four previous customers for tender evaluation)

TENDER NO.

REQUIREMENT	BIDDER'S OFFER (indicate full details of offered item)
Name & address of manufacturer	
Country of manufacture	
Manufacturer's letter of authorization	
Clause Number as per specification	
1.1	
1.2	
2.0	
3.0	
4.1	
4.2.1	
4.2.2	
4.2.3	
4.2.4	
4.2.5	
4.2.6	
4.2.7	
4.2.8	
4.2.9	
4.2.10	
5.1	
5.2 a) to f)	
5.3	
5.4	
6.1 a) to h)	
6.2	
6.3 a) to f)	

NB: - This schedule does not in any way substitute for detailed information required elsewhere in the specification.

.....
Supplier's Name, Signature, Stamp and Date

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10





Kenya Power

TITLE:

**SPECIFICATION FOR
PERSONAL PROTECTIVE
EQUIPMENT: Part 4:
Motorcycle Riders**

Doc. No.

KP1/3CB/TSP/01/003-4

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Page 1 of 13

TABLE OF CONTENTS

0.1 Circulation List

0.2 Amendment Record

FOREWORD

1. SCOPE
2. REFERENCES
3. TERMS AND DEFINITIONS
4. REQUIREMENTS
5. TESTS AND INSPECTION
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ANNEX A: Guaranteed Technical Particulars *(to be filled and signed by the Supplier and submitted together with copies of the manufacturer's catalogues, brochures, drawings, technical data, copies of previous test reports, list of customers and reference letters from four previous customers for tender evaluation)*

ANNEX B: Designs of Personal Protective Equipment for Motorcyclists (various items)
- *to be attached for each tender*

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**SPECIFICATION FOR
PERSONAL PROTECTIVE
EQUIPMENT: Part 4:
Motorcycle Riders**

Doc. No.	KP1/3CB/TSP/01/003-4
Issue No.	1
Revision No.	0
Date of Issue	2012-12-21
Page 2 of 13	

0.1 Circulation List

NO.	COPY HOLDER
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4	Safety, Health & Environment Manager
5	Kenya Electrical Trade & Allied Workers Union
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**SPECIFICATION FOR
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EQUIPMENT: Part 4:
Motorcycle Riders**

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Issue No.	1
Revision No.	0
Date of Issue	2012-12-21
Page 3 of 13	

FOREWORD

This specification has been prepared by the Research and Development Department in collaboration with the Benefits & Staff Relations Department, Distribution Division and Safety, Health & Environment Department all of The Kenya Power and Lighting Company Ltd (Kenya Power) and The Kenya Electrical Trade & Allied Workers Union. The specification lays down requirements for Personal Protective Equipment (including protective clothing) for Motorcyclists. 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.

1.0 SCOPE

1.1 This specification is for Personal Protective Equipment (including protective clothing) for Motorcyclists (Motorcycle Riders) employed by the company.

1.2 The specification covers the following types of Personal Protective Equipment (including protective clothing) for Motorcyclists:

- Riding Suit
- Riding Gloves
- Riding Boots
- Full Face Helmet for Motorcyclist (Full face Crash Helmet)

1.3 The specification stipulates the minimum requirements for Personal Protective Equipment (including protective clothing) for Motorcyclists acceptable for use in the company and it shall be the responsibility of the Supplier to ensure adequacy of the design, adherence to applicable standards, good workmanship and good engineering practice in the manufacture of the Personal Protective Equipment (including protective clothing) for Motorcyclists for The Kenya Power & Lighting Company Ltd.

2.0 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.

BS 6658: Specification for Protective Helmets for Vehicle Users.

KS 08-1149: Kenya Standard Specification for Optical Performance of High Visibility Garments and Accessories for use on the Highway.

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EQUIPMENT: Part 4:
Motorcycle Riders**

Doc. No.	KP1/3CB/TSP/01/003-4
Issue No.	1
Revision No.	0
Date of Issue	2012-12-21
Page 4 of 13	

KS 08-439: Kenya Standard Method for Determination of Resistance of Fabrics to Penetration by Water (Hydrostatic Head Test).

KS 08-269: Kenya Standard Method for Determination of Crease Recovery of Fabrics.

KS 1469: Kenya Standard Specification for Work Wear and Career Wear.

3.0 TERMS AND DEFINITIONS

3.1 The definitions given in the reference standard shall apply.

3.2 Kenya Power Logo – As per sample available with Human Resource & Administration Division, Kenya Power.

4.0 REQUIREMENTS

4.1 Operating Conditions

The Personal Protective Equipment (including protective clothing) for Motorcyclists shall be suitable for use outdoors in tropical climate with temperatures between -1 to +45 degrees Centigrade.

4.2 Materials, Design and Construction

4.2.1 Riding Suits

4.2.1.1 The basic design shall be in accordance with Annex B attached to this specification and or as per the approved sample.

4.2.1.2 The riding suit shall new and unused and shall comply with all applicable ISO Standards and Kenya Standards.

4.2.1.3 The riding suit shall be designed for use by motorcyclists. It shall protect the wearer from wet weather (rain) and effects of strong winds.

4.2.1.4 The suit shall be one piece comprising of trouser part and jacket part all Blue, Pantone 288 PC in colour. When specifically stated on the schedule of requirements in the tender document, two piece riding suits will be considered.

4.2.1.4.1 Jacket Part of Riding Suit

The jacket part shall be padded and lined to suit intended purpose

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Motorcycle Riders**

Doc. No.	KP1/3CB/TSP/01/003-4
Issue No.	1
Revision No.	0
Date of Issue	2012-12-21
Page 5 of 13	

It shall have a high collar with size adjustable hood (with string) incorporated into the collar.

The front shall have a zipper on the inside and four press buttons on the outside. It shall have two diagonal pockets on the lower part.

The jacket part shall have the following markings:

- Kenya Power Logo shall be embroidered in reflective yellow on the left chest area. The logo size shall be 65mm by 65mm with a tolerance of ± 5 mm.
- It shall also have embroidered Kenya Power letters between two yellow lines in reflective yellow colour centered at the back (as per approved sample). The overall dimensions of the marking at the back shall be 200mm length and 60mm height, with a tolerance of ± 5 mm.
- It shall have high visibility reflective bands on the arms, over the shoulders, around the chest and the back. The bands shall be reflective yellow colour, 50 mm ± 5 mm wide and shall comply with KSO 08 –1149.

4.2.1.4.2 Trouser Part of Riding Suit

The trouser part shall have two side pockets (each with flap zipper), elasticized waist and elasticized leg bottoms. Each leg bottom shall have a side opening zipper.

The trouser part shall be made from materials identical to the jacket part and shall be reinforced and padded at the knees. The reinforcement at the knees shall be 360mm ± 10 mm in length and shall cover the entire front part between the two side seams.

The trouser part shall have the following markings:

- Kenya Power Logo (reflective yellow) shall be embroidered on the left pocket. The logo size shall be 40mm by 40mm with a tolerance of ± 5 mm.
- High visibility reflective bands around the lower parts. The bands shall be reflective yellow colour, 50 mm ± 5 mm wide and shall comply with KSO 08 – 1149.

4.2.1.5 Each riding suit shall be free from hole, cut or tear.

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Doc. No.	KP1/3CB/TSP/01/003-4
Issue No.	1
Revision No.	0
Date of Issue	2012-12-21
Page 6 of 13	

- 4.2.1.6 Seams, stitching, sewing threads, facings, buttons, fronts, closures and fasteners shall all conform to applicable Kenya Standards. The stitches shall be 10-12 per inch (25.4mm) in number.
- 4.2.1.7 All seams of each item shall be free from pucker and shall have overlock stitches.
- 4.2.1.8 Pocket bag edges shall be sewn with a double stich (two rows of sewing).
- 4.2.1.9 Pockets, buttons and buttonholes shall be properly aligned and as per approved design.
- 4.2.1.10 Each item shall be supplied with open buttonholes whose edges shall have been sewn to avoid fraying and the ends shall be locked.
- 4.2.1.11 Sizes shall be as per the measurements taken by the successful supplier for each entitled employee after tender award. Standard sizes, where applicable, shall be in accordance with Kenya Standards.
- 4.2.1.12 Colour fastness (washing & dry cleaning) in accordance with KS 541-1 shall be: 4 (colour change, staining, rubbing & pressing, perspiration) and 6 (light).
- 4.2.1.13 The dimensional changes of the fabric, in either direction, after five washings shall not exceed 2% when tested in accordance with KS 08-123.
- 4.2.1.14 Metallic parts when used in any garment shall be corrosion resistant.
- 4.2.1.15 Each finished garment shall be well pressed, free from gloss, brushed off and free from loose threads and ends of thread.
- 4.2.1.16 Labels shall be attached to each garment and have the following information; marked legibly and indelibly:
 - name/trademark of manufacturer;
 - standard to which the garment complies;
 - size;
 - instructions for care and cleaning
- 4.2.1.17 Riding Suit shall be dispatched by the manufacturer in clean condition and shall be packed in such a way so as to avoid soiling in storage as well as in transit.
- 4.2.1.18 The Riding Suit shall be subject to Sample & Design Approval by The Kenya Power & Lighting Company Ltd before manufacture. The supplier shall submit

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