



TITLE:  
**SPECIFICATION FOR  
PERSONAL PROTECTIVE  
EQUIPMENT: Part 9:  
Welders**

|               |                      |
|---------------|----------------------|
| Doc. No.      | KPI/3CB/TSP/01/003-9 |
| Issue No.     | 1                    |
| Revision No.  | 0                    |
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**ANNEX B:** **Designs of Personal Protective Equipment for Welders**

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**0.1 Circulation List**

| NO. | COPY HOLDER                                   |
|-----|---|
| 1   | Research & Development Manager                |
| 2   | Procurement Manager                           |
| 3   | Staff Benefits & Relations Manager            |
| 4   | Safety, Health & Environment Manager          |
| 5   | Kenya Electrical Trade & Allied Workers Union |

Electronic copy (pdf) on Kenya Power Server (currently: Network→stima-fprnt-001→techstd&specs)

**0.2 Amendment Record**

| Rev No. | Date<br>(YYYY-MM-DD) | Description of Change | Prepared by<br>(Name & Signature) | Approved by<br>(Name & Signature) |
|---------|----------------------|-----------------------|-----------------------------------|-----------------------------------|
|         |                      |                       |                                   |                                   |
|         |                      |                       |                                   |                                   |
|         |                      |                       |                                   |                                   |
|         |                      |                       |                                   |                                   |

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## 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 for welders. 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 for welders employed by the company.

1.2 The specification covers the following items:

- Welding Gloves
- Welding Apron
- Welding Helmet
- Welding Goggles

1.3 The specification stipulates the minimum requirements for personal protective equipment for welders 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 items for The Kenya Power & Lighting Company Ltd.

### 2.0 REFERENCES

N/A

### 3.0 TERMS AND DEFINITIONS

N/A

### 4.0 REQUIREMENTS

#### 4.1 Operating Conditions

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The personal protective equipment for welders 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 Welding Gloves

- 4.2.1.1 The Welding Gloves shall be designed and manufactured in accordance with applicable ISO and Kenya Standards and shall be suitable for use by welders.
- 4.2.1.2 The basic design shall be in accordance with Annex B attached to this specification and or as per the approved sample.
- 4.2.1.3 The Welding Gloves shall be made from premium grade split leather and shall have the following features:
- Wear seams welted for extra strength
  - Reinforced palm

### 4.2.2 Welding Apron

- 4.2.2.1 The Welding Apron shall be designed and manufactured in accordance with applicable ISO and Kenya Standards and shall be suitable for use by welders.
- 4.2.2.2 The basic design shall be in accordance with Annex B attached to this specification and or as per the approved sample.
- 4.2.2.3 The Welding Apron shall be made from leather and shall be heavy duty type.

### 4.2.3 Welding Helmet

- 4.2.3.1 The Welding Helmet shall be designed and manufactured in accordance with applicable ISO and Kenya Standards and shall be suitable for use by welders.
- 4.2.3.2 The basic design shall be in accordance with Annex B attached to this specification and or as per the approved sample.
- 4.2.3.3 The Welding Helmet shall have the following features:
- Flip-up lens for welding and grinding

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- Adjustable head band
- Polypropylene construction providing strength and heat resistance.

#### 4.2.4 Welding Goggles

- 4.2.4.1 The Welding Goggles shall be designed and manufactured in accordance with applicable ISO and Kenya Standards and shall be suitable for use by welders.
- 4.2.4.2 The basic design shall be in accordance with Annex B attached to this specification and or as per the approved sample.
- 4.2.4.3 The Welding Goggles shall have the following features:
- Flip-up lens for welding and grinding
  - Adjustable head band
  - Polypropylene construction providing strength and heat resistance.

#### 4.2.5 Design and Sample approval before manufacture

The personal protective equipment for welders shall be subject to Sample & Design Approval by The Kenya Power & Lighting Company Ltd before manufacture. The supplier shall submit sample and design details for each item on order to The Kenya Power & Lighting Company Ltd for approval before manufacture.

### 5.0 TESTS AND INSPECTION

- 5.1 Tests for the materials used and standard of manufacture shall be done in accordance with applicable ISO and Kenya Standards 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 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.
- 5.3 Every batch of personal protective equipment for welders 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.

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5.4 On receipt of the personal protective equipment for welders, 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, personal protective equipment for welders 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 Labels shall be attached to each item and shall have the following information; marked legibly and indelibly:

- name/trademark of manufacturer;
- standard to which the item complies;
- size;
- any other parameters specified by the applicable standard of manufacture.

The labels and marking shall be done at the factory during manufacture and shall be permanent type.

6.2 The personal protective equipment for welders shall be dispatched by the supplier in clean condition and shall be supplied packed in such a manner as to avoid soiling and damage in transport and storage.

6.3 Detailed user's instructions guide including cleaning guide, meaning of all symbols used and other instructions specified by the applicable standard shall be submitted with each item printed in English language.

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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)

**TENDER NO.** .....

| REQUIREMENT   | BIDDER'S OFFER (indicate full details of offer) |
|---|---|
| Name & address of manufacturer                                |   |
| Country of manufacture  |   |
| Manufacturer's letter of authorization (as per tender format) | Welding Gloves                                  |
|   | Welding Apron                                   |
|   | Welding Helmet                                  |
|   | Welding Goggles                                 |
| Clause Number as per specification                            |   |
| 1.1   |   |
| 1.2   |   |
| 1.3   |   |
| 2.0 REFERENCE STANDARDS                                       |   |
| 3.0 TERMS AND DEFINITIONS                                     |   |
| 4.0 REQUIREMENTS  |   |
| 4.1 Operating Conditions                                      |   |
| 4.2 Design and Construction                                   |   |
| 4.2.1 Welding Gloves  |   |
| 4.2.1.1   |   |
| 4.2.1.2   |   |
| 4.2.1.3   |   |
| 4.2.2 Welding Apron   |   |
| 4.2.2.1   |   |
| 4.2.2.2   |   |
| 4.2.2.3   |   |
| 4.2.3 Welding Helmet  |   |
| 4.2.3.1   |   |
| 4.2.3.2   |   |
| 4.2.3.3   |   |
| 4.2.4 Welding Goggles   |   |
| 4.2.4.1   |   |
| 4.2.4.2   |   |
| 4.2.4.3   |   |
| 4.2.5 The personal protective equipment for                   |   |

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| REQUIREMENT   | BIDDER'S OFFER <i>(indicate full details of offer)</i> |
|---|--|
| welders shall be subject to Sample & Design Approval by The Kenya Power & Lighting Company Ltd before manufacture |  |
| 5.0 TESTS AND INSPECTION  |  |
| 5.1   |  |
| 5.2   |  |
| 5.3   |  |
| 5.4   |  |
| 6.0 MARKING, LABELLING AND PACKING  |  |
| 6.1   |  |
| 6.2   |  |
| 6.3   |  |

*Note: - This schedule does not in any way substitute for detailed information required elsewhere in the specification and tender.*

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

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**ANNEX B: Designs of Personal Protective Equipment for Welders**



**Figure 1: Welding Gloves**



**Figure 2: Welding Apron**

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**Figure 3: Welding Helmet**



**Figure 4: Welding Goggles**

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