PRIVATE SPECIFICATION

Prepared for the

Johannesburg Metropolitan Police Department

BOOTS, ALL-WEATHER, MOTORCYLE UNIT

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JMPD 012
Version 01.0/April 2015

1. Scope

This specification covers the design and limited performance requirements for all-weather protective motorcycle boots for personnel of the motorcycle unit of the Johannesburg Metropolitan Police Department.

NOTE: ***All components shall be manufactured in the Republic of South Africa. In instances where the raw material and/or finished components are not available in the Republic of South Africa, the onus shall be on the bidder to apply for exemption certificates from the Department of Trade and Industry. Attention is drawn to Annex A.***

2. Definitions and Abbreviations

For the purpose of this specification, the following definition shall apply:

acceptable: acceptable to the Johannesburg Metropolitan Police Department

defective: A pair of boots that after an inspection is judged to have a major fault that is likely to cause boots to fail in wear, or a pair of boots that is unsightly to the extent that it is unsuitable for issue

JMPD: Johannesburg Metropolitan Police Department

nominal: subject to the tolerances normal to good manufacturing practice

SANS: South African National Standard

3. Style

The style is as follows:

- protective motorcycle boots
- waterproof, windproof and breathable
- combination of leather and extreme abrasion resistant textile uppers
- padded, breathable materials used on the inside
- outside leather counter
- reinforced ankle support
- foam padding on shin and ankle reinforcements
- reinforced heel and toe
- reinforced at gear-shift area
- moulded solid sole and heel
- flexible textile sections
- reflective material at the back, extending towards the sides
- fasten with a slide fastener on the inleg
- slide fastener to be partially concealed by a closing flap that fastens with touch and close fastener
- padded leather insert along top edge
- anatomically shaped removable insole
- gusset positioned behind the slide fastener
- design to be such that it is commercially referred to as “Commuter/Touring” boots

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4. Digital images

Images to serve as examples of a suitable product, and given for guidance only. Alternatives will also be considered, as long as if conforms to the critical requirements of this specification and subject to approval of the end-users.

Figure 1 – Example of typical side views

Figure 2 – Examples of typical front and back views

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Figure 3 – An example of typical linings and padding on the inside of the boot

Figure 4 – An example of a typical sole and heel tread pattern

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5. Client Furnished Materials

No materials will be supplied by the Johannesburg Metropolitan Police Department.

6. Component Materials

6.1 Upper Leather

- the uppers shall be of 100% full-grain hydrophobized (water repellent) bovine leather
- the leather shall be through drum dyed to at least the depth of the grain layer
- the flesh side of the leather shall be clean and free of any stain and fleshy areas
- the uppers shall not contain any leather that is pipy, loose grained, hard or bony
- the thickness of the leather for the uppers shall be 1,8 mm to 2,0 mm
- colour to be black

6.2 Upper Textiles

- Cordura[1]-type fabric with a high abrasion resistance and tear strength, both requirements to be such as to comply with international standards for PPE (footwear)
- 100 % polyamide with melting point is 210 °C
- to incorporate membranes such as Gore-Tex®[1]- (or similar products) to ensure breathability and waterproofing, creating a moisture management system
- colour fastness requirements to be as given in table 1
- colour to be black

Table 1 – Colour fastness requirements

1	2	3
Property	**Requirement**	**SANS number** (unless otherwise indicated)
Colourfastness to:		
Water, rating, min.		105-E01
Change in colour.....	4-5	
Staining of adjacent fabrics.....	4-5	
Perspiration, rating, min.		105-E04
Change in colour	4	
Staining	4	
Rubbing, rating, min.		105-X12
Dry……..	4	
Wet ……	4	
Light, rating, min.	5	105-B02

6.3 Toe Puffs and Stiffeners

- to be such as to comply with the requirements as specified in EN 13634:2010 “Protective footwear for motorcycle riders – requirements and test methods”

[1] This information is given for the convenience of users of this private specification and does not constitute an endorsement by the JMPD of the products named. Equivalent products may be used if they can be shown to lead to the same results.

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6.4 Ankle and shin Reinforce Material

- to be such as to comply with the requirements as specified in EN 13634:2010 “Protective footwear for motorcycle riders – requirements and test methods”
- to be of acceptable moulded plastics and lined with foam-rubber

6.5 Slide fasteners

- to comply with the requirements for class C of SANS 1822 “Slide fasteners”
- colour to be black
- coil type
- one-way closed end
- puller to be fitted with toggle to enable easy opening

6.6 Touch and close fastener

- to comply with the requirements of SANS 1823 “Touch and close fasteners”
- colour to be black
- width to be such as to be fit for purpose

6.7 Threads

- the treads used for attaching the various upper components shall be polyester and cotton core-spun threads that comply with the relevant requirements of SABS 1362
- ticket No 12 and 36, applied as relevant
- colour to be black

6.8 Lining materials

- inner lining materials to be padded to provide comfort at the relevant zones
- inner linings and materials to be breathable and incorporate membranes such as Gore-tex® (or similar) to create a moisture management system
- colour to be black
- have anti-microbial properties

6.9 Heels and soles

- heels shall be of an acceptable durable and fit for purpose moulded material
- to be light-weight
- an acceptable pattern of the heel and sole to be as shown in figure 4
- the height of the heel shall be in accordance with the pitch of the last used
- to be resistant to fuel oil
- slip resistant
- colour to be black

6.10 Inner soles

- to be of a breathable material that is laminated to a closed-cell foam of acceptable thickness to promote comfort

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6.11 All other inner materials and bottom stock

- to be fit for purpose
- to enhance comfort
- light-weight
- to comply with the requirements as given in EN 13634:2010 “Protective footwear for motorcycle riders – requirements and test methods”

7. Performance requirements

7.1 General

- boots to comply with the requirements of EN 13634:2010 “Protective footwear for motorcycle riders – requirements and test methods”
- suitable for wear during all seasons
- protection performance levels to be as given in 7.1.1 to 7.1.3

7.1.1 Impact abrasion resistance of the ankle:

- Section A: Level 1 ≥ 1.5 seconds
- Section B: Level 1 ≥ 5 seconds

7.1.2 Impact cut resistance of the leather:

- Section A: Level 2 ≤ 25 mm
- Section B: Level 2 ≤ 15 mm

7.1.3 Transverse rigidity of the whole shoe:

- Level 2 ≥ 1.5 KN

7.2 Reflective material

- to comply with the relevant requirements of ISO 20471

7.3 Total mass of boots

- the total mass of a single boot (size 39 EU) shall be approximately 665 g (at room temperature and as received)

8. Design and make

8.1 General

- the methods of construction shall be in accordance relevant industry standards for protective footwear
- neatly made, to be clean and have no defects

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8.2 Upper Construction

- to incorporate design elements as given in figures 5(a), 5(b) and 6
- to have an adjustable closure flap that fastens with touch and close fasteners
- fastens with a concealed slide fastener
- a triangular gusset of soft pliable leather that is lined with breathable lining shall be positioned behind the slide fastener and shall extend beyond the top edge of the slide fastener (see figure 6)

8.3 Closing

8.3.1 Skiving

- Skiving shall be done in a manner that will prevent the formation of ridges inside the shoe.

8.3.2 Edge treatment

- All raw edges visible on a finished boot shall be stained to a colour that is a match to that of the upper materials.

8.3.3 Seams

- the upper closing shall be done in accordance with sound trade practice
- all inside upper seams shall be free from ridges and roughness
- there shall be no loose, ragged or uneven seams, and all loose thread ends shall have been removed
- all seams on the upper boot shall be stitched with two rows of stitches
- number of stitches shall be 7 -10 per 25 mm
- all seams shall be lock-stitch seams or chain stitch seams where relevant

Figure 5 (a) - Example of typical design elements (to serve as guideline)

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Figure 5 (b) - Example of typical design elements (to serve as guideline)

Figure 6 - Example of slide fastener opening and gusset (to serve as guideline)

8.4 Inner soles

- the inner soles shall be accurately cut to the correct shape of the last
- the innersoles shall conform to the bottom contour of the last

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8.5 Stiffeners

- stiffeners of the correct size, properly activated, shall be correctly positioned in the uppers
- stiffeners shall be well stuck to both the outside counter and the upper

8.6 Lasting

- toe-puffs of the correct size and properly activated shall be correctly positioned in the uppers
- the boot shall remain on the last long enough to allow the toe-puff and stiffener to dry and set thoroughly

8.7 Shank fitting

- the shank shall be inserted in such a way that it shall fit the contour of the boot bottom properly

9. Sizes

The unisex boots shall be supplied in sizes 34 to 48 (EU sizes), or corresponding UK sizes.

In addition to the quantities as stipulated in the official order and in addition to the pre-production samples as required in Annex B, the successful bidder shall also supply the following:

- all sizes, i.e. a full fit range, that will be used for fitting purposes (the cost of the fit range shall be included in the bid submission)

10. Packaging and preservation

10.1 Packing

- unless otherwise specified in the order or contract, each pair of boots shall be placed in an individual cardboard box and then packed in a corrugated board bulk outer container
- with the exception of the last consignment of an order, only footwear of the same size shall be packed together in an outer container

10.2. Marking

10.2.1 Both boots of each pair shall be printed or have a textile label with the following information:

- The manufacturer's name or trade mark or both
- The size
- The protection level (as per EN 13634:2010)
- The country of origin

In Addition to the above, each boot shall have a label stating the composition of the main components

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10.2.2 Individual cardboard boxes shall bear the following information:

- The manufacturer's name or trade mark or both
- The item description
- The size

10.2.3 Bulk containers shall bear the following information:

- The manufacturer's name or trade mark or both
- The item description
- The size
- The quantity
- The order number
- The year of manufacture
- The gross mass

10.3 Labelling of Bulk Containers

Bulk containers

- each outer container shall have a printed label securely attached to all sides
- this label shall be visible when containers are stacked and shall provide the information given in 11.2.3 in legible and indelible block capital letters of height 12 mm

10.4 Care-labelling

- a swing label with the appropriate care and use instructions shall be attached to one of the boot (refers to each pair)

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13. Normative References

The following documents contain provisions which, through reference in this text, constitute provisions of this specification. All documents are subject to revision and, since any reference to a document is deemed to be a reference to the latest edition of that document, parties to agreements based on this specification are encouraged to take steps to ensure the use of the most recent editions of the documents indicated below. Information on currently valid national, international and CKS documents may be obtained from South African Bureau of Standards[2].

EN 13634:2010, *Protective footwear for motorcycle riders – requirements and test methods.*

ISO 20471,*High visibility clothing – Test methods and requirements*

SANS 105-B02/ISO 105-B02, *Textiles – Tests for colour fastness – Part B02: Colour fastness to artificial light: Xenon arc fading lamp test*.

SANS 105-C10:2006/ISO 105-C10, *Textiles – Tests for colour fastness – Part C10: Colour fastness to washing with soap or soap and soda.*

SANS 105-E04/ISO 105-E04, *Textiles – Tests for colour fastness – Part E04: Colour fastness to perspiration.*

SANS 105-X12/ISO 105-X12, *Textiles – Tests for colour fastness – Part X12: Colour fastness to rubbing.*

SANS 1362, *Sewing threads.*

SANS 1822, *Slide fasteners.*

SANS 1823, *Touch and close fasteners.*

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[2] ***SABS: Tel. +27 (0) 12 4287911***
www.sabs.co.za

ANNEX A

(Normative)

Bid sample submission requirements

In addition to the bid documents, each bidder shall submit the following:

A.1 Bid samples that comply with the requirements of the specification.

A.2 Detailed certificates/technical documentation to support the supplied product(s).

A.3 Any deviation from this specification shall be clearly identified and motivated by means of a written report that shall be submitted together with each sample for consideration.

A.4 Exemption certificates from the Department of Trade and Industry, if relevant.

A.5 The bid sample shall be submitted in a UK size 9.

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ANNEX B
(Normative)

Special conditions of bid

(Applicable to the successful bidder)

NOTE: ***Should the products supplied be commercially available motorcycle boots, the special conditions shall be as agreed upon between the JMPD and the supplier.***

B-1 GENERAL

B-1.1 Unless otherwise stated, the Johannesburg Metropolitan Police Department (or an organization appointed by it), shall be the inspecting authority.

B-1.2 Three pre-production sample boots shall have been inspected, tested and approved by the inspecting authority before bulk production is commenced. **Each one of these samples shall be accompanied by a trim chart containing a sample of each component material and the relevant certificates that prove compliance with the requirements of each component**. It shall be the duty of the manufacturer to give adequate notice to the inspecting authority of the availability of these samples.

B-1.3 The boots shall be subject to inspection during the course of manufacture. The inspector shall, during normal working hours, be given all reasonable facilities for carrying out his duties and shall have the right of entry into the contractor's factory and the factory or works of any subcontractor where work on boots supplied to this specification may be in progress.

B-1.4 The contractor shall inspect the finished boots for compliance with the specification before submitting them to the inspecting authority for final inspection.

B-1.5 Before acceptance, the boots shall have been inspected and tested by the inspecting authority and found to comply with the requirements of the specification.

B-2 DOCUMENTATION

One container of each consignment shall be marked “DOCUMENTS” and in addition to the boots, shall contain the following:

a) The packaging slip or delivery note;
b) Where applicable the inspection certificate(s); and
c) A copy of the invoice containing the following information:
   - the order number;
   - the financial authority number; and
   - a full description of the consignment, i.e. quantity, etc.

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HISTORY SHEET				
VERSION	**DATE**	**AMENDMENTS/HISTORY**	**CHECKED**	
			NAME	**INIT.**
00.1	Feb 2015	First draft		
00.2	Feb 2015	Add Annex A Add reference to local content Change markings on bulk container Add anti-microbial requirements		
01.0	April 2015	First release		

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