F. No. IV-21011/7/2012-Prov-I-MHA - 1784
भारत सरकार/Government of India
मंत्रालय/Ministry of Home Affairs
पुलिस आयुर्विज्ञानीकरण प्रभाग /Police Modernization Division
संभरण-1 डेस्क /Prov.I Desk

Jaisalmer House, 26, Man Singh Road,
New Delhi, dated the November, 2016

To

The DsG: AR, BSF, CISF, CRPF, ITBP, NSG, SSB, IB & BPR&D.

Subject: Revised QRs/Specification of Leather Belt.

Sir,

The undersigned is directed to refer to the subject mentioned above and to say that the revised QRs/specifications in respect of Leather Belt as per Annex-I has been approved by the competent authority in MHA.

2. Henceforth, all the CAPFs should trial evaluate and procure the above item, required by them, strictly as per the laid down revised QRs/Specification of Leather Belt.

3. Concerned CAPF will be accountable for correctness of the QRs and Trial Directives of Leather Belt.

4. QRs/Specifications of Leather Belt issued earlier vide MHA’s letter No.IV-21011/7/2012-Prov-I dated 3.7.2013 is rescinded.

Encl: As above.

Yours faithfully,

(Ritesh Kumar)
Under Secretary to the Govt. of India

Copy forwarded for necessary action to: SO (IT), MHA - with the request to host the QRs and Trial Directives of Leather Belt on official website of MHA (under the page of Organizational Set up, Police Modernization Division-Clothing items) and remove earlier QRs/Specifications of Leather Belt vide letter No. IV-21011/7/2012-Prov-I dated 3.7.2013. Soft copy is being sent through email.

(V. Devadas)
Section Officer (Prov-I)

Copy to: DDG (Procurement), MHA
1. **SCOPE**

This specification covers the requirements of Leather Belt Black for use by CAPFs. This standard prescribes the requirements and methods.

2. **MATERIAL**

2.1 Vegetable Tanned Leather black colour
2.2 Buckle, Sword Hook, Loop, Loop stopper Hook, D-Ring, Revet, Stud etc.

3. **REQUIREMENT**

3.1 Raw material

3.1.1 **Belt:** The leather shall be good quality vegetable tanned leather. It shall be free from defects. Upper side of Leather Belt should be black polished and should have a shining finish.

3.1.2 **Logo:** It should be of Brass [Copper 70% (min) & Zinc 25% (min)]

3.1.3 **Buckle:** Sword Hook, Loop, Loop stopper Hook, D-Ring, Rivet, Stud etc. should be made from good quality MS (low carbon steel) with Nickel Chrome plating.

3.2 **Tanning:** The butts shall be tanned with vegetable tanning materials or synthetic tanning materials or the mixture of two. Mineral acids shall not be used for plumping the hides either in pretanning stage or during tanning. A cut section of the leather made by knife shall be smooth showing that the inside fiber is compact and fully tanned.

3.3 **Finishing:** The strap butts or bends shall be finished on the grain and flesh sides and the thin protective layer of grease left during the period of seasoning shall be removed.

3.4 **Physical Dimensions:**

3.4.1 The dimensions of the belt should be as follows:

   a) Length : 140 cm ± 5 cm
   b) Thickness : 2.5 mm ± 0.2 mm
   c) Width : 30 mm ± 2 mm

One end of the leather strap should be sewed with a leather piece of a size of 11 cm length having same width and thickness as that of the belt.
The dimensions of the buckle should be as follows:

a) Length : 90 mm ± 5 mm  
b) Thickness : 1.2 mm ± 0.1 mm  
c) Width : 63 mm ± 2 mm

The dimensions of the buckles for CAPFs is attached as Sketch- 2(i), 2(ii), 2(iii), 2(iv), 2(v), 2(vi) & 2(vii) for Assam Rifles, SSB, CISF, BSF, ITBP, CRPF & NSG respectively.

Leather Loops : 3 Leather loops should be provided in the leather belt at the buckle side/Head end. Two out of three loops should move freely on the leather & one should be fixed duly sewed with leather belt at the buckle end. The dimensions of the loops should be as per the attached sketch.

Steel Loop with Steel Hook Stopper : One Steel loop should be provided to move freely on the leather belt having one steel loop round hook for locking/stopping. Dimensions should be as per the sketch.

Steel loop, at the end of belt, for holding two hooks of belt buckle: As - % sketch.

Physical Requirements: The leather/Leather loop shall comply with the physical requirements given below:

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Characteristics</th>
<th>Requirement</th>
<th>Method of test (Ref. To Cl.No. of IS 5914:1970)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Tensile strength, MN/sq.m, Min</td>
<td>20.6</td>
<td>LP:6</td>
</tr>
<tr>
<td>2</td>
<td>Temporary elongation, % Max at a load of 4N/square mm</td>
<td>6</td>
<td>LP:6</td>
</tr>
<tr>
<td>3</td>
<td>Permanent elongation, % Max at a load of 4N/square mm</td>
<td>2</td>
<td>LP:6</td>
</tr>
<tr>
<td>4</td>
<td>Stitch tear resistance, N/cm thickness, Min</td>
<td>834 N/cm</td>
<td>LP:8</td>
</tr>
<tr>
<td>5</td>
<td>Grain Strength</td>
<td>Shall not crack</td>
<td>LP:13</td>
</tr>
</tbody>
</table>

Chemical Requirements: The leather/Leather loop shall also comply with the Chemical requirements given below:

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Characteristics</th>
<th>Requirement</th>
<th>Method of test (Ref. To Cl.No. of IS 582:1970)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Total ash, percentage by mass, Max</td>
<td>2.5</td>
<td>LC:3</td>
</tr>
<tr>
<td>2</td>
<td>Solvent extractable substances, percent by mass, Max</td>
<td>5 to 7</td>
<td>LC:4</td>
</tr>
<tr>
<td>3</td>
<td>Water soluble matter, percent by mass, Max</td>
<td>16.0</td>
<td>LC:6</td>
</tr>
<tr>
<td>4</td>
<td>Insoluble ash, percent by mass, Max</td>
<td>1.0</td>
<td>LC:8</td>
</tr>
<tr>
<td>5</td>
<td>pH of water soluble</td>
<td>3.5 to 4.5</td>
<td>LC:18</td>
</tr>
<tr>
<td>6</td>
<td>Differential number, Max</td>
<td>0.6</td>
<td>LC:18</td>
</tr>
<tr>
<td>7</td>
<td>Degree of tannage, Min</td>
<td>55</td>
<td>LC:21</td>
</tr>
<tr>
<td>8</td>
<td>Hide substance, percentage by mass, Min</td>
<td>40</td>
<td>LC:5</td>
</tr>
</tbody>
</table>
3.7 Eco-friendly parameters: The leather/leather loop should also meet the following eco-friendly quality parameters:

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Test</th>
<th>Quality Norm</th>
<th>Method of test</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Azo</td>
<td>IS 14898</td>
<td>LC:4 of IS 14816/ISO 17234</td>
</tr>
<tr>
<td>2</td>
<td>Pentachlorophenol(PCP)</td>
<td>IS 14898</td>
<td>IS 14575/ISO 17070</td>
</tr>
<tr>
<td>3</td>
<td>Formaldehyde</td>
<td>IS 14898</td>
<td>LC:3 of IS 14816/ISO 17226</td>
</tr>
</tbody>
</table>

3.8 Physical Requirements: The Buckle shall comply with the physical requirements given below:

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Characteristics</th>
<th>Requirement</th>
<th>Method of test</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Corrosion Resistance</td>
<td>No rust / colour change in sample Till 24 hrs</td>
<td>SATRA TM-310 part-II</td>
</tr>
<tr>
<td>2</td>
<td>Breaking St of Buckle</td>
<td>250 N (min)</td>
<td>BS 5131-5.11</td>
</tr>
</tbody>
</table>

3.9 Chemical Requirements: The Buckle shall comply with the chemical requirements given below:

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Characteristics</th>
<th>Requirement</th>
<th>Method of test</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Nickel Release</td>
<td>Less than 0.5 ug/sq.cm/week</td>
<td>DIN EN 12471</td>
</tr>
<tr>
<td>2</td>
<td>Composition Test</td>
<td>Copper 70% (min) &amp; Zinc 25% (min)</td>
<td>ISO 426/1</td>
</tr>
</tbody>
</table>

4. Packing: The Belt shall be packed as agreed to between the purchaser and the supplier.

5. SAMPLING AND CRITERIA FOR CONFORMITY

For the purpose of ascertaining the conformity of the material in a consignment of this specification, the scale of sampling and criteria for conformity shall be as prescribed in IS 2051:1962

6. MARKING: The packages shall be marked with the following information:

a) Name of the material,
b) Number of pieces or quantity
c) Manufacturer’s name or recognised trade-mark, if any, or both; and
d) Month and year of manufacture

Note: Quality evaluation to be done either by government or government approved laboratory.

Approved/Not Approved

K. Durga Prasad, IPS,
DG CRPF
BUCKLE 1mm THICK

M3 NUT

HOOK

90 MM

44.5 MM

90 MM

HOLE 3φ

HOLE 4φ

9

10.5

15

15

9

10

63 MM

17

19

5

8

15

8mm x 5mm x 15mm

HOLE

HOLE X 2

HOLE X 2
SKETCH-3

31 mm
\( \pm 0.1 \text{ mm} \)

18 mm \( \pm 0.2 \text{ mm} \)

60 mm \( \pm 3 \text{ mm} \)
SKETCH-4

60mm

DIA 2.5mm ± 0.1mm

STEEL STOPPER

DIA 1.2mm ± 0.1mm

STEEL LOOPS