



**Technical Specification for  
STRAPS CHIN CHAIN**

**BEARSKIN SOLDIERS LARGE AND SMALL  
HELMET CEREMONIAL ARMY BANDSMAN  
HELMET WHITE ROYAL MARINES  
STRAP ADJUSTING BEARSKIN  
CEREMONIAL RIFLE BAND OFFICER  
THE CAVALRY BAND**

Defence Clothing (DC)

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TABLE 1 – PRODUCT LIST

<b>Item Name</b>	STRAP CHIN CHAIN	
<b>Development File No</b>	NN/P2060	
<b>Product Support File No.</b>	DCIPT/RMTUC/4/9 & DCIPT/CST/NR/12/07	
<b>NATO Stock Number</b>	<b>Item</b>	<b>Pattern Number</b>
8415-99-513-4030	Bearskin Soldiers Large	24090
8415-99-751-3979	Bearskin Soldiers Small	24089
8415-99-869-3676	Helmet Ceremonial Army Bandsman	28560
8405-99-352-6592	Strap Adjusting for Cap Bearskin	24088
8415-99-397-4632	Ceremonial Rifle Band Officers	D01988
8415-99-741-0708	Helmet White Royal Marines	D00686
8415-99-553-3643	The Light Cavalry Band Busby Other Ranks	D02205
8415-99-553-3644	The Light Cavalry Band Busby Officers	D02206

**Any colour shown in this document is for representation and must not be used for colour matching.**

#### IPR STATEMENT

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TABLE 2 – ISSUE RECORD

Issue No	Comments	Issue Date
09	Addition of NSN's: The Light cavalry Band Other ranks chin chain, D02205 The Light cavalry Band Officers chin chain, D02206	28 July 2011
08	Reformatted to DC template. Deletion of NSN: 8415-99-135-4323, pattern No. M308B. Superseded by 8415-99-741-0708, pattern number D00686. Addition of 2 adjuster straps for patterns 24089 & 24090 included in para 5.3	19 May 2011
07	Pattern No. D01988 added. DEF STAN 81-89 deleted	17 February 2011
06	Reformatted and Royal Marine Band Service (NSN 8415-99-741-0708) chin chain added.	20 August 2008
05	Reviewed for component specifications. Addition of chin chains for wear with the Helmet White Royal Marines (NSN 8415-99-135-4323) and Helmet Ceremonial Army Bandsman (NSN 8415-99-869-3676) NSC updated for Patterns 24090 & 24089 to read 8415 (originally 8405)	01 March 2007
04	Reformatted with technical change	04 August 2004
03	Updated with technical change	06 May 1991
02	Updated with technical change	07 March 1955

PART 1THE PRODUCT

- a. Use of the Product. Chin chains to be worn with ceremonial headdress.

TABLE 3 – RELATED SPECIFICATIONS AND DOCUMENTS

<b>Specification/Document</b>	<b>Detail</b>
BS EN ISO 105 Part E01 Part E04	Textiles. Test for colour fastness Colour fastness to water Colour fastness to perspiration
BS EN ISO 11640	Leather. Test for colour fastness Colour fastness to cycles of to-and-fro rubbing
BS EN 1652	Copper and copper alloys-Plate, sheet, strip and circles for general purposes
BS 4292 Part 2	Method for specifying electroplated coatings of gold and gold alloys Gold and gold alloys for decorative and protective purposes
BS 7318	Industrial sewing threads made from linen (flax) or cotton
UK/SC/5628	Cloth, velvet, cotton and silk, WR
UK/SC/5574	Straps chin various
UK/SC/5696	Leather, sheep, head leathers
UK/SC/5699	Leather vegetable tanned various

PATTERNS

- a. Master Patterns: DC holds a Master Pattern for this product. Potential contractors may view the pattern on site by arrangement with the DC Commercial Department.
- b. Standard Patterns: A Standard Pattern may be obtained from the DC Technical Information Office and may be used to provide the criteria for all materials, components and manufacturing features not fully defined in this specification.

PART 2PRODUCT DESIGN

- a. Product Description: A group of leather chin straps covered in a link of brass rings and adjustment strap for bearskins.

TABLE 4 – PRODUCT COMPONENTS

4.1 Chin strap for Pattern No 24090	<ul style="list-style-type: none"> <li>Leather strap to UK/SC/5574, NSN 8415-99-975-6350</li> <li>Pattern No 10793A</li> </ul>
4.2 Chin straps for Pattern No 24089	<ul style="list-style-type: none"> <li>Leather strap to UK/SC/5574, NSN 8415-99-975-6351</li> <li>Pattern No 10794A</li> </ul>
4.3 Strap adjusting for cap bearskin Pattern No 24088	<ul style="list-style-type: none"> <li>Leather, vegetable tanned cattle hide, to, UK/SC/5699, full grain, black 2.8mm to 3.2mm thickness</li> </ul>
4.4 Chin strap for Pattern Nos 28560 and M308B	<ul style="list-style-type: none"> <li>Leather sheep black to UK/SC/5696</li> <li>Thickness 0.7mm +/-0.2mm</li> </ul>
4.5 Chin strap for pattern No D00686	<ul style="list-style-type: none"> <li>Leather, sheep skin, vegetable tanned, undyed. 0.3mm thick. All requirements to UK/SC/5696</li> </ul>
4.6 Chin strap for pattern No D02205 & D02206	<ul style="list-style-type: none"> <li>Leather sheep black to UK/SC/5696</li> <li>Thickness 1.5mm +/-1mm</li> </ul>
4.7 Brass links for Pattern Nos 24089 and 24090	<ul style="list-style-type: none"> <li>Brass to BS EN 1652 Symbol CuZn30 natural finish</li> <li>Number CW505L, condition R270</li> </ul>
4.8 Brass links for Pattern D01988	<ul style="list-style-type: none"> <li>Brass to BS EN 1652 Symbol CuZn15 black matt finish as standard pattern</li> </ul>
4.9 Brass links for Pattern Nos 28560	<ul style="list-style-type: none"> <li>Brass to BS EN 1652 Symbol CuZn15 bright gilt finish</li> <li>Number CW502L, condition R260</li> </ul>
4.10 Brass links for Pattern D02205 & D02206	<ul style="list-style-type: none"> <li>Brass to BS EN 1652 Symbol CuZn15 bright gilt finish</li> </ul>

TABLE 4 – PRODUCT COMPONENTS continued

4.11 Links for Pattern No. D00686	<ul style="list-style-type: none"> <li>• Gilding metal, 18ct hard gold plate. All requirements to BS 4292</li> </ul>
4.12 Threads	<ul style="list-style-type: none"> <li>• Thread linen to Table 2 of BS 7318</li> <li>• Thread No 18 Cord 3 black for Pattern No's 24089, 24090, D01988, D02205 &amp; D02206</li> <li>• Thread No 30 Cord 3 black and yellow for Pattern No 28560</li> <li>• Thread No 30 Cord light brown for Pattern No D00686</li> </ul>

TABLE 5 – PRODUCT CONSTRUCTION

5.1 Chains	<ul style="list-style-type: none"> <li>• The number and size of links for each strap are specified in Table 6</li> <li>• The links are to be soundly soldered with silver solder with no sharp edges</li> <li>• The interlinking is to be through every two links</li> <li>• For Pattern No's 24089 and 24090 a solid link is to be fitted to both ends to complete the chain</li> <li>• For Pattern No's 28560, D00686, D01988 D02205 &amp; D02206 a solid link is to be fitted to both ends</li> <li>• And a further 7 links are to be added to one end. The final link being solid to complete the chain</li> </ul>
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TABLE 5 – PRODUCT CONSTRUCTION continued

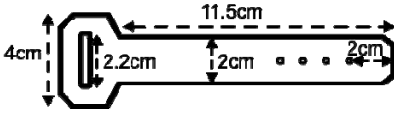
<p>5.2 Chin strap</p>	<ul style="list-style-type: none"> <li>• The chin straps are to compiled of two layers of leather</li> <li>• For Pattern No. D01988 is compiled with a single layer of leather which is backed with black velvet with a colourfastness requirement to comply with UK/SC/5628</li> <li>• For Pattern No. D02206 is compiled with a double layer of leather which is backed with black velvet with a colourfastness requirement to comply with UK/SC/5628</li> <li>• For Pattern No's 28560 and D01998 length 390mm by width 16mm</li> <li>• For Pattern No's 24089 and 24090 as described in UK/SC/5574</li> <li>• For Pattern No D00686, length 390mm by width 16mm</li> <li>• For pattern no's D02205 &amp; D02206, length 380mm by width 19mm</li> <li>• Each link of the chain is to be securely attached to the top layer of leather with two rows of stitching</li> <li>• The second layer of leather can then be glued to the top layer</li> <li>• The two layers to be securely stitched together with at least 5 stitches per 20mm</li> </ul>
<p>5.3 Strap adjuster bearskin</p> 	<ul style="list-style-type: none"> <li>• For pattern numbers 24089 and 24090 each chin chain is to be supplied with 2 adjusting straps</li> <li>• The strap is to comply with the shape and measurements of the diagram</li> <li>• The first hole to be 20mm from the end, other holes spaced 10mm apart</li> </ul>

TABLE 6 – MEASUREMENT OF LINKS PRIOR TO FORMING (All measurements in millimetres unless otherwise stated)

	Solid end links CuZn15	Solid end links CuZn30	Convex middle links both CuZn15 and CuZn30												
<b>Thickness of link</b>	1.2	3.0	0.7												
<b>Inside diameter of link</b>	16.0	24.1	10.3	11.4	13.3	14.0	15.5	16.5	17.00	17.9	19.6	20.9	22.6	22.9	Total number of links to chin chains
<b>Outside diameter of link</b>	18.2	36.2	17.3	17.3	19.1	20.8	22.6	24.6	25.7	26.9	28.4	31.00	33.5	36.1	
<b>Pattern No 24090</b>	-	2	2	2	2	2	6	4	2	2	4	2	4	4	36
<b>Pattern No 24089</b>	-	2	2	2	2	2	6	4	2	2	2	2	2	4	32
<b>Pattern No 28560 &amp; D01998</b>	9	-	-	66	-	-	-	-	-	-	-	-	-	-	75
<b>Pattern No D00686 *</b>	9	-	-	64	-	-	-	-	-	-	-	-	-	-	73
<b>Pattern No's D02205 &amp; D02206</b>	5	-	62	-	-	-	-	-	-	-	-	-	-	-	62
* Gilding metal, 18ct hard gold plate															



TABLE 7 – COLOUR FASTNESS REQUIREMENTS for LEATHER STRAPS

AGENCY	RATING		METHOD OF TEST
	COLOUR CHANGE	STAINING	
Perspiration	3	3	BS EN ISO 105 E04
Water	3	3	BS EN ISO 105 E01
Cycles of to-and-fro (Wet Rub)	3	3	BS EN ISO 11640

#### 4. LABELLING REQUIREMENTS

- Each strap is to be individually wrapped in acid free tissue paper or an alternative approved by DC
- Each item to be individually marked as label below, to include item name, NSN and Contract Number

TABLE 8 – SPECIMEN LABELS

ITEM NAME
NSN
Contract No.