1774
17/2

पु.म.नि. (सं.)
डी. सं. .....दि. .....
IGP (Prov.)
Dy. No. 340 Date 14/2/14

DG/SDG/ADG
SPS Dy No. H36(m)
Date 344 14/2/14

SL: 40

F.No. U-II-98 (Spec.)/2013-14-Prov./MHA Prov.I
Bharat Sarkar/Government of India
Grihas Mantralaya/Ministry of Home Affairs
PM Division/Prov.II
*****

IG (Prov)

26, Man Singh Road, Jaisalmer House,
New Delhi. Dated 11th February 2014

To

DsG : AR (through LOAR), BSF, CISF, CRPF, ITBP, SSB, NSG & BPR&D.

Subject :- QRs/specification of various CTS items.

The QRs in respect of following items (as per annexure) have been accepted by the competent authority in MHA subject to condition that no deviation will be made from the proposed QRs and Trial Directives without the permission of MHA.:-

1. Synthetic Web Equipment- Improved Versions (p. 7-39/c)
   a) Pack with aluminum frame.
   b) Haversack
   c) Pouches ammunition
   d) Frog Bayonet
   e) Belt waist
2. Sling assembly Rifle 5.56mm (p. 40-44/c)
3. Rifle Sling (Nylon) AK-47 (p. 45-55/c)
4. Carbine Sling (Nylon).

DIG (Prov)
पु.उ. महा (प्रोव्हा)
Dy. Com
उप [illegible]
AD [illegible]
[illegible]
OS [illegible]
[illegible]
DA
प्राप्ति की तिथि

2. Henceforth, all the CAPFs should procure the above items by them strictly as per the laid down Technical Sprecifications/QRs subject.

Encl: A/a

Yours Faithfully,

S.K. Jain
Director (Prov)
Tele/Fax: 2338 6191

on file
14/02/14

DIG Prov

Copy forwarded for necessary action to:-

The Section Officer (IT), MHA: it is requested to host the QRs (soft copy attached) on the MHA website (under the page of Organisational set up- Police Modernisation Division- QRs under CTS items)

(R.K. Soni)
Section Officer (Prov.I)

Insp (Clo) - convey to all formations

17/

Copy to :- Director (Procurement)/MHA

QRs of Syn/Web Equip - Improved vers QRs Sim Does SCM- 1 to 10.

GOVERNMENT OF INDIA
(Ministry of Defence)

Provisional Specn. No.
DMSRDE/T&GS/99/440(a)
No. of Drawing/Plate attached
29 Plates

Latest Spec

SPECIFICATION
FOR

SYNTHETIC WEB EQUIPMENT - IMPROVED VERSION
Cat No.–NIV

ITEMS

I) PACK WITH ALUMINIUM FRAME
II) HAVERSACK
III) POUCHES AMMUNITION
IV) FROG BAYONET
V) BELT WAIST

1. THIS SPECIFICATION CONSISTS OF EIGHT PAGES

2. THIS SPECIFICATION IS INTENDED TO GUIDE PURCHASE, INSPECTION AND MANUFACTURE OF SYNTHETIC WEB EQUIPMENT -IMPROVED VERSION AGAINST ARMY REQUIREMENT.

3. THIS SPECIFICATION OR ANY DRAWINGS, PATTERN OR ANY OTHE INFORMATION ISSUED IN CONNECTION THERE-WITH MAY ONLY BE USED FO SPECIFIC ORDER PLACED BY A COMPETENT AUTHORITY. IT IS NOT TO B USED FOR ANY OTHER PURPOSE WHAT SO EVER WITHOUT THE EXPRES WRITTEN SANCTION OF THE APPROPRIATE AUTHORITY.

4. ALL CLAUSES IN THIS SPECIFICATION SHALL BE COMPLIED WITH IN EVER RESPECT, IRRESPECTIVE OF THE SOURCE OF SUPPLY OF THE MATERIAL AND/OR COMPONENTS.

5. IN CASE OF ANY DISCREPANCY BETWEEN THIS SPECIFICATION AND AN SAMPLE OR PATTERN, LOANED FOR ANY PURPOSE, THIS SPECIFICATIO TOGETHER WITH DRAWING AND OTHER CONNECTED SPECIFICATION SHAL BE TAKEN AS CORRECT.

6. WHEN-EVER A REFERENCE TO ANY OTHER SPECIFICATION OCCURS IN TH SPECIFICATION, IT SHALL BE TAKEN AS REFERENCE TO THE LATEST VERSIC OF THAT SPECIFICATION EXISTING AT THE TIME OF FINALISATION OF CONTRACT.

ISSUED

BY

THE DIRECTOR
DEFENCE MATERIALS & STORES
RESEARCH & DEVELOPMENT ESTABLISHMENT
D.M.S.R.D.E., POST OFFICE
G.T. ROAD, KANPUR - 208013

Price Rs. ~~130~~ 500/=

CRPF BSF CISF ITBP SSB NSG AR&Fle BPR&D

(2) (142)

1. SCOPE

This specification covers the requirements of Synthetic Web Equipment - Improved Version in universal size.

2. GENERAL

The Synthetic Web Equipment-Improved version is made from Fabric Nylon 250 GSM, Polyurethane Coated Disruptive. The equipment consists of Pack with Aluminium Frame, Haversack, Pouches Ammunition Frog Bayonet and Belt Waist.

3. MATERIAL

The components of Synthetic Web Equipment-Improved version shall be manufactured from the following materials:-

TEXTILE ITEMS

Sl.No.	Materials	Particulars
I)	Fabric Nylon 250 GSM Disruptive, Polyurethane Coated (variety No.2)	Prov.Specification No.DMSRDE/ T&GS/89/377(C).
II)	Tape Nylon thick 13 mm O.G.	Prov.Specification No. DMSRDE/T&GS/92/403
III)	Tape Nylon thick 19 mm O.G.	
IV)	Tape Nylon thick 25 mm O.G.	
V)	Tape Nylon thick 38 mm O.G.	
VI)	Tape Nylon thick 51 mm O.G.	
VII)	Webbing Nylon 57 mm O.G.	
VIII)	Tape Nylon thin 13 mm medium O.G.	
IX)	Tape Nylon thin 51 mm O.G.	
X)	Tape Nylon 19 mm O.G.	Specification No. JSS-8315-6
XI)	Latex Foam Rubber sheet solid type 25 mm thick.	'HARD GRADE OF IS : 1741-1960 (amendment No.4, March 1992 of IS : 1741:1960)
XII)	Fastener Hook Tape Synthetic 50 mm type-I, O.G	Specification No. IS : 8156
XIII)	Fastener loop Tape Synthetic 50 mm type-I O.G.	

CRPF BSF CISF ITBP SSB NSG A.Rifle BPR&D

XIV)	Fastener Hook Tape Synthetic 25 mm type-I, O.G.	Specification No. IS : 8156
XV)	Fastener Loop Tape Synthetic 25 mm type-I, O.G.	
XVI)	Fastener Hook Tape Synthetic 16 mm type-I, O.G.	
XVII)	Fastener Loop Tape Synthetic 16 mm type-I, O.G.	
XVIII)	Long Cloth white Bleached variety No.1	Specification No. IS : 187
XIX)	Nylon Sewing thread O.G. for Aero space purposes variety No. H_1	Specification No. IS : 4229
XX)	Flexible Polyurethane foam 8 mm thick	Specification No. IS : 7933
XXI)	Drill Cotton Disruptive Pattern Vat Printed	Specification No. IND/TC/0044
XXII)	Synthetic (Plastic) Slide fastener-special purpose, O.G., Medium duty 28 Cm.	Specification No. IS : 14181

METAL COMPONENTS

4. DIMENSIONS — As per details given in Annexure.

4.1 All the components of Synthetic Web Equipment viz. Pack with Aluminium Frame, Haversack, Pouches Ammunition, Belt Waist & Frog Bayonet shall be manufactured to the shape, design & dimensions as shown in the attached relevant drawing.

4.2 GENERAL TOLERANCE IN DIMENSIONS (excluding metal components)

a) Dimensions upto 25 Cms. - +0.25 Cms.

b) Dimensions from 26 Cms. upto 50 Cms. - ±0.50 Cms.

c) Dimensions from 51 Cms. upto 100 Cms. - ±1.00 Cms.

d) Dimensions from 101 Cms. and above. - ±1.50 Cms.

CRPF BSF CISF ITBP SSB NSG ARMY BPR&D

5. MANUFACTURE

The fabric shall be cut properly. The free edges shall be neatly turned in or covered through piping and sewn while fabricating textile items of Synthetic Web Equipment.

All the textile items of Synthetic Web Equipment shall be machine stitched with Thread Sewing Nylon. The stitches shall be regulated at 30/35 stitches per dm.

Thread break shall be back stitched (overlapped) for not less than 2.5 cms. at each break. Stitching shall be over sewn at the ends to 1.0 cm. to prevent un-ravelling except when ends are turned-in under a hem or held down by other stitching. Thread tension shall be properly maintained to prevent loose stitching/seam puckering

6. HEAT SEALING

Both the ends of each Tape/Webbing being used shall be heat sealed properly to avoid fraying in longer use. The loose end of the Tape/Webbing shall be heat sealed to a length of 2 cms. rounded and shaped for smooth passage through respective buckles

7. EYELETS

Holes suitably punched with heat sealing to receive the eyelets shall be smaller than the outside diameter of the eyelet barrels, so that barrels must fit tight in the holes. Loose fibres shall not be visible around the punched hole. The eyelets and washers shall be securely clinched without damage to surface of fabric/webbing.

8. WORKMANSHIP & FINISH

In appearance, shape, workmanship and finish and in all other respects not defined in this specification, the Synthetic Web Equipment shall conform to the sealed sample held in the custody of the AHSP.

9. PRE-INSPECTION

Before tendering a store to the Government Inspector, the supplier will carryout a thorough pre-inspection of each delivery to satisfy himself that the stores fully conform to this specification.

10. INSPECTION

If on examination from any portion of consignment, the stores and its basic materials are found not to be fully in accordance with the specification, the whole consignment is liable to be rejected.

CRPF BSF CISF ITBP SSB NSG AR Rifle BPR&D

The sampling plan as under shall be followed :-

Lot Size	No. of samples for visual Inspection	Permissible No. of defective samples	No. of samples for distructive test	Permissible No. of defective samples
0 - 300	10	1	2	0
301 - 500	20	2	3	0
501 - 1000	30	3	5	0
1001 - 3000	50	5	8	0
3001 & above	80	5	13	1

11. MARKING

Each article shall be legibly & indelibly marked in white ink with Cat. No. Manufacturer's initials or recognised trade mark, and year of manufacture at a place previously approved by AHSP/Inspecting officer.

12. PACKING

The various articles of Synthetic Web Equipment shall be packed as per details given below:-

Sl.No.	Designation	Nos. per bundle	No. of bundles per bale
I)	Pack	10	4
II)	Aluminium Frame for Pack	10	4
III)	Haversack	10	8
IV)	Pouches Ammunition	10	8
V)	Belt Waist	10	16
VI)	Frog Bayonet	10	80

a) Each article of Synthetic Web Equipment shall be delivered in new clean and dry condition & packed properly. Quantity noted against each article above shall be made into unit pack (bundle) by suitably folding, placing one over the other and then suitably tying them with three ply twine jute (IS:1912)

CRPF BSF CISF ITBP SSB NSG Army BPR&D

(12) (446)

b) Unit packs (bundles) shall then be wrapped with Polythene film of 0.04mm thickness (IS: 2508) and quantity of unit packs (bundles) noted against each article above shall then be wrapped in laminated hessian cloth (Specn. No.IND/TC/2123) to form a compact bale of rectangular shape as far as possible by placing suitably four pieces of slats wood 70 mm wide & 10 mm thick (Specn. No. CIGS/US/410) or Bamboo strips (preserved).

c) The overlaps of inner layers shall be at least 10 cms to ensure full protection to the contents of the bale. The overlaps of the outer layer of hessian cloth shall be such that it can be properly and securely sewn around the bale. The bale shall be stitched with double three ply jute twine with not less than twelve stitches per dm., taking care not to pierce the inner wrapping during stitching. Sufficient hessian cloth shall be pulled out at each corner to form 'ears' of about fifteen cms in length. The bale shall be suitably secured by fastening with polypropylene strapping 12 mm (specn. CIGS/US/282).

Before despatch each bale/package shall be legibly marked by stencil showing:-

a) Nomenclature and Cat. No. of the store

b) Qty. packed in the bale/package.

c) Serial No. of the bale/package.

d) Month & Year of packing.

e) Name/trademark of the manufacturer

f) Gross weight of the bale/package in Kg.

g) Name & address of the consignee.

h) Inspection Note No. and date

13. WARRANTY CLAUSE

The store supplied against an order shall bear warranty of the contractor against defective material/workmanship and performance for a period of one year from the date of receipt of the stores at consignee depot. If during the period the stores supplied are found by the consignee to be so defective, the same shall be replaced immediately with serviceable stores, without any charges or cost.

KANPUR

DATED : 07.01.2007

(V.P. RALLI)
Director
Defence Materials & Stores
Research & Development Establishment
D.M.S.R.D.E., Post Office.
G.T. ROAD, KANPUR - 208013

CRPF BSF CISF ITBP SSB NSG A/Rifle BPR&D

(7) (13) 46-7

METAL COMPONENTS

Sl. No.	Nomenclature	Particulars/Description
1.	Aluminium Alloy Frame for Pack, Synthetic Web Equipment	(Frame attached with components may procured as one unit)
	a) Frame with integral load rest	Aluminium Alloy Tube is 15 mm O.D x 2.5 W.T. conforming to Alloy 64430 condition W.P. of IS :1285
	b) Alignment & Strengthening piece	Aluminium Alloy rod 10 mm dia x 70 mm long to be inserted before rivetting conforming Alloy 64430 -condition W.P. of IS : 733.
	c) Horizontal strips	Aluminium Alloy sheet 3mm thick conforming to Gde. 53000 condition H_1 of IS : 737.
	d) Rings on the Horizontal strips	M.S. wire 4 mm dia conforming to IS : 280 annealed condition.
	e) Straps Retainers (Eye)	M.S. wire 4 mm dia conforming to IS : 280 annealed condition.
	f) Revets ((Frame attached with components may be procured as one unit)	Aluminium Alloy Round head 5 mm dia x 25 mm long conforming to Gde. 53000 (NR-5) of IS : 740.
2.	Eyelets Brass No.21 with plain washer.	Conforming to No. 21 of IS : 4084, except overall length 'D' shall be 7.0 mm.
3.	Belt Buckle 57 mm (Male & Female)	Aluminium Alloy sheet 5 mm thick conforming to Gde. 53000 condition H_2 of IS : 737
4.	Slides for Belt	Aluminium Alloy sheet 1.5 mm thick conforming to Alloy 53000 Temper H_1 of IS : 737.
5.	Buckle Adjusting 60 mm	Aluminium Alloy sheet 3 mm thick conforming to Alloy 53000 Temper H_1 of IS : 737.
6.	Buckle Aluminium Alloy 25 mm	Specification No. CQA (GS)/US/324

Item No. 2 Eyelets Brass with plain washer has been substituted for ~~painted~~ Painted O.G. vide our letter No. F-1/LE-2 dt 18-1

18/4/2002

CRPF BSF CISF MHA SSB NSG AVRDE BPR&D

7.	Buckle Aluminium Alloy 51 mm	Specification No. CQA (GS)/US/324
8.	'D' Ring 19 mm Nickel plated, Nickel plating 0.025 mm (25 Micron) copper (as base coating) 0.008 mm (8 Micron) as per IS : 1068	Mild steel wire 2 mm dia conforming to IS:280, ½ Hard (H_1) condition.
9.	Buckle Aluminium Alloy Quick Release 19 mm	Specification No. CQA(GS)/ US/324
	PAINT - Paint R.F.U. finishing War equipment, stoving, brushing/ spraying Olive Green Scamic No. 314.	Specification No. IND/SL/3235

Note:-

COATING

a) The metal fittings shall be free from burrs, flaws, cracks, sharp/rough edges and any defects. The surface of the metal fittings shall be finished smooth all over.

b) All the metal components shall be anodized and dyed in black except M.S. wire rings. Wherever not covered under the relevant specification. The anodizing shall conform to grade AC 15 of IS : 1868 and thickness be determined as per IS : 5523. The anodized surface after dyeing shall be sealed as required vide clause 10 of IS : 1868 and when tested as per IS : 5523. The anodized and dyed surface shall have a dull finish and conform to light fastness requirement when tested as per IS : 5523. M.S. Wire (Rings) components shall be epoxy Coated in Black colour. Anodization of 'D' ring 19 mm Nickel plated is not required.

CRPF BSF CISF ITBP SSB NSG A/Rifle BPR&D

(9) 13/149

PLATE No.

SYNTHETIC WEB EQUIPMENT - IMPROVED VERSION

INDEX

Sl. No.	NOMENCLATURE	PLATE No.
1.	INDEX	1
2.	MATERIAL LIST	2
3.	PACK WITH FRAME ASSEMBLY	3
4.	PACK (FRONT VIEW)	4
5.	PACK (BOTTOM VIEW)	5
6.	PACK (BACK VIEW)	6
7.	PACK (TOP COVER)	7
8.	STRAP ATTACHMENT PACK (SHOULDER STRAP)	8
9	STRAP ATTACHMENT PACK (BACK SUPPORTING STRAP)	9
10.	STRAP ATTACHMENT PACK (SLEEVE)	10
11.	ALUMINIUM FRAME (PLAN)	11
12.	ALUMINIUM FRAME (FRONT VIEW)	12
13.	ALUMINIUM FRAME (SIDE VIEW)	13
14.	ALUMINIUM FRAME (LOWER STRIP)	14
15.	ALUMINIUM FRAME (UPPER STRIP)	15
16.	HAVER-SACK (FRONT VIEW)	16
17.	HAVER-SACK (BACK VIEW)	17
18.	AMMUNITION POUCHES (FRONT VIEW)	18
19.	AMMUNITION POUCHES - SECTION AA	19
20.	AMMUNITION POUCHES - SECTION BB & CC	20
21.	AMMUNITION POUCHES (BACK VIEW)	21
22.	AMMUNITION POUCHES (HAND GRENADE POCKET AT SIDE)	22
23.	FROG BAYONET	23
24.	BELT WAIST - SUB ASSEMBLY	24
25.	BELT WAIST	25
26.	BELT WAIST (BUCKLE MALE)	26
27.	BELT WAIST (BUCKLE FEMALE)	27
28.	BELT WAIST (BUCKLE ADJUSTING 60mm)	28
29.	BELT WAIST (SLIDERS)	29

FIRST ANGLE PROJECTION	DRAWN BY	CHECKED BY	APPROVED BY
DIMENSIONS IN mm.	K.C. Reddy	PA[illegible]	

CRPF BSF CISF ITBP SSB NSG AWNIE BPR&D

(10) (16) 1660

SYNTHETIC WEB EQUIPMENT - IMPROVED VERSION

MATERIAL LIST

(TEXTILE ITEMS & METAL COMPONENTS)

S.NO.	NAME OF MATERIALS
1.	FABRIC NYLON 250GSM DISRUPTIVE POLYURETHANE COATED (VARIETY No. 2)
2.	DRILL COTTON DISRUPTIVE PATTERN VAT PRINTED
3.	LONG CLOTH WHITE BLEACHED VARIETY No. 1.
4.	WEBBING NYLON 57 mm O.G
5.	FASTENER HOOK TAPE SYNTHETIC 50mm TYPE - I, O.G
6.	FASTENER LOOP TAPE SYNTHETIC 50mm TYPE - I, O.G
7.	FASTENER HOOK TAPE SYNTHETIC 25mm TYPE - I, O.G
8.	FASTENER LOOP TAPE SYNTHETIC 25mm TYPE - I, O.G
9.	FASTENER HOOK TAPE SYNTHETIC 16mm TYPE - I, O.G
10.	FASTENER LOOP TAPE SYNTHETIC 16mm TYPE - I, O.G
11.	LATEX FOAM RUBBER SHEET SOLID TYPE 25 mm THICK
12.	FLEXIBLE P.U. FOAM 8 mm THICK
13.	TAPE NYLON THICK 51mm O.G
14.	TAPE NYLON THICK 38 mm O.G
15.	TAPE NYLON THICK 25mm O.G
16.	TAPE NYLON THICK 19mm O.G
17.	TAPE NYLON THICK 13mm O.G
18.	TAPE NYLON THIN 51mm O.G
19.	TAPE NYLON THIN 13mm MEDIUM O.G
20.	TAPE NYLON 19 mm O.G
21.	PLASTIC SLIDE FASTENER MEDIUM DUTY O.G 28 cm.
22.	NYLON SEWING THREAD O.G. FOR AEROSPACE PURPOSES VARIETY No. H_1
23.	BUCKLE ALUMINIUM ALLOY 25 mm
24.	BUCKLE ALUMINIUM ALLOY 51 mm
25.	'O' RING 19 mm NICKEL PLATED
26.	EYELETS BRASS No. 21 WITH PLAIN WASHER PAINTED O.G.
27.	BELT BUCKLE 57 mm (MALE & FEMALE)
28.	BUCKLE ADJUSTING 60 mm
29.	SLIDES FOR BELT
30.	ALUMINIUM ALLOY FRAME
31.	BUCKLE ALUMINIUM ALLOY QUICK RELEASE 19 mm

FIRST ANGLE PROJECTION	DRAWN BY	CHECKED BY	APPROVED BY
DIMENSIONS IN mm.OP			

10

CRPF BSF CISF ITBP SSB NSG A/Rifle BPR&D

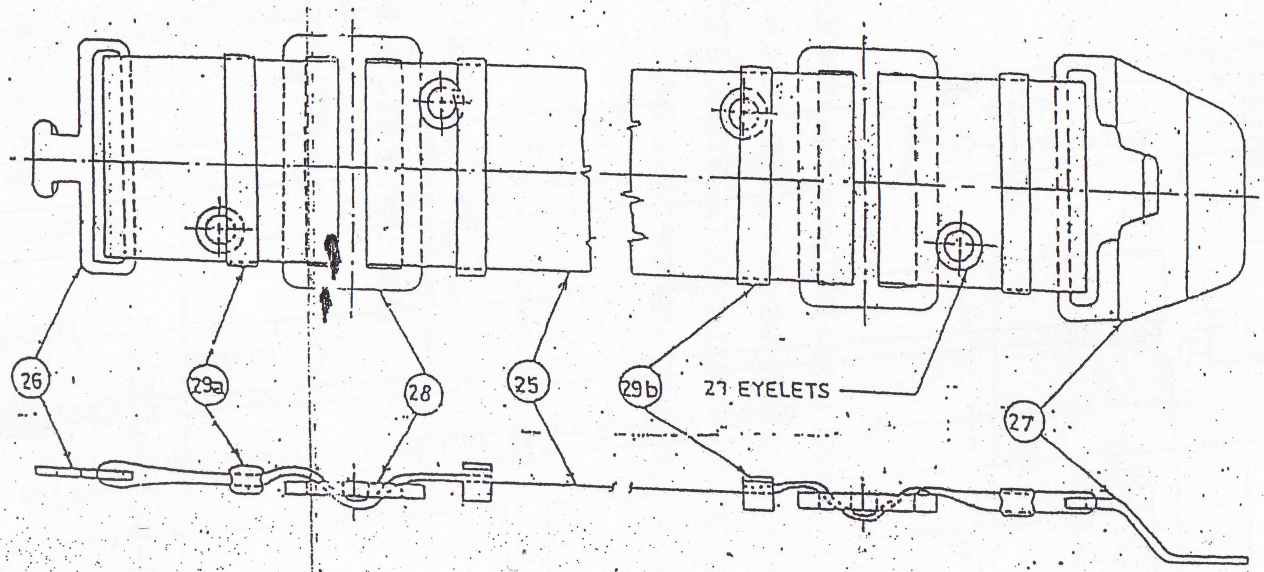
37 38

SYNTHETIC WEB EQUIPMENT - IMPROVED VERSION

29 - PLATES
PLATE -24

BELT WAIST

SUB - ASSEMBLY



THIRD ANGLE PROJECTION	DRAWN BY	CHECKED BY	PASSED BY	APPROVED
DIMENSIONS IN mm	K.L. REDDY			

BPR&D
Airfile
NSG
SSB
ITBP
CISF
BSF
CRPF