### GOVERNMENT OF INDIA



(MINISTRY OF DEFENCE)

PROVISIONAL SPECIFICATION NO. DMSRDE / T& GS /93/411(b)

# SPECIFICATION FOR NYLON WEBBING BLUE VARIOUS

- 1. THIS SPECIFICATION CONSISTS OF SIX PAGES.
- 2. THIS SPECIFICATION IS INTENDED TO GUIDE PURCHASE, INSPECTION AND MANUFACTURE OF NYLON WEBBING BLUE VARIOUS.
- THIS SPECIFICATION OR ANY DRAWING, PATTERN OR ANY OTHER INFORMATION ISSUED IN CONNECTION THERE WITH MAY ONLY BE USED FOR SPECIFIC ORDER PLACED BY A COMPETENT AUTHORITY. IT IS NOT TO BE USED FOR ANY OTHER PULPOSES WHAT SO EVER WITHOUT THE EXPRESS WRITTEN SANCTION OF THE APPROPRIATE AUTHORITY.
- 4. ALL CLAUSES IN THIS SPECIFICATION SHALL BE COMPLIED WITHIN EVERY RESPECT, IRRESPECTIVE OF THE SOURCE OF SUPPLY OF THE MATERIAL AND / OR COMPONENTS:
- 5. IN CASE OF ANY DISCREPANCY BETWEEN THIS SPECIFICATION AND ANY SAMPLE OR PATTERN LOANED FOR ANY PURPOSE, THIS SPECIFICATION AND A OR DRAWING SHALL BE TAKEN AS CORRECT AT THE TIME OF FINALISATION OF A CONTRACT.
- 6. WHEREVER A REFERENCE TO ANY OTHER SPECIFICATION /DRAWING OCCURS IN THIS SPECIFICATION, IT SHALL BE TAKEN AS A REFERENCE TO THE LATEST VERSION OF THAT SPECIFICATION/DRAWING EXISTING AT THE TIME OF FINALIZATION OF A CONTRACT.

ISSUED BY
THE DIRECTOR
DEFENCE MATERIALS AND STORES
RESEARCH & DEVELOPMENT ESTABLISHMENT
DMSRDE PO
G.T. ROAD, KANPUR:-208 013



# 1. SCOPE

1.1 This specification covers the requirements of Nylon Webbing Blue Various for manufacturers of Combination Harness.

### 2. RELATED SPECIFICATION AND AVAILABILITY.

2.1 Indian standard specification are obtainable on payment from the Secretary (Administration) B.S. Manak Bhawan, 9 Bahadur Shah, Zafar Marg, New Delhi or from their regional or branch offices.

### 3 SEALED SAMPLE

3.1 The sealed sample held in the custody of AHSP shall constitute the standard of particulars not defined in this specification.

# 4. MATERIAL

4.1 Multifilament Nylon Yarn having approximate tenacity of 5 g per denier and with nominal twist shall be used in the manufacture of webs so as to achieve the various requirements stipulated in clause 6.

# 5. MANUFACTURE, WORKMANSHIP AND FINISH.

- 5.1 The webs shall be uniformly woven with firm selvages, the dyeing shall be uniform and shall withstand the dye fastness requirements as stipulated in clause 6.3. The shade shall match the standard sample held in the custody of AHSP.
- 5.2 It shall be free from objectionable flaws, like missing or broken ends and picks, floats, knots, dueing defects.
- 5.3 The web shall be clear, free from objectionable matters which may give a fictitious weight or cause tendering in subsequent stages

Contd Page No. 0

H9 (7

# 6. REQUIREMENTS AND TEST METHODS

6.1 The webs shall meet the requirements as listed below when tested as per specifications mentioned against each.

6.2

	2	3442			1963		1964 (Method A)	1954		(Indian Standard)	(Indi
										Test method	Test
				er in delen der er de er	and the second	B-1	± 5%		ordered		
	515	1520	Single	Single	1115	G-72	2000	25 ± 1	100 m or as	25mm wide thin	يس
	A special in the section for			and to the second		B-1	±5%		ordered		
	おい	1910	Single	Single	115	G-111	3300	$38 \pm 1$	100 m or as	38mm wide thin	5
						B-1	± 5%		ordered		
5 min	930	1890 930	Single	Single	100	G-179	5670	48 ± 1	100 m or as	48mm wide thick	journalit.
1	Weft	Warp	Wen	Warp							
					***************************************	ends.	ଫର୍				
		(approx)			picks/ dm	No. of	100 m	'mm'	,ш,	Blue	No
Tenacity	of yarn	Denier of yarn	blds	No. of folds	No. of	Total	Mass	Width	Roll length	Nylon Webbing	S

Note: G= Ground end, B - Binding end.



# 6.3 Colours Fastness to:

i) Light	Ratting V or better	IS: 2454
ii) Washing		
a) Change in shade	Dutting the true	10.761
b) Staining on Nylon	Ratting 4 or better	IS : 764
iii) Rubbing		
a) Dry	l Divisor 4 Louis	YG - 77.2
b) Wet	Ratting 4 or better	IS : 766
iv) Perspiration		
a) Change in colour	   Ratting 4 or better	IS: 971

\* Carbon Arc fadeometer can also be used in lieu

6.4	pH value of aqueous extract	6.0- 8.5	IS: 1390
, 6.5	Identification of Fibre	Nylon	IS: 667 or
. 6.6	Nature of dve	Acid	any suitable method
		(Shade – 3% of Shade No.CI Acid Blue 247)	

7. PRE -INSPECTION

b) Staining on Nylon

- 7.1 Before tendering the store to the Govt. Inspector, the supplier shall carry out thorough pre-inspection to satisfy himself that the webs fully conform to this specification.
- 8 PRELIMINARY VISUAL EXAMINATION OF LOT
- 8.1. Before drawing bulk supply samples for laboratory test the lot shall be examined for visual defects.
- 8.2 The store when visually examined shall be free from weaving and processing flaws.
- 9. SAMPLING AND CRITERIA FOR CONFORMITY
- 9.1 The quantity of store offered against one 'despatch note' shall constitute a lot.
- 9.2 The conformity of a lot to the requirements of the standard shall be determined on the basis of tests carried out on the sample selected from the lot.



9.3 The number of rolls of web to be selected at random for laboratory tests shall be inconformity with the table given below.

Lot Size	Number of samples	to be selected for	
No. of Rolls of 100m	Non Destructive test	Destructive test	
Up to 10	5	2	
11 to 30	10	2	
31 to 50	15	3	
51 to 100	20	3	
101 and above	30	3	

# 10. CRITERIA OF CONFORMITY FOR BULK SAMPLE

10.1 All samples when tested for physical and chemical tests as per relevant specification shall conform to the stipulated standard.

### 11. BULL INSPECTION

11.1 On receipt of the satisfactory test from the labs, 100% visual examination of each lot shall be carried out. The sample not found conforming to the specification shall be rejected.

# 12. PACKING AND MARKING OF ROLLS

12.1 The webbing shall be packed in neat and dry conditions.

12.2 The following items shall be used for packaging.

i) Low density polyethylene film 0.05 nm

IS: 2508

ii) Polypropylene film of 0.0375 mm (150 Gauge)

IS: 2508 (Part-II)

iii) Cloth Hessian heavy

IS: 2818 (Part-II)

iv) Cloth 'C' Heavy

IS: 1921

v) Met I hoops / wire

best trade quality previously approved



### MARKING OF INDIVIDUAL ROLL 13.

- Each roll shall be suitably marked with contractor's name or trade mark, year of 13.1 manufacture, length of roll, Cat. No. and nomenclature of the store. The roll shall be kept in a bag made of polyethylene or polypropylene film. Each type of web shall be packed separately. Convenient number of rolls as mentioned in clause 12 shall be wrapped with polyethylene or polypropylene film ( clause 12.2 refers) and shall be suitably tied with Twine Jute 3 ply to form a bundle. The bundle shall firstly be wrapped with one layer of Cloth Hessian Heavy (IS: 2818 Part-II) as mentioned in clause 12.2 and finally with one layer of Cloth 'C Heavy (Clause 12.2 refers). The gross weight of the package shall not exceed to 40 kg.
- 13.2 The bale shall finally be stitched with Twine Jute 3 ply with 6 stitches per decimeter. While stitching, care shall be taken to avoid piercing of the inner contents of the bale and then it should be secured by means of metal hoops / metal wires
- 13.3 The store consigned to Ordnance Factories shall be packed as per details given in clause 12 & 13 above.
- 13.4 If ordered for delivery to a local Inspection Depot, the webbing's may be delivered loose. After inspection, the accepted supplies shall be packed by the Inspection Depot authorities as per method described in clause 13

### MARKING OF PACKAGE 14.

- 14.1 Before despatch, each package shall be legibly marked with indelible marking ink/ paint showing the following details.
  - Nomenclature and Cat number of the store i)
  - ii) Quantity packed in bundle
  - Lot and Serial No. of the packing roll. iii)
  - Month and year of the packing iv)
  - Name and address of the consignee V)
  - Name and trade mark of the manufacture vi)
  - Inspection note number and date vii)
  - A/T number and date. viii)

### WARRANTY CLAUSE 15

The stores supplied against any order stores 15.1 contractor against defective materials, we period of 12 months from the date of receipt and the during this period, the stores supplied are four the same shall be replaced immediately with or cost.

ranty of the forms the comments iepo If so a fec e, off and day as

DIRECTOR
Defence Materials & Stores
Research & Development Establishment, G.T. Road, KANPUR

Station: KANPUR Dated : 13 05,0-2,

(MCS)