

Kapil No. 1

GOVERNMENT OF INDIA
MINISTRY OF DEFENCE

CORDAGE NYLON BRAIDED CORELESS 500N & 1000 N.

Cordage for Parachute

1. The specification is intended to guide ^{manufacture} purchase & inspection and ~~manufacture of~~ ^{webbing nylon} ~~various~~ ^{for parachutes} ~~500N & 1000~~ ^{Braided Coreless} against Defence requirements.
2. In case of discrepancy between this specification and any sample or pattern, this specification together with drawings, if any, will be taken as correct.
3. Whenever a reference to any other specification/Drawing occurs in this specification, it shall be taken as a reference to the latest ~~in the~~ ^{version} ~~various~~ of that specification/Drawing.

1. SCOPE :- This specification covers the requirements of the following types of cordages :-

- (a) Cordage Nylon Braided Coreless 500 Newtons. (51 kg)
- (b) Cordage Nylon Braided coreless 1000 Newtons. (98 kg)

2. GENERAL :- The cordages described in this specification are made of ~~the~~ continuous filament Nylon yarn and are of braided construction without core. The cordages are used as Rigging Line of Illuminating ammunition parachutes and other allied items.

3. MATERIAL :- The nylon yarn used in the manufacture of the cordages shall be 23 Tex (210 denier) and 140 Tex (1260 denier) for variety No. 1 & 2 respectively (as shown in the table), continuous filament, bright, high tenacity type 66 or 64

4. MANUFACTURE/WORK SHIP AND FINISH :- Doubled & twisted together to the requirement. During the process of throwing/applied shall not be very high. The braiding machine shall be so adjusted that it should give firm and adequately tight braiding without cutting any undue tension on the yarns. The cordage shall be free from any manufacturing flaws. The braiding ends shall be free from any knots, slubs and stains.

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not be subjected

5. The cordages shall be supplied in the natural/undyed shade. The cordages shall essentially be smooth to handle and shall have uniform diameter throughout with round cross-section.

6. The cords shall ~~be~~ not be more than one year old from the date of manufacture to the date of delivery.

7. DIMENSIONS AND OTHER DETAILS :- The cordages nylon Braided 500 Newtons & 1000 Newtons coreless shall conform to the particulars given in the table.

8. TESTS :- Breaking Load Test :- When tested in accordance with the method laid down in I S Specification IS: 4437 the breaking load of any test specimen shall not be less than the minimum shown in the table.

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9. PLAITS PER CENTIMETER : When tested in accordance with the method laid down in IS specification IS: 4437, Plaits/Cm shall not be less than that shown in the table.
10. LENGTH PER KG.: When tested in accordance with the method laid down in IS specification IS:4437, length per kg shall not be less than that shown in the table.
11. PH VALUE : PH Value of aqueous extract should be 6.0 to 8.6 when tested as per IS specification IS: 1390 (cold method).
12. Elongation at Break Percentage: - The method laid down when tested in accordance with IS specification IS:4437, elongation at break percentage(%) shall not be less than that shown in the table.
13. Marking : Each hank/ball shall be tied with a card board label 4.5 Cm X 2.5 Cm, on which shall be marked with the contractor's name, trade mark, date of manufacture, length of the hank/ball, cat No. and nomenclature of the store.
14. PACKING : Cordage Nylon Braided 500N and 1000N coreless, shall be supplied in hanks/balls of continuous length of 500Mtrs or as requested by the procuring authority. Each hank/ball of the cordage shall be packed in a polythene bag (150 gauge film) to form a unit pack. The appropriate number of unit packs shall be properly arranged in cases, wood packing provided with liners waterproof. The empty spaces, if any, shall be filled in with cushioning materials to prevent any movement of the contents inside the cases wood packing and top lid of the cases shall be nailed in. Care shall be taken that the nails do not pierce into the contents of the case. The Gross mass of the package shall not exceed 40 kg. Packing materials used should be of the best trade quality and previously approved by the Inspecting Officer.
15. IF ~~IF~~ If ordered for delivery to a local inspection depot, the cordages shall be delivered loose in firms returnable packs. After inspection, the accepted supplies shall be packed by the inspection depot authorities as indicated in para-14 above.
16. Before despatch each case wood packing shall be legibly and indelibly marked showing the following details :-
 - (a) Nomenclature and Cat No. of the store.
 - (b) Quantity packed in each CWP.
 - (c) Serial No. of the CWP.
 - (d) Month and year of packing .
 - (e) Name and trade mark of the manufacturer.
 - (f) Gross Mass of the CWP in kg.
 - (g) Name and address of the consignee.
 - (h) Inspection note No. and date.

17. PRE INSPECTION : Before tendering the store ^{to} of the Govt Inspector, the supplier shall carryout 100% preinspection of each and every hank/ball to satisfy himself, that the store fully conforms to the specification in all respects.
18. INSPECTION : If, on examination, material from any portion of a consignment is found not to be fully in accordance with the specification, the whole consignment ~~may be rejected~~ is liable to be rejected.
19. If, on examination of 20% of any delivery, 20% of these examined are found not to conform to this specification in any respect then the whole consignment may be rejected.
20. All hanks/balls not fully in accordance with this specification shall be rejected.

AGRA CANTT
DATED:

for DIRECTOR
AERIAL DELIVERY RESEARCH &
DEVELOPMENT ESTABLISHMENT
AGRA CANTT.

WATER
 Gov. Specn. No. ADRDE/SPECN/1985/25/16

: TABLE :

PARTICULARS OF CORDAGE NYLON BRAIDED 500N & 1000N. CORELESS

Sl. No.	Nomenclature	No. of Spindles	Total No. of Ends & Folds	Yarn Count	Plaits/ Cm.	Length/ Kg Mtrs	Breaking Load (15 Cm between grips) Newtons	Material	Percentage Elongation at Break %
						(Min)	(Min)		(Min)
1.	Cordage Nylon Braided 500N Coreless 500N.	32	16 of Single Folds & 16 of Double Folds	23 Tex (210/1d) 23 Tex X2 (210/2d)	10/11	730 <i>1.37 g/m</i>	500N	Nylon 66 or Nylon 6	20%
2.	Cordage Nylon Braided Coreless 1000N. Coreless	16	16 Single	140 Tex (1260D)	6/7	320 <i>1.12 g/m</i>	1000N	Nylon 66 or Nylon 6	20%


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