METRIC

A-A-59834 September 25, 2009

### COMMERCIAL ITEM DESCRIPTION

### ANCHOR, ROCK, CHOCK

This commercial item description is approved for use by the Defense Supply Center, Philadelphia and is available for use by all Departments and Agencies of the Department of Defense.

- 1. SCOPE. This commercial item description covers the requirements for chocks which are used for protecting climbers on steep rock routes by placing the chocks into cracks in the rock.
- 2. CLASSIFICATION. The chocks will be furnished in the following types and sizes:
  - 2.1 Types

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Type I – Wedge, wired
Type II – Hexcentric, wired
Type III – Irregular, slung
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2.2 <u>Sizing.</u> The chock be as light-weight as possible, while meeting the standards described in the description.

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Type I - Sizes 1-13 (as specified in Table I)

Type II - Sizes 1-11 (as specified in Table II)

Type III - Sizes 0.5 - 3 (as specified in Table III)
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Comments, suggestions, or questions on this document should be addressed to: Defense Supply Center Philadelphia, Clothing and Textiles Directorate, Attn: DSCP Standardization Team, 700 Robbins Avenue, Philadelphia, PA 19111-5096. Since contact information can change, you may want to verify the currency of this address information using Acquisition Streamlining and Standardization Information System (ASSIST) online database at <a href="http://assist.daps.dla.mil/">http://assist.daps.dla.mil/</a>.

AMSC N/A FSC 8465

- 3. SALIENT CHARACTERISTICS. The chock shall be as light-weight as possible meeting the standards described in 3.1 and provide ease of use with any typical combat gloves.
- 3.1 Type I (TABLE I). The chock shall be a wedge-shaped design with the chock's width tapering from the top to the bottom and the dimension requirements of drawing X3-3-0115. The chock's thickness shall be tapered from top to bottom along its width. The wire loop shall be routed through four holes in the chock (two in the top, two in the bottom). The size shall be stamped on the wider, flat portion of the chock. The wire loop cable will protrude 190 ( $\pm$  13) mm on sizes 1 through 10; 215 ( $\pm$  13mm) on sizes 11 through 13. The thickness shall be measured at the top of the chock, along its shorter side. The width shall be measured at the top of the chock, along its longer side. The chock will be constructed and comply with the size requirements in Table I.
- 3.1.1 Type II (TABLE II). The chock shall be constructed and comply with the size physical requirements in Table II and the dimension requirements of drawing X3-3-0116. The wire loop shall be routed through four holes in the hexcentric shaped portion (two in the top, two in the bottom). The size shall be stamped on the hexcentric shaped portion of the chock. The thickness of each hexagonal side shall vary to provide use in various sized cracks in the rock. The wire loop cable shall protrude  $190 (\pm 13)$  mm on sizes 1 through 5;  $342 \text{ mm} (\pm 13)$  mm on sizes 6 through 11. The hexcentrics shall be measured for thickness on their parallel sides. The length shall be measured at the top along the longest dimension, perpendicular to width measurement.
- 3.1.2 Type III (TABLE III). The chock shall be constructed and comply with the size and physical requirements in Table III and the dimension requirements of drawing X3-3-0117. The irregular chock shall be constructed to provide three points of contact with the rock. The irregular chock shall be designed to provide protection in both passive and active camming modes. The size shall be depicted on a label that is affixed to the webbing loop portion. The webbing loop portion shall protrude  $190 (\pm 13)$  mm on all sizes. The width shall be measured at the point at the end of the rails proximal to the webbing.
- 3.2 <u>Color.</u> The chocks shall be provided in a low reflectance, matte finish and provide low contrast with typical use terrain. Each size shall be of a different anodized color (Type I and Type II only). The webbing sling (Type III only) shall be of a different color for each size.
- 3.3 Materials.
- 3.3.1 <u>Basic Material (All types)</u>. The wedging portion of the chock shall be anodized 6061-T6 or 7075 aluminum.

TABLE I. Physical characteristics for Type I

Size	Width (mm)	Thickness	Wire Diameter	Min. breaking	Weight,
		(mm)	(mm)	Strength, kN	Grams
1	9.1	4.3	1.5	2	7
2	9.9	4.8	1.7	2	8
3	11.4	6.1	2.2	5	15
4	12.4	6.9	2.2	6	16
5	13.5	8.4	2.5	6	18
6	15.5	10.2	3.0	10	32
7	16.3	11.7	3.0	10	34
8	18.3	13.5	3.0	10	37
9	20.8	15.2	3.0	10	39
10	23.4	17.3	3.0	10	43
11	26.7	20.1	3.0	10	51
12	30.5	22.9	3.0	10	58
13	35.1	26.4	3.0	10	71
Tolerance	(±10%)	(±10%)	± 0.1	N/A	(±10%)

TABLE II. Physical characteristics for Type II

Size	Width (mm)	Thickness	Wire Diameter	Min. breaking	Weight,
		(mm)	(mm)	Strength, kN	Grams
1	19.0	11.4	2.38	6	19
2	20.8	14.2	2.38	6	22
3	24.4	16.8	2.38	6	28
4	27.9	20.6	3.17	10.0	51
5	33.0	23.9	3.17	10.0	53
6	39.1	27.2	3.17	10.0	64
7	45.7	33.0	3.17	10.0	86
8	54.1	39.1	3.17	10.0	94
9	63.7	47.0	3.17	10.0	124
10	75.2	55.6	3.17	10.0	164
11	89.1	65.0	3.17	10.0	206
Tolerance	(±10%)	(±10%)	± 0.1	N/A	(±10%)

TABLE III. Physical characteristics for Type III

Size	Minimum	Maximum	CAM	Min. breaking	Weight,
	range, mm	range, mm	Width, mm	Strength, kN	grams
0.5	16	28	28	9	26
1	20	30	28	9	35
1.5	26	38	28	14	50
2	29	41	31	14	55
2.5	32	48	31	17	77
3	38	54	31	17	90
Tolerance	N/A	N/A	± 0.1	N/A	(±10%)

### 3.3.2 Sling/Cable Material

- 3.3.2.1 <u>Type I & Type II</u>. The wired portion of the chock shall be either galvanized or stainless steel.
- 3.3.2.2 <u>Type III</u>. The sling portion of the chock shall be either Dyneema® or nylon (see 7.4).
- 3.4 <u>Tests.</u> The chock shall meet Union Internationale des Association d'Alpinisme (UIAA) Standard 124 or European Standard EN 12270.
- 3.5 <u>Workmanship</u>. The finished anchor rock chock shall conform to the quality of product established by this document. The occurrence of defects shall not exceed the contractors own quality assurance standards and the quality assurance standards defined in the technical data in the solicitation and/or contract.
- 4. REGULATORY REQUIREMENTS. The offeror/contractor is encouraged to use recovered materials to the maximum extent practicable, in accordance with paragraph 23.403 of the Federal Acquisition Regulation (FAR).
- 4.1 <u>Recycled, recovered, or environmentally preferable materials.</u> Recycled, recovered, or environmentally preferable materials should be used to the maximum extent possible, provided that the material meets or exceeds the operational and maintenance requirements and promotes economically advantageous life cycle costs.

#### 5. PRODUCT CONFORMANCE PROVISIONS.

- 5.1 <u>Product conformance</u>. The products provided shall meet the salient characteristics of this Commercial Item Description, conform to the producer's own drawings, specifications, standards, and quality assurance practices, and be the same product offered for sale in the commercial marketplace. The Government reserves the right to require proof of such conformance.
- 5.2 <u>Visual examination.</u> Each chock shall be examined for the following defects as listed in Table IV.

TABLE IV. End item examination

Examine	Defect Description
Finish	Not smooth and adherent
Construction	Not free of burrs, rough spots, slivers, flat
	areas or projections
	Any component loose, missing or not
	specified type
	Any component fractured, slit, punctured,
	dented, bowed, malformed or damaged
	Marking etched or indented, contains
	rough or sharp edges
Label and instruction slip	Incorrect, illegible, omitted or misplaced.
Marking	Omitted, missing information or illegible
Swage (Type I & II)	Not swaged properly
	Not covered
Webbing or Wire Loop	Not sized properly

5.3 <u>Acceptance criteria</u>. Acceptance criteria shall be as specified in the contract or purchase order (see 7.5).

### 6. PACKAGING.

6.1 <u>Preservation, packing and marking.</u> The preservation, packing and marking shall be as specified in the contract or order (see 7.5).

### 7. NOTES.

## 7.1 Sources of Government documents.

7.1.1 Copies of Government documents are available online at <a href="http://assist.daps.dla.mil/quicksearch/">http://assist.daps.dla.mil/quicksearch/</a> or from the Standardization Documents Order Desk, Building 4D, 700 Robbins Avenue, Philadelphia, PA 19111-5094.

### 7.1.2 DRAWINGS

### U.S. ARMY NATICK SOLDIER CENTER

3-3-0115	Anchor, Rock, Chock, Type I
3-3-0116	Anchor, Rock, Chock, Type II
3-3-0117	Anchor, Rock, Chock, Type III

(Copies of drawings are available from the U.S. Army Research Development and Engineering Command, Natick Soldier Center, ATTN: NSRDEC-RDNS-WPW-C), Kansas Street, Natick, MA 01760)

7.2 <u>Non-Government Documents</u>. Non-Government standards and other publications are normally available from the organizations that prepare or distribute the documents. These documents may be available in or through libraries or other informational services.

EUROPEAN STANDARD (EN)

EN 12270:1998 Mountaineering Equipment – Chocks – Safety Requirements and Test Methods

(Copies are available online at <a href="www.bsi-global.com">www.bsi-global.com</a> or from BSI British Standards, Customer Services 389 Chiswick High Road London W4 4AL United Kingdom)

INTERNATIONAL MOUNTAINEERING AND CLIMBING FEDERATION UNION INTERNATIONALE DES ASSSOCIATIONS D'ALPINISME (UIAA)

UIAA Safety Standard 124 Mountaineering and Climbing Equipment, Chocks

(Copies are available online at <a href="www.theuiaa.org">www.theuiaa.org</a> or from the Union Internationale Des Associations D'Alpinisme (UIAA) Monbijoustrasse 61 Postfach CH-3000 Bern 23 Switzerland

- 7.3. Federal Acquisition Regulations are available online at <a href="http://acquisition.gov/far/index.html">http://acquisition.gov/far/index.html</a> or by contacting the Superintendent of Documents at 202-512-1800.
- 7.4 <u>Available sources</u>. Dyneema ® or equal. (Head office address: Mauritslaan 49, Urmond, P.O. Box 1163, 6160 BD Geleen, the Netherlands or Production site address: Eisterweg 3, Heerlen, P.O. Box 6510, 6401 JH Heerlen, the Netherlands <u>info.dyneema@dsm.com</u>)
- 7.5 Ordering Data. The contract or order should specify the following:
  - a. Commercial Item Description document number
  - b. Type and size required (see 2.1).
  - c. Acceptance criteria (see 5.3).
  - d. Packaging (see 6.1).

**MILITARY INTERESTS:** 

CIVIL AGENCY COORDINATION ACTIVITY:

<u>Custodian</u>: Army - GL Marine Corps - MC PREPARING ACTIVITY: GL-Army

Project 8465-2009-014

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