

<b>ANDREX INC</b>	<b>Material Specification</b>		
	NUMBER AX-120	REV C	SHEET 1 of 4

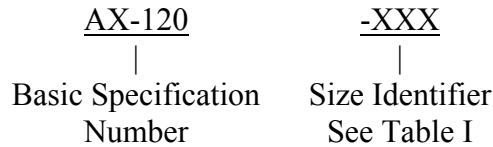
TITLE: <p style="text-align: center;">Wire, Nonferrous, Bronze, Round Alloy UNS C22000</p>	WRITTEN BY: J.B. 10/16/89  ENG APPROVAL: J.B. 10/16/89
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<u>Revision</u>	<u>Description</u>	<u>Date</u>	<u>Approved</u>
-	Release to Production	10/16/89	J.B.
A	Revised.	02/07/91	J.B.
B	ECN-H176: Revised to add dash numbers for each size.	01/26/99	W.M.B.
C	ECN-H285: Added new paragraph 5.3 for slip-on braid, renumbered "packaging and marking" and "certification" paragraphs to 5.4 and 5.5, resp.	03/16/04	W.M.B.

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**1. SCOPE.**

- 1.1 Scope. This specification defines the requirements for round bronze wire for use in the production of hose and conduit.
- 1.2 Classification. Part Numbers under this specification are coded as follows:



**2. APPLICABLE DOCUMENTS.**

This section does not apply to this specification.

**3. REQUIREMENTS.**

Material shall be bronze per UNS C22000 as specified herein.

3.1 Chemical Analysis Requirements:

Cu:	89.0-91.0%
Fe:	0.05% max.
Pb:	0.05% max.
Zn:	Remainder

3.2 Physical Analysis Requirements:

Tensile Strength:	As specified in Table I.
Elongation:	1% in 10 inches, min.
Finish:	Hard
Size:	As specified in Table I

**TABLE I**

Size Identifier	Width	Tensile Strength
-008	.0085 ±.0005	45,000 psi min
-011	.0110 ±.0005	75,000 – 85,000 psi
-013	.0130 ±.0005	65,000 – 75,000 psi

3.3 Material Workmanship:

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Wire shall be clean, smooth, free from defects or surface imperfections and carefully coiled without kinks.

**4. QUALITY ASSURANCE PROVISIONS.**

4.1 Quality Assurance shall be responsible for inspection of material upon receipt of each lot for conformance to this specification, or unless otherwise specified by any requirements stated on the lot's specific purchase order.

**5. PREPARATION FOR DELIVERY.**

Braid wire shall be supplied as follows or as otherwise specified on purchase order.

5.1 Spooling requirements:

Vendor shall supply continuous lengths of wire on spools having 1-1/4" I.D. Bore and 8" O.D. Flange. Approximate weight should be 30 lbs. per spool. Spools shall have 10 lbs. min of wire. Spool traverse shall be approximately 6 inches. Spooling shall be such that wire may be unwound under reasonable tension without binding.

5.2 Supplied on braider bobbins

Supply continuous length on Flexco supplied bobbins with minimum weight of 2.0 lbs. per bobbin. Bobbins shall be wound to insure smooth and even unwinding of bobbin.

5.3 Supplied as tubular (slip-on) braid:

When ordered as p/n AX-120-008-500, the braid shall be supplied as follows:

Stranding: 24 X 4 X 32  
Picks/In: (14-15)  
Shape: Tubular  
ID: 1/2" nom. (braided on and removed from a Ø1/2" LPDF or similar arbor)

5.4 Packaging and Marking:

Packing shall be adequate to protect the product from contamination and physical damage during shipment and be plainly marked. Spools shall be plainly marked with material identification, wire diameter, shipping date, weight and name of manufacturer and packaging shall be adequate to insure spooling integrity during shipment.

5.5 Certification:

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Certificate of Compliance and Analysis Test Reports must accompany each shipment.

**6. NOTES.**

6.1 Ordering Information: Purchase orders should specify the following:

- a. Part Number including size identifier (see 1.2 and 5.0)
- b. Description
- c. Quantity, total poundage.
- d. Delivery Date
- e. Special requirements: