

MIL-C-782B(MU)

20 March 1969

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SUPERSEDING

MIL-C-00782A(ORD)

1 December 1958

## MILITARY SPECIFICATION

## CORES, STEEL; FOR USE IN BALL TYPES OF SMALL ARMS AMMUNITION

## 1. SCOPE

1.1 This specification covers steel cores for use in the assembly of bullets for ball types of small arms ammunition.

1.2 Classification.- The steel cores covered by this specification shall be of the following types (See 6.1):

Type I - Core for Cartridge 7.62MM, NATO, Ball, M59

Type II - Core for Cartridge, Caliber .50, Ball, M2 and M33

## 2. APPLICABLE DOCUMENTS

2.1 The following documents of the issue in effect on date of invitation for bids or request for proposal form a part of this specification.

## SPECIFICATIONS

## Federal

PPP-B-621

PPP-B-636

VV-L-800

Boxes, Wood, Nailed and Lock Corner

Boxes, Fiberboard

Lubricating Oil, General Purpose,  
Preservative (Water Displacing, Low  
Temperature)

## STANDARDS

## Military

MIL-STD-105

MIL-STD-109

MIL-STD-129

Sampling Procedures and Tables for  
Inspection by Attributes

Quality Assurance Terms and Definitions

Marking for Shipment and Storage

## DRAWINGS

## US Army Munitions Command

B6171991

B7553746

Cores, Caliber .50, Ball, M2 and M33

Core, 7.62MM, NATO, Ball, M59

FSC 1305

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PUBLICATIONS

US Army Munitions Command

ORD-SIP-S302

Visual Inspection Standards for Cores  
Used in Small Arms Ammunition Manu-  
facture

(Copies of specifications, standards, drawings and publications required by suppliers in connection with specific procurement functions should be obtained from the procuring activity or as directed by the contracting officer.)

3. REQUIREMENTS

3.1 General.- The core shall comply with all requirements specified on the applicable drawing, referenced specifications and the following:

3.2 Workmanship.- The requirements for workmanship are as specified on the applicable drawings, referenced specifications and the following:

3.2.1 Metal defects.- The core shall be free of teats, cracks, chips, mutilations, defective points, tool marks, excessive corner break, no corner break, burrs, steps, long body and missing cannellure.

3.2.2 Foreign matter.- The core shall be free of rust, dirt, scale and grit.

4. QUALITY ASSURANCE PROVISIONS

4.1 Responsibility for inspection.- Unless otherwise specified in the contract or purchase order, the supplier is responsible for the performance of all inspection requirements as specified herein. Except as otherwise specified in the contract or order, the supplier may use his own or any other facilities suitable for the performance of the inspection requirements specified herein, unless disapproved by the Government. The Government reserves the right to perform any of the inspections set forth in the specification where such inspections are deemed necessary to assure supplies and services conform to prescribed requirements.

4.1.1 Quality assurance terms and definitions.- Reference shall be made to MIL-STD-109 to define quality assurance terms used.

4.2 First article sample.

4.2.1 Initial production sample.- At the beginning of regular production, a sample shall be submitted in accordance with contract requirements and shall consist of 200 cores. The sample shall be manufactured using the same materials, equipment, processes and procedures as will be used in regular production. All parts and materials, including packaging and packing shall be the same as used for regular production and shall be obtained from the same source of supply.

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4.2.1.1 Examination and test.- After inspection and provisional acceptance at source, the sample shall be inspected for all requirements of the drawings and specifications at a government laboratory or such other facility specified in the contract.

4.2.1.2 Initial production sample.- Failure of the sample to comply with the requirements of the drawings and specifications shall result in sample disapproval.

#### 4.3 Inspection provisions.

##### 4.3.1 Lot.

4.3.1.1 Submission of product.- The product shall be submitted in accordance with MIL-STD-105.

4.3.1.2 Lot identification. Each lot of cores shall be identified by lot number, type, name of the contractor and name of the steel manufacturer.

4.3.2 Examination.- Examination for major and minor defects shall be performed on a class basis in accordance with the classification of defects, Table I, using applicable sampling plans and acceptance criteria of MIL-STD-105. The acceptable quality level (AQL) for the major class shall be 0.25 percent and the AQL for the minor class shall be 1.50 percent. All non-conforming cores shall be rejected.

4.3.2.1 Classification of defects.- The classification of defects shall be as specified in Table I.

TABLE I 1/

<u>Defect</u>	<u>Method of Inspection</u>
CRITICAL: None defined	
MAJOR	
101. Total length	Gage
102. Outside diameter	Gage
103. Ogive profile	Gage
104. Diameter and taper of boattail	Gage <u>2/</u>
105. Cannelure diameter	Gage
106. Location of cannellure	Gage
107. Rod ends, stubs and scrap	Visual
108. Teat	Visual
109. Multilated	Visual
110. Cracked	Visual <u>3/</u>
111. Chipped	Visual

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TABLE I (Cont'd)

## MINOR

<u>Defect</u>	<u>Method of Inspection</u>
201. Weight	Scale
202. Defective point	Visual
203. Excessive or no corner break	Visual
204. Tool marks	Visual
205. Burrs	Visual
206. Steps	Visual
207. Rusty, dirt, scale and grit	Visual

1/ Refer to ORD-SIP-S302 in defining and evaluating visual defects (See 6.2.1).

2/ Applicable to Caliber .50 cores only.

3/ Defined as crack deeper than .010" for Caliber .50 and .008" for 7.62MM cores. Cores having cracks with depth equal to or less than that noted shall be classed as minor defectives. Section, polish and examine under magnification.

4.3.3 Inspection equipment.- The examination shall be made using commercial measuring equipment with a precision of 10 percent of the tolerance on the product dimension.

## 5. PREPARATION FOR DELIVERY

5.1 Preservation.- Cores shall be coated lightly with rust inhibiting oil, Federal Specification VV-L-800.

5.2 Packing.

5.2.1 Level C (Domestic shipment).- The cores shall be packed in boxes manufactured in accordance with Federal Specification PPP-B-621 or PPP-B-636. No more than 10,000 7.62MM or 2,500 Caliber .50 cores shall be packed in any single container.

5.3 Marking.- Each box shall be marked with the quantity, nomenclature, caliber and model number of core, lot number, name of contractor, and the number of the contract or purchase order in accordance with Military Standard MIL-STD-129.

## 6. NOTES

6.1 Ordering data.- Invitations for bids or request for proposal and contracts or orders will specify the following:

6.1.1 Title, number and date of this specification.

6.1.2 Type of core (See 1.2).

6.1.3 Type of packing.

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6.1.4 Provision for submission of acceptance inspection reports, in duplicate, to the contracting officer, containing final inspection results for each lot of cups presented to the Government.

6.2 Defect definitions and standards.

6.2.1 Visual defects.- Defects for 7.62MM M59 cores covered by this specification are not shown specifically in ORD-SIP-S302, Visual Inspection Standards for Cores Used in Small Arms Ammunition Manufacture. The illustrations at the bottom of Page 7 of that SIP are applicable only to a predecessor design of the 7.62MM M59 core. Applicable visual defect standards of the Caliber .30 AP and API core sections of the SIP should be used in connection with visual inspection of the 7.62MM M59 cores.

Custodian:

Army - MU

Preparing activity:

Army - MU

Project No. 1305-A351