PRETORIA METAL PRESSINGS
a division of Denel (Pty.) Ltd

BUYING SPECIFICATION FOR CORE, 12,7mm, BALL (M33)

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PRETORIA METAL PRESSINGS a division of DENEL (Pty.) Ltd.

APPROVAL PAGE

FOR ORIGINAL SIGNATURE REFER TO ISSUE 1

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ORIGINAL COPY SIGNED

AMENDMENT HISTORY

Issue	Details	Job no	Done by	Date
1	Specification compiled.	KB/171/98SA	H B	1998-06-29
2	Specification updated and type in word format.	E2/104/08SA	I P	2009-02-17

TENDER
DATE 2023-06-13
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1. SCOPE

1.1 This specification details the requirements for the tender, manufacture and acceptance of a core, 12,7mm, Ball (M33).

2. APPLICABLE DOCUMENTS

2.1 MIL-STD-105: Sampling procedures and tables for inspection by attributes.

2.2 05527-010103-203001: Drawing for core for 12,7 x 99mm Ball bullet (M33).

Order of precedence

In the event of a conflict between the text of this specification and the references cited herein, the text of this specification shall take precedence. Nothing in this specification, however, shall supersede applicable laws and regulations unless a specific exemption has been obtained.

3. REQUIREMENTS

3.1 Item definition

This shall be a machined steel core.

3.1.1 Controlled release items

None.

3.2 Characteristics

3.2.1 Performance

Not applicable.

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3.2.2 Physical characteristics

3.2.2.1 Dimensions

The dimensions and material of the core shall conform to drawing 05527-010103-203001. The diameter and total length shall be measured for lot acceptance.

3.2.2.2 Mass

The core mass shall range from 25,42 - 26,00 grams.

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3.2.2.3 Lot identification

The cores shall be submitted in lots of 10 000 ± 1 000.
Each lot of cores shall be identified by a lot number. Mixed lots (calibre or type) are not acceptable.

A lot shall consist of one or more batches of steel cores produced by one manufacturer in accordance with the same specifications using the same set of operating instructions. The supplier shall ensure that all deliveries to the end user are fully traceable by lot number and that identification records are supplied to the end user to match lot numbers with inspection records.

3.3 Design and construction

3.3.1 Materials, processes and parts

Not applicable.

3.3.2 Identification and marking

Not applicable.

3.3.3 Workmanship

Workmanship shall be such that all the requirements herein are met. The core shall be free of any surface, internal or other defects that will be detrimental to the final product.

3.4 Standard of manufacture

The product shall be manufactured in accordance with the supplier's own product and process documents. These documents shall be made available to the purchaser on request.

3.5 Qualification inspection

As negotiated between the supplier and the purchaser.

4. QUALITY ASSURANCE PROVISIONS

4.1 General

4.1.1 Responsibility for inspection

The responsibility for performing all the verification tests and inspections shall be that of the manufacturer.

4.1.2 Certificates

The following certificates, reports and statements shall be supplied to the Acceptance Authority when submitting the lot for production acceptance.

4.1.2.1 A certificate of conformance

This certificate shall state the whole of the supplies detailed there on have been subject to planned close control of all supply and manufacturing activities and have been inspected and tested in accordance with this specification.

4.1.3 Special tests and examinations

4.1.3.1 Final acceptance

This specification will be used for the final acceptance of cores by the Acceptance Authority.

4.2 Quality Conformance Inspection

4.2.1 Visual and dimensional Inspection

4.2.1.1 Submission of the product

The cores shall be submitted in lots.

4.2.1.2 Examination of an inspection sample

Examination for major and minor defects shall be performed on a class basis in accordance with the classification of defects in Table 1, using applicable sampling plans of MIL-STD-105. (General inspection level GII). Double normal sampling plans will be used. The first sample is to be inspected in its entirety even when acceptance or rejection is already certain.

TABLE 1: Sentencing of visual and dimensional defects

No	Description of defects	Classification
1	Profile form exceeds the maximum.	Major
	Boat tail form exceeds the maximum.	Major
	The diameter exceeds the maximum.	Major
	Mass not within specified limits.	Major
5	The diameter does not pass a minimum gauge.	Minor
6	Incorrect overall length	Minor
7	Incorrect surface finish.	Minor
8	Concentricity exceeds 0,1mm.	Minor
9	Incorrect length of the cut off pips.	Minor
10	Any other incorrect dimension	Minor

4.2.1.3 Acceptance procedure

The Acceptable Quality Levels (AQL) for the Major class shall be 0,65 percent and for the Minor class 1,5 percent.

5. PREPARATION FOR DELIVERY

5.1 Packing - general

The cores shall be packed in approved packaging material to withstand road, rail, sea or air transport. The cores shall have a suitable coating of oil to prevent rust before and during transit to the end user. None of the following defects shall be present:

Cores missing from a container.
Broken outer containers.

5.1.1 Package marking

All containers are to be legibly and durably marked with any markings called for by statutory requirements and in addition with the following details:

Description as in the title of this specification.
Containers belonging to the same lot must be numbered consecutively in a closed series.

6. NOTES

6.1 Intended use

This core will be used for assembly into 12,7 x 99mm bullets.

6.2 Definitions

6.2.1 Major defects

A Major defect is a defect that judgement and experience indicate is likely to result in hazardous or unsafe conditions for individuals using, maintaining or depending upon the product, or hazardous or unsafe conditions for the equipment used.

6.2.2 Minor defects

A minor defect is a defect that is not likely to reduce materially the efficiency of the unit of products for its intended purposes although it is a departure from established standards, having little bearing on the effective use or operation of the unit.

6.3 Acceptance authority

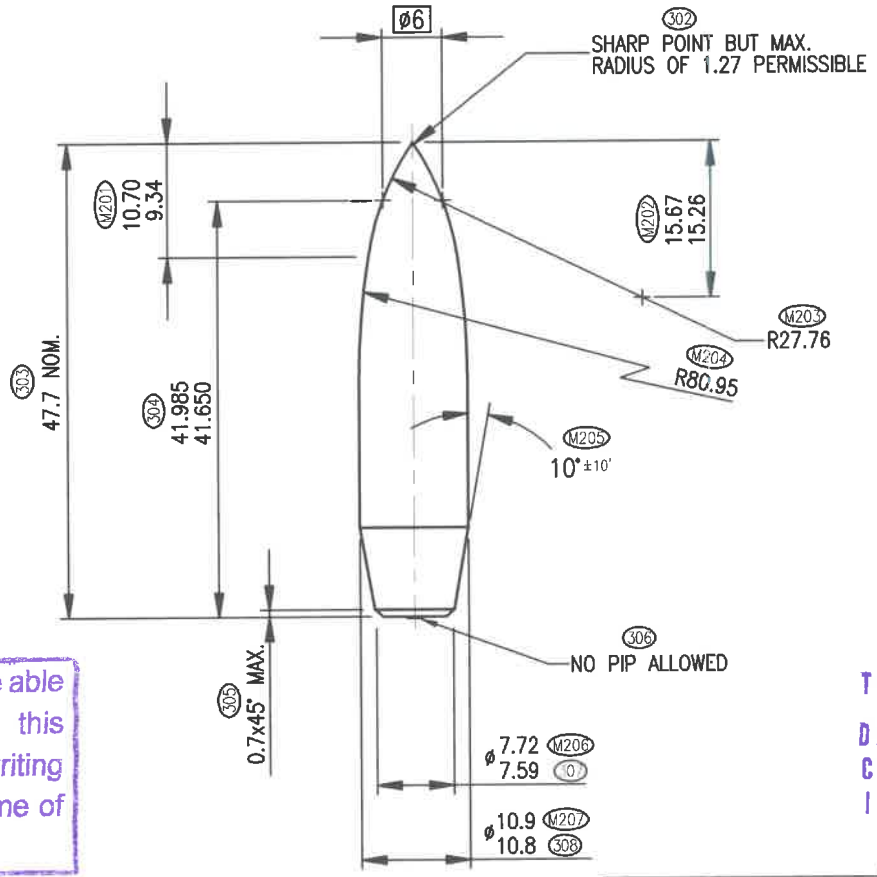
The term acceptance authority refers to the Purchaser's Quality Control Department.

A3

NOTE:

1. CORE TO BE ACCEPTED IN ACCORDANCE WITH SPEC. 105 0056.
2. (301) ECCENTRICITY SHALL NOT EXCEED 0.1.

DO NOT SCALE
ALL DIMENSIONS ARE IN mm.



Should a Tenderer/Vendor not be able to meet the requirements of this document, it must declared in writing to the Buying Manager at the time of tendering/receipt of an order.

TENDER
DATE 2023-06-14
COPY NO: 21
ISSUED BY. I P

(310) N8 [✓][✓] ☐ HRC

(309) MASS: 26.00 GRAMMES 25.42

CLASSIFICATION OF CHARACTERISTICS CODING BASED ON DCD-STD 2101		
CLASSIFICATION		TOTAL
CRITICAL	(C1-C99)	0
MAJOR A	(M101-M199)	1
MAJOR B	(M201-M299)	7
MINOR	(301-399)	10
INCIDENTAL	(401-499)	0

FINAL ACCEPTANCE SAMPLE FOR VISUAL AND DIMENSIONAL INSPECTION: ACCORDING TO MIL. STD. 105 SINGLE NORMAL SAMPLE PLAN: GENERAL INSPECTION II

A.Q.L.	
CRITICAL	NOT APPLICABLE
MAJOR A	0,025%
MAJOR B	0,65%
MINOR	1,5%
INCIDENTAL	4,0%

JOB No. KB/036/98SA

MATERIAL SEE SPEC. 750 2106 (M101D)

DRAWN DJ 09-02-18

CHECKED FJW 09-02-19

NEXT ASSY 05527-010101x202001 ITEM 2

GENERAL TOLERANCES (UNLESS OTHERWISE STATED)

FINALIZED

APPROVED MGV 09-02-19

DRG No. 05527-010103-203001

REV. F

PROJECT LEADER

SCREEN DRG. No.

CODE No. 07700418107 01105005603

CAD No. 00281660

LENGTHS AND DIAMETERS								ANGLES		RADII					ALL GEOMETRIC TOLERANCES TO BE WITHIN 0,1
0 TO 6 ±0,1	6 TO 30 ±0,2	30 TO 120 ±0,3	120 TO 315 ±0,5	315 TO 1000 ±0,8	1000 TO 2000 ±1,2	2000 TO 4000 ±2,0	4000 AND MORE ±3,0	0° TO 30° ±30'	30° AND MORE ±1°	1 TO 6 ±0,5	6 TO 30 ±1,0	30 TO 100 ±1,5	100 TO 300 ±2,0	300 TO 1000 ±3,0	

TITLE CORE FOR 12,7 x 99mm BALL BULLET (M33)

PRODUCT

MACHINE

REPLACES DRG. No.

REV	APP.	DATE	DONE BY
F	FJW	17-07-26	DJ

DIMENSION UPDATED, SEE ECP. E2/062/17SA

DETAILS