



## 155MM/45CAL ELECTRONICALLY UPGRADED GUN SYSTEM "DHANUSH"

QUALITY ASSURANCE PLAN/ACCEPTANCE TEST
PROCEDURE
OF
BEARING HOUSING MACHINED CASTING
(GCF-50-40890)

GOVERNMENT OF INDIA, MINISTRY OF DEFENCE ORDNANCE FACTORY BOARD GUN CARRIAGE FACTORY JABALPUR (M.P) 482011 QAP NO-GCF/QC/100/QAP/155MM/45CAL/DHANUSH/BEARING HOUSING MACHINED CASTING (GCF-50-40890)/JUNE/2021/01

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**REVIEWED BY** 

PREPARED BY

(NILESH SOLANKY) WM/QC (DANISH ANSARI) JWM/QC

APPROVED BY

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# QUALITY ASSURANCE PLAN/ACCEPTANCE TEST PROCEDURE OF BEARING HOUSING MACHINED CASTING (GCF-50-40890)/DHANUSH



#### 1. MATERIAL DETAILS:

S.N.	Material
a)	Chemical composition and mechanical properties compliance with standard given in drawing.
	And its Chemical composition and mechanical properties NABL accredited/Gov. approved lab reports is to be attached herewith.

#### 2. <u>DIMENSIONS:</u>

	Dimensions	Instrument to measurement	o be used for of dimension	Observed dimensions	Remark
with	dimensions must compliance a drawing and should be in the rance limits.	General instrument	engineering		
Not	e:				
i.	Casing tolerance according: SS722GTA12 or SS722 GTB				
	16, which ever mentioned in casting drawing.				
ii.	Dimensions given regarding wall thickness are minimum.				,
iii.	Appropriate casting clearance to be applies.		estation in the		,

#### 3. **NON-DESTRUCTIVE TESTING:**

Parameter	Specification	Report
1. Radiography	Gas hole and forging material: level 5 as per ASTM E-192 Shrinkage (All type): Level 3 as per ASTM E-192.	NABL accredited/Gov. approved lab reports
2. Ultrasonic test	ASTM E446-78 , Class 2 , Group A,B & C Group D, E, F & G are not	
Note:	acceptable.	

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i. The above mentioned ND Test to be done according to individual drawing. ii. X-ray first part sample only (Conditional).	Ď.
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#### 4. **DESTRUCTIVE TEST:**

Parameter	Report
Tensile test: One tensile test from separate cast test piece from each charge.	NABL accredited/Gov. approved lab reports
Note: The above mentioned Tensile Test to be done according to individual drawing.	

## 5. <u>LIST OF DOCUMENTS TO BE SUBMITTED BY FIRM ALONG WITH SUB ASSY/COMPONENT/ITEM:</u>

- a) Copies of invoice /Purchases order of all raw materials/Standard items pertaining to said item/components/sub-assy are to be attached herewith this QAP/ATP by the firm in hard copy.
- b) NABL accredited /Gov. approved Chemical composition report.
- c) All dimension check list reports.
- d) Cast test report.

#### 6. IMPORTANT NOTES:

- a) Manufacturing Specification: A2003, if applicable.
- b) Inspection and delivery specification: A2017 commercial quality, if applicable.
- c) Sealing and surface decarburization, if applicable.
- d) Test Specification: 0804092, if applicable.
- e) Use rust preventative (W11-217-1) after integration, location specified in drawing; if applicable.
- f) If any query arise pertaining to dimensions, standards (viz. mechanical properties, chemical composition, Heat treatment etc) or any other aspects which are mentioned in QAP but the same is

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mismatched with actual drawings/standards, then the firm should intimate GCF with detail explanation .The commencement of bulk production only be initiate after the proper clarification received from GCF, Jabalpur.

g) Sample test piece of adequate size need to submit for testing purpose.

h) All necessary mark/punch/patter should be compliance with drawing, if applicable.

## 7. <u>LIST OF DOCUMENTS PROVIDED BY GCF TO FIRM ALONG WITH THIS QAP/ATP, ISENUMERATED BELOW:</u>

a) A copy of drawing no. GCF-50-40890

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