

Mounting body BOM

S.No.	1	2	3	4	5	Art. No.	Nomenclature	Qty
1	1155256	1142716				1142716	<b>MOUNTING BODY</b>	1
2	1155256	1142716	2025042			2025042	MOUNTING BODY ASSY DRAWING	
3	1155256	1142716	5169972			5169972	BUSH	2
4	1155256	1142716	10648367			10648367	HEX. SCREW N2-140-6x14	12
5	1155256	1142716	10316983			10316983	WASHER N5-42-6, 4x12	12
6	1155256	1142716	10343523			10343523	PLUG N15-417-F111	9
7	1155256	1142716	10343539			10343539	PLUG N-15-417-F44	1
8	1155256	1142716	11500500			11500500	GREASING METHOD W14-33-A	
9	1155256	1142716	11500035			11500035	GLUEING METHOD W30-804-3	
10	1155256	1142716	1141501			1141501	<b>STRIP</b>	1
11	1155256	1142716	1141501	3051542		3051542	STRIP WELDING	
12	1155256	1142716	1141501	38000076		38000076	WELDING SPECIFICATION A 3026	
13	1155256	1142716	1141501	11500144		11500144	ZINC PHOTPHATE Y3-11	
14	1155256	1142716	1141501	11500267		11500267	PAINTING METHOD Y4-26-10-600	
15	1155256	1142716	1141501	3051541		3051541	PLATE	1
16	1155256	1142716	1141501	6350429		6350429	PLATE	1
17	1155256	1142716	1141501	6350432		6350432	PLATE	1
18	1155256	1142716	1141502			1141502	<b>STRIP</b>	1
19	1155256	1142716	1141502	3051544		3051544	STRIP WELDING DRAWING	
20	1155256	1142716	1141502	38000076		38000076	WELDING SPECIFICATION A 3026	
21	1155256	1142716	1141502	11500144		11500144	ZINC PHOTPHATE Y3-11	
22	1155256	1142716	1141502	11500267		11500267	PAINTING METHOD Y4-26-10-600	
23	1155256	1142716	1141502	3051543		3051543	PLATE	1
24	1155256	1142716	1141502	6350429		6350429	PLATE	1
25	1155256	1142716	1141502	6350432		6350432	PLATE	1
26	1155256	1142716	1142717			1142717	<b>MOUNTING BODY</b>	1
27	1155256	1142716	1142717	2025043		2025043	MOUNTING BODY FABRICATION AND MACHINING DRAWING (2025043D)	
28	1155256	1142716	1142717	2025044		2025044	MOUNTING BODY FABRICATION AND MACHINING DRAWING	
29	1155256	1142716	1142717	3052211		3052211	MOUNTING BODY SECTIONS FABRICATION DRAWING	
30	1155256	1142716	1142717	807922		807922	M <sup>T</sup> USING HAND HOLD YOKE	
31	1155256	1142716	1142717	809391		809391	ULTRASONIC TESTING	
32	1155256	1142716	1142717	38000075		38000075	WELDING SPECIFICATION A-3025	
33	1155256	1142716	1142717	11500367		11500367	PAINTING METHOD Y4-33-10-600	
34	1155256	1142716	1142717	3050827		3050827	PLATE (3050827D)	1
35	1155256	1142716	1142717	4076085		4076085	PLATE	1

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Mounting body BOM

36	1155256	1142716	1142717	5168076		5168076	PLATE	1
37	1155256	1142716	1142717	5168077		5168077	PLATE	1
38	1155256	1142716	1142717	5168079		5168079	PLATE	1
39	1155256	1142716	1142717	5168080		5168080	PLATE	1
40	1155256	1142716	1142717	5178741		5178741	PLATE	1
41	1155256	1142716	1142717	6333616		6333616	PLATE	6
42	1155256	1142716	1142717	11500191		11500191	LUBRICATION METHOD M11-217-A	
43	1155256	1142716	1142717	11500500		11500500	GREASING METHOD W14-33-A	
44	1155256	1142716	1142717	1136111		1136111	BEAM RIGHT	1
45	1155256	1142716	1142717	1136111	3050828	3050828	BEAM RIGHT FABRICATION DRAWING	
46	1155256	1142716	1142717	1136111	807922	807922	MT USING HAND HOLD YOKE	
47	1155256	1142716	1142717	1136111	809391	809391	ULTRASONIC TESTING	
48	1155256	1142716	1142717	1136111	38000075	38000075	WELDING SPECIFICATION A 3025	
49	1155256	1142716	1142717	1136111	3050829	3050829	PLATE	1
50	1155256	1142716	1142717	1136111	3050830	3050830	PLATE	1
51	1155256	1142716	1142717	1136111	4074504	4074504	BEARING	1
52	1155256	1142716	1142717	1136111	803263	803263	SPEC. DETECT. BY MAGNETIC POWER	
53	1155256	1142716	1142717	1136111	4076087	4076087	PLATE	1
54	1155256	1142716	1142717	1136111	4076088	4076088	PLATE	1
55	1155256	1142716	1142717	1136111	5168088	5168088	PLATE	1
56	1155256	1142716	1142717	1136111	6346160	6346160	SLEEVE	1
57	1155256	1142716	1142717	1136112		1136112	BEAM LEFT	1
58	1155256	1142716	1142717	1136112	3050831	3050831	BEAM LEFT FABRICATION DRAWING	
59	1155256	1142716	1142717	1136112	807922	807922	MT USING HAND HOLD YOKE	
60	1155256	1142716	1142717	1136112	809391	809391	ULTRASONIC TESTING	
61	1155256	1142716	1142717	1136112	38000075	38000075	WELDING SPECIFICATION A 3025	
62	1155256	1142716	1142717	1136112	3050832	3050832	PLATE	1
63	1155256	1142716	1142717	1136112	3050833	3050833	PLATE	1
64	1155256	1142716	1142717	1136112	4074505	4074505	BEARING	1
65	1155256	1142716	1142717	1136112	803263	803263	SPEC. DETECT. BY MAGNETIC POWER	
66	1155256	1142716	1142717	1136112	4076089	4076089	PLATE	1
67	1155256	1142716	1142717	1136112	4076090	4076090	PLATE	1
68	1155256	1142716	1142717	1136112	5168089	5168089	PLATE	1
69	1155256	1142716	1142717	1136112	6346160	6346160	SLEEVE	1
70	1155256	1142716	1142717	1136112	6346161	6346161	INSERT	2
71	1155256	1142716	1142717	1136112	6346162	6346162	INSERT	3

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72	1155256	1142716	1142717	1136112	6346163	6346163	6346163	PLATE	2
73	1155256	1142716	1142717	1136112	6346164	6346164	6346164	PLATE	1
74	1155256	1142716	1142717	1136112	6346165	6346165	6346165	PLATE	1
75	1155256	1142716	1142717	1142718	1142718	2025045	1142718	BEARING HOUSING	1
76	1155256	1142716	1142717	1142718	1142718	2025045	2025045	BEARING HOUSING FABRICATION AND MACHINING (2025045D)	
77	1155256	1142716	1142717	1142718	1142718	807922	807922	MT USING HAND HOLD YOKE	
78	1155256	1142716	1142717	1142718	38000075	38000075	38000075	WELDING SPECIFICATION A-3025	
79	1155256	1142716	1142717	1142718	2025046	2025046	2025046	RING	1
80	1155256	1142716	1142717	1142718	4080458	4080458	4080458	PLATE (4080458D)	1
81	1155256	1142716	1142717	1142718	5160498	5160498	5160498	PLATE	1
82	1155256	1142716	1142717	1142718	5168087	5168087	5168087	PLATE	1
83	1155256	1142716	1142717	1148866	1148866	1148866	1148866	BRACKET	1
84	1155256	1142716	1142717	1148866	4082471	4082471	4082471	BRACKET WELDING DRAWING	
85	1155256	1142716	1142717	1148866	807922	807922	807922	MT USING HAND HOLD YOKE	
86	1155256	1142716	1142717	1148866	809391	809391	809391	ULTRASONIC TESTING	
87	1155256	1142716	1142717	1148866	38000075	38000075	38000075	WELDING SPECIFICATION A-3025	
88	1155256	1142716	1142717	1148866	5168084	5168084	5168084	PLATE	1
89	1155256	1142716	1142717	1148866	5178713	5178713	5178713	PLATE	1
90	1155256	1142716	1142717	1148866	5178714	5178714	5178714	PLATE	1
91	1155256	1142716	1142717	1148866	5178742	5178742	5178742	PLATE	1
92	1155256	1142716	1142717	1173343	1173343	1173343	1173343	TRAVERSING BRACKET	1
93	1155256	1142716	1142717	1173343	4094757	4094757	4094757	TUBE WELDING AND MACHINING DRAWING	
94	1155256	1142716	1142717	1173343	807922	807922	807922	MT USING HAND HOLD YOKE	
95	1155256	1142716	1142717	1173343	38000075	38000075	38000075	WELDING SPECIFICATION A-3025	
96	1155256	1142716	1142717	1173343	5160490	5160490	5160490	ATTACHMENT	1
97	1155256	1142716	1142717	1173343	5161531	5161531	5161531	ATTACHMENT FORGING	1
98	1155256	1142716	1142717	1173343	5160491	5160491	5160491	ATTACHMENT	1
99	1155256	1142716	1142717	1173343	5161531	5161531	5161531	ATTACHMENT FORGING	1
100	1155256	1142716	1142717	1173343	5173542	5173542	5173542	TUBE	1
101	1155256	1142716	1142717	1173343	5196960	5196960	5196960	FLANGE	1

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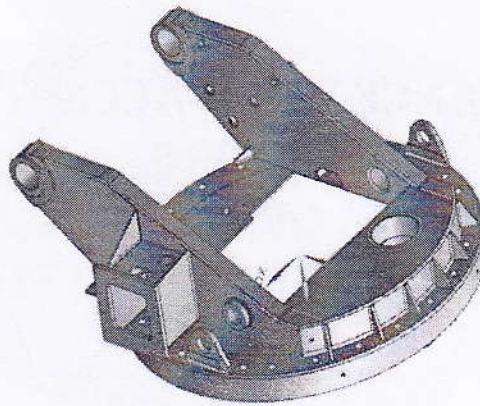
Material Estimate for Mounting Body ( For Referece Purpose only)					
SNO	ITEM-CD	ITEM-DESC.	SPECIFICATION	UQ	QPS
1	0010476061	ST.PLATE6X1250X2500MM LONG.SAILRATH	STEEL PLATE 6 X 1250 X 2500 MM LONG TO SPECN. ISO 4950/3 GD.E 690,SAILRATH.	KG	111.416
2	0010476062	ST.PLATE8X1250X5000MM LONG SAILRATH	STEEL PLATE 8 X 1250 X 5000 MM LONG TO SPECN. ISO 4950/3 GD.E 690,SAILRATH.	KG	86.38
3	0143000235	ST.RD.235MM DIA IS:5517-93,42CR4MO2	ST.RD.235MM DIA IN STD.LENGTH TO IS:5517-1993,DESIGN.42CR4MO2,LRS 63.	KG	80
4	0375000130	ST.RD.130MM BS:EN:10083-1-91,GD.25	ST.RD.130MM DIA.X 500MM OR ITS MULTIPLE TO SPECN.BS:EN:10083-1-1991,Gd.25 Cr Mo4 OR ASTM A29M-04,Gd.4130 SUPPLY COND.AS ROLLED & SOFTENED OR FORGED & SOFT ANNEALED ORBOF W3-2225-05	KG	43.97
5	0144000160	STEEL ROUND BAR FORGED 160MM IS5517	STEEL ROUND BAR FORGED 160MM DIA IN STD.LENGTH TO SPECN.IS: 5517-1993,DESIGN.25CR13MO6,LRS 150(TS=1000-1150 MPa).	KG	30.9
6	0143054100	ST.BLOOM FORGED 100MM IS:5517-1993	ST.BLOOM FORGED 100MM TO SPECN.IS:5517-1993,DESIGN.42CR4MO2,LRS 63.	KG	13.34
7	0010476071	ST.PLATE25X1250X5000MMLONG SAILRATH	STEEL PLATE 25 X 1250 X 5000 MM LONG TO SPECN. ISO 4950/3 GD.E 690,SAILRATH.	KG	10.6
8	0010476067	ST.PLATE15X1250X2500MMLONG SAILRATH	STEEL PLATE 15 X 1250 X 2500 MM LONG TO SPECN. ISO 4950/3 GD.E 690,SAILRATH.	KG	10.25
9	9081000289	PLUG TO BOF.STD. N15-417-F111	PLUG TO BOFORS STD. NO.N15-417-111 ART. NO.10343523.	NO	9
10	0010476065	ST.PLATE10X1250X5000MMLONG SAILRATH	STEEL PLATE 10 X 1250 X 5000 MM LONG TO SPECN. GD.E 690,SAILRATH .	KG	8.38
11	0010476059	ST.SHT.5X1250X5000 MM LONG SAILRATH	STEEL SHEET 5 X 1250 X 5000 MM LONG TO SPECN. ISO 4950/3 GD.E 690,SAILRATH.	KG	7.74
12	0143006045	ST.RD.45MM IS:5517-93,DESI.42CR4MO2	ST.RD.45MM DIA IN STD.LENGTH TO SPECN.IS:5517-1993,DESIGN.42CR4MO2,LRS 100.	KG	5.854
13	0010476066	ST.PLATE12X1250X5000MMLONG SAILRATH	STEEL PLATE 12 X 1250 X 5000 MM LONG TO SPECN. ISO 4950/3 GD.E 690,SAILRATH.	KG	2.07
14	9081001015	BUSH TO DRG NO 5169972 OF 155MM-FH	BUSH TO DRG NO 5169972 OF 155MM-FH.	NO	2
15	9081005696	STRIP WELDING DRG. 1141501/3051542	STRIP WELDING DRAWING.NO.1141501/3051542	NO	1
16	9081005697	STRIP TO DRG.NO.1141502/3051544	STRIP WELDING DRAWING.NO.1141502/3051544	NO	1
17	9081000966	PLUG TO BOF.STD.N15-417-F44	PLUG TO BOFORS STD. NO. N15-417-F44 ART. NO.10343539.	NO	1
18	0423080350	FORGED BILLET,D-350MM,L-720MM,IS:55	FORGED BILLET TO SIZE DIAMETER 350MM, LENGHT 720MM TO SPECIFICATION IS:5517-93, DESIGNATION 25CR13MO6, LRS 150,(TS= 1000-1150 Mpa).	NO	1
19	9077000641	RING FORGING,GCF/FH-257(REF2025046)	RING FORGING TO DRG.NO.GCF/FH-257 (REF:-DRG.NO.2025046.) (IS:5517-1993,DESIG-25Cr13Mo6 LRS150(TS=1000-1150 MPa) MATERIAL TO BE SUPPLIED BY GCF.	NO	1
20	0010476058	ST.SHT.4X1250X5000MM LONG SAILRATH,	STEEL SHEET 4 X 1250 X 5000 MM LONG TO SPECN. ISO 4950/3 GD.E 690 SAILRATH.	KG	0.39

Disclaimer: Above material estimate is for ref purpose only. Firm should make his own estimate based on drawings and documents uploaded with the tender.

Kulwan



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



**QUALITY ASSURANCE PLAN/ACCEPTANCE TEST  
PROCEDURE OF MOUNTING BODY (1142716)**

**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/MOUNTING BODY  
(1142716)/OCT/2020/01


**155MM/45CAL ELECTRONICALLY UPGRADED GUN  
SYSTEM  
“DHANUSH”**

**QUALITY ASSURANCE PLAN/ACCEPTANCE TEST  
PROCEDURE  
OF  
MOUNTING BODY (1142716)**

**REVIEWED BY**

  
**(NILESH SOLANKY)**  
WM/QC

**PREPARED BY**

  
**(DANISH ANSARI)**  
JWM/QC

**APPROVED BY**

  
**(SANJAY SHRIVASTAVA)**  
AGM/Q



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QUALITY ASSURANCE PLAN OF MOUNTING BODY (1142716):  
155MM/45CAL DHANUSH GUN



INDEX

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11.	Important notes for the firm
12.	Records of Amendments

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**QUALITY ASSURANCE PLAN OF MOUNTING BODY (1142716):  
155MM/45CAL DHANUSH GUN**



**1. GENERAL INFORMATION:**

The Mounting Body to drawing No 1142716 is a main part of 155 mm /45 Cal EU Gun System Dhanush Gun. The general procedure of Mounting Body to drawing No 1142716 of 155 mm /45 Cal EU Gun System Dhanush have been laid down in this Quality Assurance Plan. This has been prepared based on standards and inspection parameters laid down in the relevant drawings and specifications.

This Quality Assurance Plan is the property of GCF Jabalpur, which is liable to be updated by AHSP authorities and therefore liable for amendments. This Quality Assurance Plan is a general guide for manufacturing and Quality Audit of Mounting Body. Any change or deviation from specification or drawing dimension must be with the consent of GCF, Jabalpur.

**BRIEF INFORMATION ABOUT MOUNTING BODY:**

The mounting body is a welded construction, consisting of two beams and a circular lower section. The trunnion bearings are fitted in the outer ends of the beams. Each bearing consists of a bronze bushing pressed into the cast end piece. The end pieces are welded to the beams. A mounting for the layer's station is situated on the left beam, and on the right beam is a crossbeam with a mounting for the loading devices. The lower part of the mounting body is screwed onto, and covers, the traverse bearing. The mounting body is also fitted with attachments for the elevation cylinder piston rods and with a protective plate over the forward part of the chassis. A tube with two securing lugs for the piston rod of the traverse cylinder is welded underneath.

**USE OF MOUNTING BODY:**

- (a) To support the Recoil mass, elevating cylinder and ordnance.
- (b) To traverse the Gun towards Left and Right.
- (c) To mount the layer's station on the left beam.

**TECHNICAL DATA**

Inspection of Mounting Body is done as per Drawings and Process Schedule made by GCF. Material used for manufacturing the components of Mounting Body has been mentioned in the drawing.

- (a) Type- Fabricated structure
- (b) Height - 465mm (Upto centre of bearing)
- (C) Dia. - 1240 +1 mm

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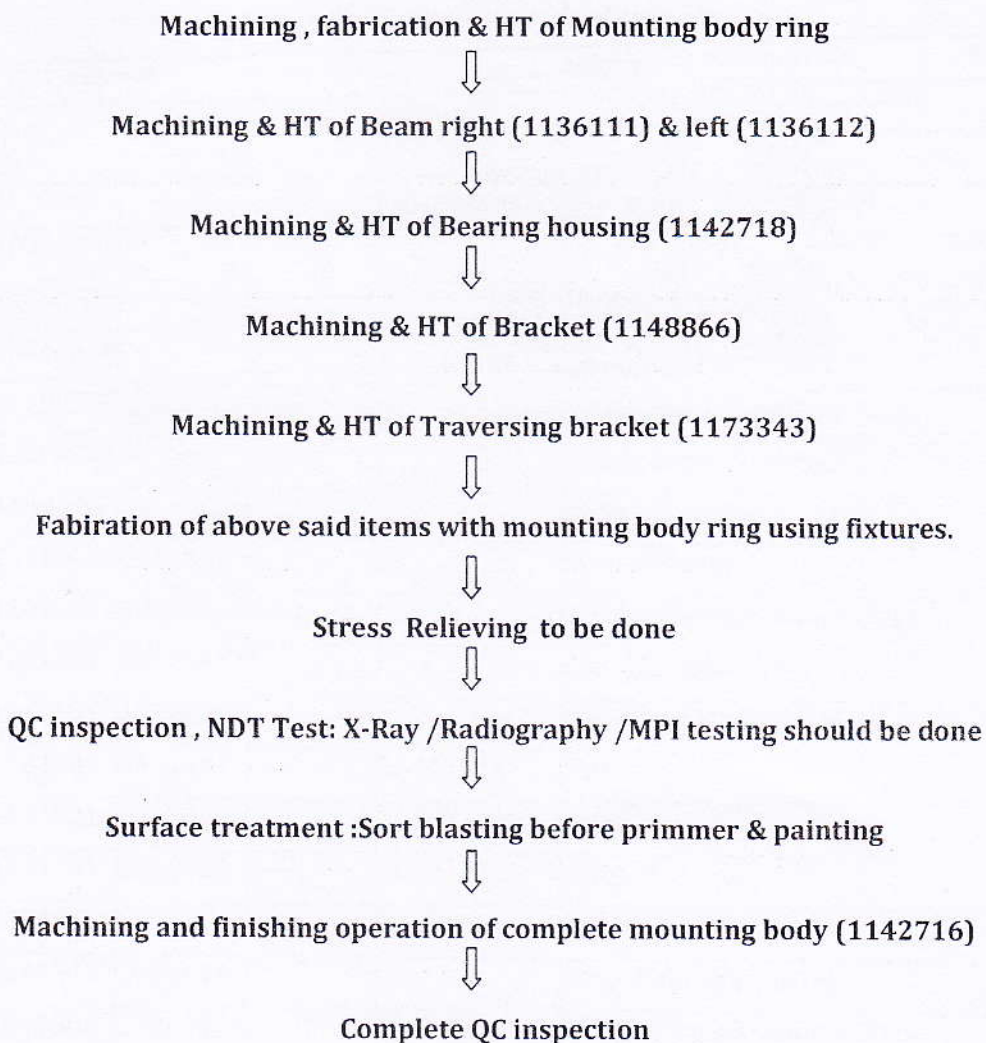
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## 2. PROCESS FLOW CHART



**Note: The above said process flow chart is for reference only. Moreover Manufacturer must strictly follow the drawings and specifications of the said sub-assy for all operations.**

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QUALITY ASSURANCE PLAN OF MOUNTING BODY (1142716):  
155MM/45CAL DHANUSH GUN



BILL OF MATERIAL:

Mounting Body				
Item	Qty	Part Number	Designation	Remarks
1	1	1142716	Mounting Body	
2	1	1141502	• Strip	
3	6	10316983	• Washer N5-42-6, 4x12	
4	12	10648367	• Hexagon Screw N2-140-6x14	
5	6	10316983	• Washer N5-42-6, 4x12	
6	1	1141501	• Strip	
7	1	10343539	• Plug N15-417-F44	
8	2	5169972	• Bush	
9	7	10343523	• Plug N15-417-F111	
10	1	1142717	• Mounting Body	
11	2	10343523	• Plug N15-417-F111	

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QUALITY ASSURANCE PLAN OF MOUNTING BODY (1142716):  
155MM/45CAL DHANUSH GUN



3. LIST OF DRAWINGS & STANDARDS:

DRAWINGS NO.			SIZE	NOMENCLATURE
1142716				<b>Mounting Body</b>
1142716	2025042			Mounting Body Assy Drawing
1142716	5169972		DIA 120X79	Bush
1142716	10648367			Hex. Screw N2-140-6x14
1142716	10316983			washer N5-42-6, 4x12
1142716	10343523			Plug N15-417-F111
1142716	10343539			Plug N-15-417-F44
1142716	11500500			Greasing method W14-33-A
1142716	11500035			Gluing method W30-804-3
1142716	<b>1141501</b>			<b>Strip</b>
1142716	1141501	3051542		Strip Welding
1142716	1141501	38000076		Welding Specification A 3026
1142716	1141501	11500144		Zinc Phosphate Y3-11
1142716	1141501	11500267		Painting method Y4-26-10-600
1142716	1141501	3051541	560X151X1	Plate
1142716	1141501	6350429	30X9X1	Plate
1142716	1141501	6350432	30X21X1	Plate
1142716	<b>1141502</b>			<b>Strip</b>
1142716	1141502	3051544		Strip Welding Drawing
1142716	1141502	38000076		Welding Specification A 3026
1142716	1141502	11500144		Zinc Phosphate Y3-11
1142716	1141502	11500267		Painting method Y4-26-10-600
1142716	1141502	3051543	560X151X1	Plate
1142716	1141502	6350429	30X9X1	Plate
1142716	1141502	6350432	30X21X1	Plate

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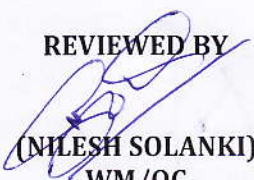


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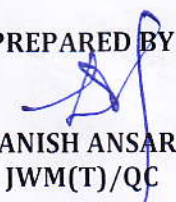
	<b>QUALITY ASSURANCE PLAN OF MOUNTING BODY (1142716): 155MM/45CAL DHANUSH GUN</b>	
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1142716	1142717				<b>Mounting Body</b>
1142716	1142717	2025043			Mounting Body Fabrication And Machining Drawing
1142716	1142717	2025044			Mounting Body Fabrication And Machining Drawing
1142716	1142717	3052211			Mounting Body Sections Fabrication Drawing
1142716	1142717	807922			Mt Using Hand Hold Yoke
1142716	1142717	809391			Ultrasonic Testing
1142716	1142717	38000075			Welding Specification A-3025
1142716	1142717	11500367			Painting method Y4-33-10-600
1142716	1142717	3050827		676X421X5	Plate
1142716	1142717	4076085		922X100	Plate
1142716	1142717	5168076		141X180X20	Plate
1142716	1142717	5168077		141X180X20	Plate
1142716	1142717	5168079		160X128X12	Plate
1142716	1142717	5168080		160X108X10	Plate
1142716	1142717	5178741		186X78X5	Plate
1142716	1142717	6333616		102X60X10	Plate
1142716	1142717	11500191			Lubrication method N11-217-A
1142716	1142717	11500500			Greasing method W14-33-A
1142716	1142717	<b>1136111</b>			<b>Beam Right</b>
1142716	1142717	1136111	3050828		Beam Right Fabrication Drawing
1142716	1142717	1136111	807922		Mt Using Hand Hold Yoke
1142716	1142717	1136111	809391		Ultrasonic Testing
1142716	1142717	1136111	38000075		Welding Specification A 3025
1142716	1142717	1136111	3050829	1205X431X6	Plate
1142716	1142717	1136111	3050830	1148X429X6	Plate

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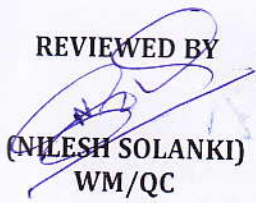


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**QUALITY ASSURANCE PLAN OF MOUNTING BODY (1142716):  
155MM/45CAL DHANUSH GUN**

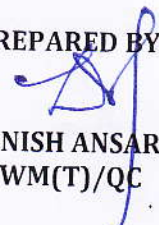

1142716	1142717	1136111	4074504	DIA 226X78	Bearing
1142716	1142717	1136111	803263		Spec. Detect. by Magnetic Power
1142716	1142717	1136111	4076087	400X56X63	Plate
1142716	1142717	1136111	4076088		Plate
1142716	1142717	1136111	5168088	246X58X4	Plate
1142716	1142717	1136111	6346160	DIA 130X88	Sleeve
1142716	1142717	<b>1136112</b>			<b>Beam Left</b>
1142716	1142717	1136112	3050831		Beam Left Fabrication Drawing
1142716	1142717	1136112	807922		Mt Using Hand Hold Yoke
1142716	1142717	1136112	809391		Ultrasonic Testing
1142716	1142717	1136112	38000075		Welding Specification A 3025
1142716	1142717	1136112	3050832	1148X429X6	Plate
1142716	1142717	1136112	3050833	1205X431X6	Plate
1142716	1142717	1136112	4074505	DIA 226X78	Bearing
1142716	1142717	1136112	803263		Spec. Detect. by Magnetic Power
1142716	1142717	1136112	4076089		Plate
1142716	1142717	1136112	4076090	400x63x56	Plate
1142716	1142717	1136112	5168089	198X58X4	Plate
1142716	1142717	1136112	6346160	DIA 130X88	Sleeve
1142716	1142717	1136112	6346161	DIA 40X91	Insert
1142716	1142717	1136112	6346162	DIA 40X84	Insert
1142716	1142717	1136112	6346163	112XX40X6	Plate
1142716	1142717	1136112	6346164	136X40X6	Plate
1142716	1142717	1136112	6346165	50X40X6	Plate
1142716	1142717	<b>1142718</b>			<b>Bearing Housing</b>
1142716	1142717	1142718	2025045		Bearing Housing Fabrication & Machining
1142716	1142717	1142718	807922		Mt Using Hand Hold Yoke

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1142716	1142717	1142718	38000075		Welding Specification A-3025
1142716	1142717	1142718	2025046		Ring
1142716	1142717	1142718	4080458	DIA 1030x8	Plate
1142716	1142717	1142718	5160498	302X70X10	Plate
1142716	1142717	1142718	5168087	102X70X10	Plate
1142716	1142717	<b>1148866</b>			<b>Bracket</b>
1142716	1142717	1148866	4082471		Bracket Welding Drawing
1142716	1142717	1148866	807922		Mt Using Hand Hold Yoke
1142716	1142717	1148866	809391		Ultrasonic Testing
1142716	1142717	1148866	38000075		Welding Specification A-3025
1142716	1142717	1148866	5168084	248X192XX5	Plate
1142716	1142717	1148866	5178713	365X195X5	Plate
1142716	1142717	1148866	5178714	201X192X5	Plate
1142716	1142717	1148866	5178742	290X275X15	Plate
1142716	1142717	<b>1173343</b>			<b>Traversing Bracket</b>
1142716	1142717	1173343	4094757		Tube Welding & Machining Drawing
1142716	1142717	1173343	807922		Mt Using Hand Hold Yoke
1142716	1142717	1173343	38000075		Welding Specification A-3025
1142716	1142717	1173343	5160490	157.5X135X30	Attachment
1142716	1142717	1173343	5161531		Attachment Forging
1142716	1142717	1173343	5160491	157.5X135X30	Attachment
1142716	1142717	1173343	5161531		Attachment Forging
1142716	1142717	1173343	5173542	DIA 120X411	Tube
1142716	1142717	1173343	5196960		Flange

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4. BRIEF OF STANDARDS AND SPECIFICATION:

S. No.	Specification No.	Detail of Specification	Remark
1	Inspection instruction 155mm FHBO2	Measure/Inspection activities	
2	Bofors Standard V9-3	Scope of Inspection for welding	
3	Bofors Standard Z9-3	Welding Classes	
4	A-3025	Welding Specification	-
5	W20-8	Filler metal for welding	-
6	N-A-XTRA 70	Welding Basic Material	-
7	Y051	Surface treatment	Strip(1141502)
8	Y4-31-10-600	Painting	Clamp(1141518)
9	Y3-13	Surface treatment	Bracket(1147393), Cover(1155763), Junction Box (3051539)
10	Y4-27-10-600	Painting	Bracket(1147393)
11	Y052	Surface treatment	Cover(2027062)
12	Y4-33-10-600	Painting method	Mounting Body(1142717)
13	N11-217-A	Lubrication method	Mounting Body(1142717)
14	W14-33-A	Greasing method	Mounting Body(1142717)

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QUALITY ASSURANCE PLAN OF MOUNTING BODY (1142716):  
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5. LIST OF MOUNTING FIXTURE FOR FABRICATION:

Serial No.	Fixture no.	Items/ comp. nomenclature
1.	AD-4221	Mounting Body (1142717)
2.	BC-1745	Mounting Body (1142717)
3.	BC-1746	Mounting Body (1142717)
4.	FF-2421	Mounting Body (1142717)
5.	JB-21864	Mounting Body (1142717)
6.	JB-22239	Mounting Body (1142717)
7.	JB-22240	Mounting Body (1142717)
8.	JJ-3360	Mounting Body (1142717)
9.	JJ-4512	Mounting Body (1142717)
10.	JJ-4513	Mounting Body (1142717)
11.	JP-3094	Mounting Body (1142717)
12.	JP-3500	Mounting Body (1142717)
13.	JP-3715	Mounting Body (1142717)
14.	JP-3716	Mounting Body (1142717)
15.	JS-3888	Mounting Body (1142717)
16.	JP-3664	Beam Right (1136111)
17.	JP-3089	Beam Right (1136111)
18.	JP-3665	Beam Right (1136111)
19.	JP-3672	Beam Left (1136112)
20.	JP-3673	Beam Left (1136112)
21.	JP-3496	Bearing Housing (1142718)
22.	JP-3716	Bracket (1148866)

NOTE : The above fixtures are for reference only. Mfr can design his own fixture as per requirement.

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**QUALITY ASSURANCE PLAN OF MOUNTING BODY (1142716):  
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**6.1 MATERIAL DETAILS:**

- a) Chemical composition and mechanical properties are according to the given standard.
- b) NABL accredited/Gov. approved lab reports of Chemical composition and mechanical properties for all items/components from which the same are manufactured/formed/integrated is to be attached herewith.

However GCF may depute representatives at firm premise or ask firm to provide the sample of the raw materials to ensure whether its mechanical properties and chemical compositions are as per given drawings and specifications or not.

**6.2 DIMENSIONS:**

Dimensions	Instrument to be used for measurement of dimension	Inspection
<p>All dimensions must compliance with drawing and should be in the tolerance limits.</p> <p><b>Note:</b> i. General tolerance according to IS standard.</p>	General engineering instrument	<p><u>Stage inspection: all dimensional check sheets of individual item/components prior to final fabrication must be checked by concerned firm's QC team. However GCF may depute representatives at firm premise to ensure whether the dimensional aspects are as per drawings or not.</u></p>

**6.3 HEAT TREATMENT REPORT:**

HT process	Inspection
<p>Items/components which required heat treatment and the procedure of it both are mentioned in drawings and standard.</p>	<p><u>Stage inspection: All necessary inspection pertaining to the Heat treatment must be checked by concerned firm's QC team. However GCF may depute representatives at firm premise to ensure whether the dimensional aspects are as per drawings or not.</u></p>

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QUALITY ASSURANCE PLAN OF MOUNTING BODY (1142716):  
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**6.4 NON DESTRUCTIVE TEST REPORT:**

Type of NDT	Attachment
Radiography / UT/ MPI as per class mentioned in welding schedule.	Stage inspection: All necessary inspection pertaining to NDT must be checked by the NDTI accredited /Govt. approved as per given standards. However GCF may deploy representatives at firm premises to ensure it.

**7. CALIBRATION STATUS OF TEST / MEASURING / GAUGES ETC., INCLUDING PROOF FIRING RANGE DETAILS.**

SI No	Type Of Gauge	Periodicity	Inspections
1	Go Gauge	Yearly	Stage inspection*
2	No Go Gauge	Yearly	Stage inspection*

**8. GAUGES:**

Manufacturer /Firm must use only calibrated gauges or any QC tool for inspection. And GCF may ask calibration certificates of all those gauges or other QC tool at any time.

**9. PRACTICAL TRIAL WITH DHANUSH GUN SYSTEM (OR WITH ITS SUB-ASSY) AFTER THE SAID ITEM/COMPONENTS/SUB-ASSEMBLY RECEIVED AT GCF.**

S.N	Remark to be filled by concerned section	Signature by concerned head of section



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	<b>QUALITY ASSURANCE PLAN OF MOUNTING BODY (1142716): 155MM/45CAL DHANUSH GUN</b>	
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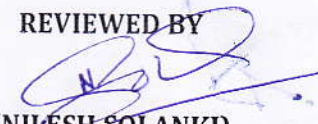
**10. LIST OF DOCUMENTS TO BE SUBMITTED BY FIRM ALONG WITH SUB ASSY/  
/COMPONENT/ ITEM:**

- a) Dimensional acceptance check sheet - 100%.
- b) NABL Accredited lab report / government approved lab report to be attached with QAP for all items/components used in this assembly.
- c) Chemical composition and mechanical properties NABL accredited/Gov. approved lab reports for all items/components from which the same are manufactured/formed/integrated.
- d) Heat treatment NABL Accredited/Gov. approved report with specified hardness as mentioned in standard along with graph, representing HT cycle, if applicable.
- e) NABL / government approved NDT certificated report to be attached herewith, if the same test is mentioned.
- f) Surface treatment report, if applicable.
- g) Surface Coating conformation certificates for all sub-assy, if applicable.
- h) Fabrication report along with SR report, if applicable.
- i) 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.


**11. IMPORTANT NOTES:**

- a) **If required , Stage inspection will be done by GCF representatives at firm premises and the schedule for stage inspection need to be intimated by the firm to GCF before commencement of final fabrication/assembly.**
- b) Handling according to standard V6-1, if the same mentioned in the drawing.
- c) Use rust preventative (W11-217-1) after integration, location specified in drawing; if applicable.
- d) 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 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.
- e) Test piece of adequate size of any sub-assy may asked by the GCF for verification in respect of its Chemical compositions, mechanical properties, NDT or any other aspects if requested.

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- f) MID section (GCF) has a responsibility to perform all necessary inspection before issuing to concerned section (GCF).
- g) **Final authority of acceptance is based on the Practical trial report.**
- h) All necessary mark/punch/patter should be compliance with drawing, if applicable.

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