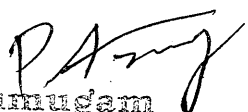


QUALITY ASSURANCE PLAN (M2HB GUN IM PHASE)									Issue No : 01 Rev No: 00 Date of Issue / / 2021
Drg . No.	5504067								QAP No: OFT/QAP/M2HB/5504067
Nomenclature	SEAR, OOW50BMG :REQD FOR BOLT ASSEMBLY BREECH (5428322)								
Material	STEEL, ASTM A304: 4140H.								
Component Nomenclature/ operations	Characteristics	Class	Type of check	Quantum of check	Reference document	Acceptance norms	Format of record	Inspection by NAI or their authorised Rep. (Review/Witness) (*)	Remarks
Sear (Raw material)	General appearance	Critical	Visual	100%	STEEL, ASTM A304: 4140H.		Firm Inspection report	R	Sample will be drawn and sealed by Inspection Agency
	Chemical properties	Critical	Chemical Lab analysis	100%			Test report from NABL lab	R	
	Mechanical properties	Critical	Mechanical Lab analysis	100%			Test report from NABL lab	R	
Heat Treatment	Mechanical properties	Critical	Mechanical Lab analysis	100%		HEAT AT 843°C TO 871°C. OIL QUENCH. TEMPER ONE HOUR MINIMUM TO HARDNESS SPECIFIED RH A75.5-78.5	Test report from NABL lab	R	Firm will be undertaking 100 % Checks and Pre inspection Report for the same be submitted
Protective Finish	General appearance	Critical	Visual and Dimensional Checks	100%	MIL-STD-171	Finish 5.3.1.2 (or) 5.3.2.2	Test report from NABL lab	R	
In process -As per Drawing 5504067	Dimensions Specified in the Inspection report of the component	Critical	Dimensional measurement	100%		As per Drawing 5504067	Firm Inspection report	R	
Final Inspection	General appearance	Critical	Visual and Dimensional Checks	100%		As per Drawing 5504067	Firm Inspection report	W	
<p>(*) Note : As per the MoU No: OFT / SRCG / M2HBGun / MoU /01 Dt: 20.09.2021, Clause no. 3(a), Sub clause (ii) & (iii) the following is applicable.</p> <p>(ii) For springs manufactured In-house (OFT) - Dimension inspection, Load Testing on sampling basis.</p> <p>(iii) For springs procured from vendors - from raw material to finished product QA by NAI, Trichy.</p>									


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TIRUCHIRAPPALLI, TAMIL NADU

QUALITY ASSURANCE PLAN (M2HB GUN IM PHASE)								Issue No : 01 Rev No: 00	
								Date of Issue / / 2021	
Drg . No.	5351220							QAP No: OFT/QAP/M2HB/5351220	
Nomenclature	SLIDE SEAR, OOW50BMG :REQD FOR BOLT ASSEMBLY BREECH (5428322)								
Material	ALLOY STEEL, SHEET AND STRIP, ASTM A506, GRADES 6150, 4340, 4140; ALLOY STEEL BARS, COLD FINISHED, ASTM A331, GRADES 6150, 4340, 4140. ALT.MATL: ALLOY STEEL BARS, HOT WROUGHT, ASTM A322, GRADES 6150, 4340, 4140. ALLOY STEEL PLATES, ASTM A829, GRADES 6150, 4340, 4140. ALLOY STEEL SHEET STRIP PLATE, AMS 6359 (GRADE 4340); ALLOY STEEL SHEET, STRIP, PLATE AMS 6395 (GRADE 4140); ALLOY STEEL SHEET, PLATE STRIP , SAE AMS 6455 (GRADE 6150)								
Component Nomenclature/ operations	Characteristics	Class	Type of check	Quantum of check	Reference document	Acceptance norms	Format of record	Inspection by NAI / GM/OFT (Review/Witness) (*)	Remarks
Slide Sear (Raw material)	General appearance	Non Critical	Visual	100%	ALLOY STEEL, SHEET AND STRIP, ASTM A506, GRADES 6150, 4340, 4140; ALLOY STEEL BARS, COLD FINISHED, ASTM A331, GRADES 6150, 4340, 4140. ALT.MATL: ALLOY STEEL BARS, HOT WROUGHT, ASTM A322, GRADES 6150, 4340, 4140. ALLOY STEEL PLATES, ASTM A829, GRADES 6150, 4340, 4140. ALLOY STEEL SHEET STRIP PLATE, AMS 6359 (GRADE 4340); ALLOY STEEL SHEET, STRIP, PLATE AMS 6395 (GRADE 4140); ALLOY STEEL SHEET, PLATE STRIP , SAE AMS 6455 (GRADE 6150)		Firm Inspection report	R	Sample will be drawn and sealed by Inspection Agency
	Chemical properties	Non Critical	Chemical Lab analysis	100%			Test report from NABL lab	R	
	Mechanical properties	Non Critical	Mechanical Lab analysis	100%			Test report from NABL lab	R	
Heat Treatment	Mechanical properties	Non Critical	Mechanical Lab analysis	100%		FOR 6150: HEAT AT 843°C TO 871°C. OIL QUENCH. TEMPER FOR 1 HOUR MINIMUM TO HARDNESS SPECIFIED (RH C45-51) FOR 4340: HEAT AT 815.5°C TO 843°C. OIL QUENCH. TEMPER FOR 1 HOUR MINIMUM TO HARDNESS SPECIFIED (RH C45-51)	Test report from NABL lab	R	Firm will be undertaking 100 % Checks and Pre inspection Report for the same be submitted
Protective Finish	General appearance	Non Critical	Visual and Dimensional Checks	100%	MIL-STD-171	Finish 5.3.1.2 (or) 5.3.2.2	Test report from NABL lab	R	
In process -As per Drawing 5351220	Dimensions Specified in the Inspection report of the component	Non Critical	Dimensional measurement	100%	As per Drawing 5351220		Firm Inspection report	R	
Final Inspection	General appearance	Non Critical	Visual and Dimensional Checks	100%	As per Drawing 5351220		Firm Inspection report	W	

(*) Note : As per the MoU No: OFT / SRCG / M2HBGun / MoU /01 Dt: 20.09.2021, Clause No. 3(b), Sub clause (i) is applicable for In-House manufacturing and inspection by GM/OFT. Sub clause (ii) is applicable for out sourced components. JRI will be done by NAI & OFT on sampling basis.
For springs: (i) Trade : Raw material to finished product QA by NAI. (ii) In house : Dimension inspection and Load test on sampling basis by NAI.

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