

QUALITY ASSURANCE PLAN

- 1.0 Nomenclature : **RIB.**
- 2.0 Drg No. & Det. No. : ARDE 2139 Det. No. 12
- 3.0 Nature of Item : **Non-Critical**
- 4.0 Inspecting Officer
- (a) Raw Material : **G.M., O.F.D.C.**
- (b) Advance Sample : **Jointly by OFDC & Authorised AQAW (A), if applicable.
[BPC will be accorded by Authorised AQAW (A)]**
- (c) Bulk : **G.M., O.F.D.C.**
- 5.0 Method of Manufacture : Machining, Drilling
- 6.0 Raw Material : Steel to IS 961 – 1975 Fe 540W–HT (Latest Issue)
- 7.0 Tests/Checks and Acceptance Criteria of Raw Material :

Sl. No	Raw Material	Acceptance
1.	Steel to IS 961 – 1975 Fe 540W–HT (Latest Issue)	Chemical Composition & Physical/ Mechanical Properties to conform Specification Steel to IS 961 – 1975 Fe 540W–HT (Latest Issue)

Note : Raw material should be tested from NABL/Govt. Lab.

8.0 **Inspection :**8.1 **Visual Inspection :**

Sl. No	Details of Feature	Sample Size	Acceptance Criteria
1.	Sharp Edges & Burrs	100 %	Not Allowed
2.	Tool Marks, Dents & cracks	100 %	Not Allowed

8.2 **Dimensional Inspection:**

Sl. No.	Dimensions / Features	Sample Size	Inspection Method
1	Critical Dimensions [All geometrical tolerances and Lengths of Front Rib (140.0), Middle Rib (150.0) & Rear Rib (160.0)]	100 %	Gauge / GE
	All other dimensions	10 %	Gauge / GE

- Note:**
1. Sample size (for inspection) may vary at the discretion of Inspecting Authority.
 2. Gauges as per Gauge Schedule No. **AIR/I-453/12** or **G.S./01-12.**
 3. Gauges calibration report / certificate to be submitted.


9.0 Tests / Checks on Finished Items & Acceptance Criteria :

Sl. No.	Details of Feature	Sample size	Acceptance Criteria
1	Phosphating	Base material test coupon for every Batch	To conform Specification IS: 3618 Class 'B' (Latest Issue)


Note : Testing (Phosphating) to be done from NABL accredited/ Govt. lab

Dated : 30 Jun 15


Prepared By
Amitava, CM (T)


Checked By
S. Shaw, JWM/DC


Approved By
Raj Kishore, DGM


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Government of India, Ministry of Defence, D.G.A.Q.A.
काशीपुर, कोलकाता / Cossipore, Kolkata-700 002

QUALITY ASSURANCE PLAN

- 1.0 Nomenclature : **RIB ASSY.**
- 2.0 Drg No. & Det. No. : ARDE 2139 Det. No. 11
- 3.0 Nature of Item : **Non-Critical**
- 4.0 Inspecting Officer
- (a) Raw Material : **G.M., O.F.D.C.**
- (b) Advance Sample : **Jointly by OFDC & Authorised AQAW (A), if applicable.
[BPC will be accorded by Authorised AQAW (A)]**
- (c) Bulk : **G.M., O.F.D.C.**
- 5.0 Method of Manufacture : Machining / Drilling / Screwing

The assy. consists of following components.

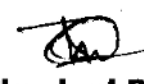
Sl. No.	Components / Sub-Assemblies	Drawing No. & Det. No.	Qty. per Assy.	Remarks
1.	Rib [Consists of Front Rib, Middle Rib & Rear Rib of Length 140 mm, 150 mm & 160 mm respectively]	ARDE 2139 Det. No.12	12 (04 Nos. each)	Refer : Doc No. QAP/OFDC/ Rib /TU-1111
2.	Stud	ARDE 2139 Det. No.13	12	Refer : Doc No. QAP/OFDC/ Stud /TU-1111

6.0 Features for Visual Examination and Acceptance Criteria:


Sl. No.	Features	Sample Size	Acceptance Criteria
1.	Assembly of components (Categorised as Critical)	100 %	Proper Assy. duly as per Drg.
2.	Damage of Screw threads	100 %	Not Allowed
2.	Sharp Edges , Burrs & Tool Marks	100 %	Not Allowed

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काशीपुर, कोलकाता / Cossipore, Kolkata-700 002

QUALITY ASSURANCE PLAN

- 1.0 Nomenclature : **STUD**
- 2.0 Drg. No. & Det. No. : ARDE 2139 Det. No. 13
- 3.0 Nature of Item : **Non – Critical**
- 4.0 Inspecting Officer
- (a) Raw Material : **G.M., O.F.D.C.**
- (b) Advance Sample : **Jointly by OFDC & Authorised AQAW (A), if applicable.
[BPC will be accorded by Authorised AQAW (A)]**
- (c) Bulk : **G.M., O.F.D.C.**
- 5.0 Method of Manufacture : **Machining**
- 6.0 Raw Material : Hexagonal Socket Set Screw M 12 × 30 
to IS: 6094 – FP. (Latest Issue)
- 7.0 Tests/Checks and Acceptance Criteria of Raw Material :

Sl. No	Raw Material	Acceptance
1.	Hexagonal Socket Set Screw M 12 × 30 to IS: 6094 – FP. (Latest Issue)	Chemical Composition & Physical/ Mechanical Properties to conform Property Class 45H of Specn : IS: 1367 (Part-V) (Latest Issue)

Note: Testing (of Raw Materials) to be done from NABL accredited/ Govt.lab.


8.0 **Inspection:**8.1 **Visual Inspection:**

Sl. No	Details of Feature	Sample Size	Acceptance Criteria
1.	Sharp Edges & Burrs	100 %	Not Allowed
2.	Tool Marks, Chattering Marks, Damage of threads	100 %	Not Allowed

8.2 **Dimensional Inspection:**

Sl. No.	Dimensions / Features	Sample Size	Inspection Method
1	Critical Dimensions	-	-
	All dimensions	10 %	Gauge / GE

- Note:**
1. Sample size (for inspection) may vary at the discretion of Inspecting Authority.
 2. Gauges as per Gauge Schedule No. **AIR/I-453/13** or **G.S./01-13**.
 3. Gauges calibration report / certificate to be submitted.

 For alternate material and proposed drawing, refer ARDE letter NO. ARDE/7/1/85-Tech/Air dated 20 Nov. 2014


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9.0 Tests/Checks on Finished Items & acceptance Criteria

Sl. No.	Details of Feature	Sample Size	Acceptance Criteria
1.	Phosphating	Base material test Coupon for every Batch	To conform Specification IS : 3618 Class-B (Latest Issue)
2.	Torque Strength (Proof Torque)	05 Nos.	Refer Property Class 45H of Specn : IS: 1367 (Part-V) (Latest Issue). <i>Proof Torque 65 Nm (Min.) must withstand without splitting or cracking.</i>

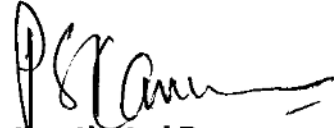
Note : Testing (Phosphating, Proof Torque Test) to be done from NABL Accredited / Govt. Lab.

Dated : 30 Jun 15


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