



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

**QUALITY ASSURANCE PLAN/ACCEPTANCE TEST
PROCEDURE
OF
HEXAGON SOCKET HEAD CAP SCREWS (N2-161)**

**GOVERNMENT OF INDIA, MINISTRY OF DEFENCE
ORDNANCE FACTORY BOARD
GUN CARRIAGE FACTORY
JABALPUR (M.P) 482011**

QAP NO-GCF/OC/100/QAP/155MM/45CAL/DHANUSH/ HEXAGON SOCKET HEAD CAP SCREWS (N2-161) /AUG /2019/01

इस दस्तावेज में दी गई सूचना कहीं और छापना अथवा प्रत्यक्ष या अप्रत्यक्ष रूप से प्रेस में या किसी ऐसे व्यक्ति को नहीं बताना है जो भारत सरकार में किसी पद पर न हो।
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**QUALITY ASSURANCE PLAN/ACCEPTANCE TEST
PROCEDURE OF
HEXAGON SOCKET HEAD CAP SCREWS (N2-161)
FOR
155 mm / 45 CAL DHANUSH**

इस हैंडबुक के होने से किसी प्रयोक्ता को यह अधिकार नहीं मिलता कि वह कंपोनेंट्स की मरम्मत करे या उसे बदलने का काम करे। अन्य एजेंसियों द्वारा मरम्मत कार्य "परमिसीबल रिपेयर शेड्यूल" के अनुसार किए जाएं जैसा कि ई एम ई आर या उस जैसे मैनुअलों में समय-समय पर प्रकाशित किया गया है।

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Prepared and published by



**Gun Carriage Factory
Ordnance Factory Board
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SCREWS (N2-161) /AUG /2019/01

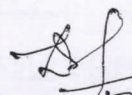
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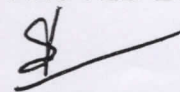
REVIEWED BY

(NILESH SOLANKY)
WM/QC

PREPARED BY


17-10-19
(DANISH ANSARI)
~~C/M(T)/QC~~
JWM

APPROVED BY


(SANJAY SHRIVASTAVA)
JT.GM/QC

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QUALITY ASSURANCE PLAN/ACCEPTANCE TEST PROCEDURE OF
HEXAGON SOCKET HEAD CAP SCREWS N2-161/DHANUSH



1. QAP/ATP OF THE FOLLOWING SIZES OF PATE :

S.No.	Size	S.No.	Size
i.	N2-161-24X110	ii.	N2-161-M10X65
iii.	N2-161-6X40	iv.	N2-161-6X12

2. MATERIAL DETAILS:

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

3. DIMENSIONS:

Dimensions	Instrument to be used for measurement of dimension	Observed dimensions	Remark
All dimensions must compliance with standard mentioned in table 1 and should be in the tolerance limits. Note: i. General tolerance according to IS standard.	General engineering instrument		

4. FIT FOR TRIAL WITH DHANUSH GUN SYSTEM 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

REVIEWED BY

(NILESH SOLANKI)
WM/QC

PREPARED BY

(DANISH ANSARI)
G/M(T)/QC
JWM

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QUALITY ASSURANCE PLAN/ACCEPTANCE TEST PROCEDURE OF
HEXAGON SOCKET HEAD CAP SCREWS N2-161/DHANUSH



**5. LIST OF DOCUMENTS TO BE SUBMITTED BY FIRM ALONG WITH SUB ASSY/
/COMPONENT/ ITEM:**

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

6. IMPORTANT NOTES:

- a) Handling according to standard V6-1, if the same mentioned in the drawing.
- b) Use rust preventative (W11-217-1) after integration, location specified in drawing; if any.
- c) 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/ATP but are mismatching with actual drawings/standards , then in this case the firm should intimate GCF with detail explanation and the commencement of bulk production only be make after receiving of proper clarification from GCF,Jabalpur.
- d) This Quality plan/Acceptance, after proper vetting by standard cell, should be issued to vendor along with supply order. Vetting by standard cell is to be done for checking whether any modification or amendment of material/drawing has been introduced in drawing within of action of procurement.
- e) Final authority of acceptance is based on the Fit for Trail (FFT) report.
- f) All necessary mark/punch/patter should be compliance with drawing, if any.

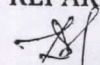
**7. LIST OF DOCUMENTS PROVIDED BY GCF TO FIRM ALONG WITH THIS QAP/ATP, IS
ENUMERATED BELOW:**

- a) A copy of a standard: N2-161

REVIEWED BY

(NILESH SOLANKI)
WM/QC

PREPARED BY


(DANISH ANSARI)
-C/M(T)/QC
JWM

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QUALITY ASSURANCE PLAN/ACCEPTANCE TEST PROCEDURE OF
HEX SCREW METRIC THREAD (N2-140)/DHANUSH



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

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

6. IMPORTANT NOTES:

- a) Handling according to standard V6-1, if the same mentioned in the drawing.
- b) Use rust preventative (W11-217-1) after integration, location specified in drawing; if any.
- c) 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/ATP but are mismatching with actual drawings/standards , then in this case the firm should intimate GCF with detail explanation and the commencement of bulk production only be make after receiving of proper clarification from GCF,Jabalpur.
- d) This Quality plan/Acceptance, after proper vetting by standard cell, should be issued to vendor along with supply order. Vetting by standard cell is to be done for checking whether any modification or amendment of material/drawing has been introduced in drawing within of action of procurement.
- e) Test piece of adequate size of any sub-assy may asked by the GCF for verification of its Chemical and mechanical properties.
- f) *Final authority of acceptance is based on the practical Trail report.*
- g) All necessary mark/punch/patter should be compliance with drawing, if any.

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

- a) A copy of a standard: N2-140

REVIEWED BY

(NILESH SOLANKI)
WM/QC

(PREPARED BY)


(DANISH ANSARI)
JWM/QC

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