

MONITORING INSTRUCTION FOR INSPECTION		Issue No. 01 Rev. No. 01
		Date of Issue 12.02.2020
STEEL TUBE OD 180 mm / ID 155mm		HAPP/QA/SC/ZI/091
Rev no	Amendment	Date
1	ULTRASONIC TEST DETAILS & NABL LAB ADDED Supply condition added Specification BS970-Pt-3:91 Was BS970-Pt-1:83	12.02.2020

SPECIFICATION : BS 970 (PT-3)-91 GR. 817M40

CONDITION OF SUPPLY : HARDENED AND TEMPERED 'X' CONDITION

END USE : CHAMBER FORE MOTOR - A/S ROCKET RGB 60 EMPTY

TABLE A: RAW MATERIAL INSPECTIONS CHECK TO BE CARRIED OUT AT FIRM'S PREMISES BY THE FIRM.

SL. NO.	CHARACTERISTICS	SPECIFICATION / REQUIREMENT	SAMPLE SIZE
1	VISUAL	THE TUBE SHALL BE CLEAN AND FREE FROM SHARP EDGES, POROSITY, CRACKS OR OTHER HARMFUL DEFECTS.	AS PER NAI SPEC A 31 B
2	OUTER DIAMETER	180 mm (+0.0 / -2.0) mm	
3	INNER DIAMETER	155 mm (+2.0 / -0.0) mm	
4	LENGTH	2 m OR ITS MULTIPLES	
5	CHEMICAL	BS 970 (PT-3)-91 GRADE 817M40	1 SAMPLE PER LOT
6	MECHANICAL	BS 970 (PT-3)-91 GRADE 817M40 HARDENED AND TEMPERED 'X' CONDITION	2 SAMPLES PER LOT
7	ULTRASONIC TEST	ALL COMPONENTS SHALL BE TESTED AS PER SPECIFICATION IS: 8791/98 CLASS "A" FOR FERRITIC STEEL FORGING OR ASTM E213 FOR SEAMLESS TUBE COLD FINISHED CONDITION & ANNEALED CONDITION AND TEST CERTIFICATE TO BE SUBMITTED.	100%
8	MARKING	EACH TUBE SHALL BE LEGIBLY STAMPED WITH MANUFACTURER'S IDENTITY & HEAT NUMBER.	EACH CONSIGNMENT
9	PACKING	PACKING OF THE MATERIAL SHALL BE DONE IN SUCH A MANNER TO AVOID CORROSION AND DAMAGE IN HANDLING AND TRANSIT.	EACH CONSIGNMENT

NOTE:

1. THE RAW MATERIAL TO BE TESTED BY THE FIRM BY SELECTING THE SAMPLE BY THE FIRM ITSELF FOR CHEMICAL AND MECHANICAL PROPERTIES FOR EACH HEAT IN NABL ACCREDITED TABLE A
2. THE FIRM HAS TO CHECK FOR THE DIMENSIONS, VISUAL DEFECTS AND MARKING AS PER TABLE A. AFTER COMPLETION OF DIMENSIONAL, CHEMICAL AND MECHANICAL PROPERTIES. THE FIRM HAS TO FORWARD THE FOLLOWING DOCUMENTS TO NAI/TRICHY.
 - I. THE RAW MATERIAL ORIGINAL MANUFACTURER'S CERTIFICATE, HEAT NUMBER, QUANTITY PURCHASED AND NUMBER OF TUBES ARE TO BE MENTIONED IN THE INSPECTION LETTER TO NAI/TRICHY.
 - II. THE CHEMICAL MECHANICAL AND ULTRASONIC TEST CERTIFICATES FROM NABL ACCREDITED LAB AS PER TABLE A
 - III. DIMENSION REPORT INCLUDING VISUAL AS PER TABLE A.
3. ALL THE ABOVE DOCUMENTS ARE TO BE FORWARDED TO NAI/TRICHY WITH A COPY TO GM/HAPP.
4. THE NAI/TRICHY SHALL VERIFY ALL THE DOCUMENTS AS ABOVE AND ACCORD CLEARANCE FOR DISPATCH OF THE MATERIAL TO HAPP IF ALL DOCUMENTS ARE IN ORDER.

5. MATERIAL HAS TO BE DESPATCHED TO HAPP ONLY AFTER DUE SUBMISSION OF ALL RELATED DOCUMENTS AS DETAILED IN TABLE A AND AFTER GETTING CLEARANCE FROM NAI/TRICHY.

STANDARD CELL
 MRS No: 190204 dtd: 20/12/19
 DATE: 20/2/20 SIGNATURE: *[Signature]*

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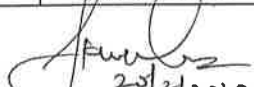
TABLE B. INSPECTION CHECK TO BE CARRIED AT HAPP AFTER RECEIPT BY NAI

SL. NO.	CHARACTERISTIC S	SPECIFICATION / REQUIREMENT	SAMPLE SIZE
1	VISUAL	THE TUBE SHALL BE CLEAN AND FREE FROM SHARP EDGES, POROSITY, CRACKS OR OTHER HARMFUL DEFECTS.	AS PER NAI SPEC A 31 B
2	OUTER DIAMETER	180 mm (+0.0 / -2.0) mm	
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6	MECHANICAL	BS 970 (PT-3)-91 GRADE 817M40 HARDENED AND TEMPERED 'X' CONDITION	2 SAMPLES PER LOT
7	MARKING	EACH TUBE SHALL BE LEGIBLY STAMPED WITH MANUFACTURER'S IDENTITY & HEAT NUMBER.	EACH CONSIGNMENT
8	PACKING	PACKING OF THE MATERIAL SHALL BE DONE IN SUCH A MANNER TO AVOID CORROSION AND DAMAGE IN HANDLING AND TRANSIT.	EACH CONSIGNMENT

1. THE NAI/TRICHY SHALL VERIFY ALL THE PARAMETERS AS ABOVE AND AFTER SATISFACTORY RESULTS, NAI/TRICHY SHALL ISSUE I-NOTE FOR THE MATERIAL RECEIVED.
2. MATERIAL/COMPONENT WILL BE CLEARED/ACCEPTED BASED ON NAI I-NOTE/CLEARANCE CERTIFICATE ONLY.
3. MATERIAL HAS TO BE REPLACED 100% BY THE FIRM IN CASE OF NON CONFORMITY TO SPECIFICATION AS PER TABLE-A DURING NAI INSPECTION AT HAPP, TRICHY.


TABLE C. VERIFICATION OF INSPECTION DOCUMENTS.
FOLLOWING INSPECTION DOCUMENTS MUST BE ENCLOSED WITH EACH SUPPLY.

SL. NO.	INSPECTION DOCUMENTS
1	THE RAW MATERIAL ORIGINAL MANUFACTURER'S CERTIFICATE, DETAILS OF HEAT NUMBER, QUANTITY PURCHASED AND NUMBER OF TUBES ETC.
2	THE CHEMICAL AND MECHANICAL & ULTRASONIC TEST CERTIFICATES FROM NABL ACCREDITED
3	DIMENSION REPORT INCLUDING VISUAL, REPORT
4	PACKING SLIP DETAILS
5	IN ADDITION TO THE ABOVE SOFT COPIES OF ALL THE CERTIFICATES MENTIONED IN TABLE - A SHALL BE SENT TO E-MAIL ID's. happqa.ofb@ofb.gov.in , mmhapp.ofb@ofb.gov.in
NOTE	1. IN CASE OF ANY DIFFERENCES, QAP & DRAWING SHALL PREVAIL 2. EXPLICIT DEVIATION(S) IF ANY SUCH AS TYPOGRAPHICAL ERROR, VALUES, NUMERIC, OTHER PARAMETER, ETC IS/ARE FOUND IN MONITORING INSTRUCTION OF THE ABOVE STORES, THE RELEVANT STANDARD CONFORMING TO THE SPECIFICATION BS 970 (PT- 3)- 91 SHALL BE REFERRED TO CONFIRM THE PARAMETER


25/2/2020
AKHILESH GAUR
AWM / P

MEMBER / MI COMMITTEE


M. RAMESHWARAN
AWM / R&D
CHAIRMAN / MI COMMITTEE


D. BHASKAR RAO
WM / PM
MEMBER/MI COMMITTEE

STAMP
MRS No 190204 dtd: 20/12/19
DATE: 20/2/20 SIGNATURE: