

रेल डिब्बा कारखाना, कपूरथला-144602, पंजाब, भारत RAIL COACH FACTORY, KAPURTHALA-144602, PUNJAB, INDIA

ORGANISATIONAL CHART OF MECHANICAL DESIGN OFFICE. VERSION 29

DOC.NO: MDG 0006 PAGE 1 OF 6 ISSUE DATE: 31/08/2024

Organisation Chart of Design office Dated 31/08/2024 Lalit Kishore Dinesh Uppal Amarjeet Dy CME Dy CME Dy CME Fur Design Shell Design Bogie Design endor developmen Ritika Rashmi Nitin Yadav Kulwinder singh Jugal kishor Deepak Shah Amit Tripathi Ashwani T P Chawla Rakesh Giri Fur-I (Passenger Furnishing) Bogie Design Shell Body Fur-II (Lavatory, Water) Jig & Tool Design Shell Underframe Fur-III (Door, Paint, Partition) PSI Quality standard (IRIS,5S Audit) Fur-IV (Exterior, Vestibule, Air Brake PSL) Respective unit Library, Design IT, Records & Filing Logistics, Admin incharges Respective Unit Incharges Respective Unit Incharges Respective Unit Incharges

UNIT OFFICER-Dy CME or SME or ADE. UNIT INCHARGE- SSE

[AS THE CASE MAY BE.]

अनुमोदित:	मुख्य डिज़ाइन इंजीनियर
<u>हस्ताक्षर:</u>	



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I. DELIGATION OF AUTHORITY:

In the absence of SSEs, concerned DY CMEs or SMEs may nominate a person from their respective areas, in the absence of SMEs, concerned DY CMEs or CDE may nominate. In the absence DY CMEs, CDE may nominate. In the absence of nominated person, immediate next senior person assumes the responsibility and authority unless otherwise mentioned by higher authority of person concerned.

II. <u>RESPONSIBILITIES:</u>

♣ CHIEF DESIGN ENGINEER [CDE]:

As laid down in the quality manual and quality system procedures, CDE is responsible for:

- 1. Design and development of new design of products.
- 2. Up gradation and modification of existing design of products.
- 3. To ensure that quality system and EMS are understood and implemented.
- 4. To control document and data.
- 5. To identify the training needs of personnel.
- 6. To approve, issue and update procedure of the department.
- 7. To ensure that the corrective and preventive actions are taken and effectively implemented.
- 8. To control and maintain specified quality records.
- 9. Coordination with electrical design for electrical design requirements and interfacing of the products.
- 10. Identification and provision of design aids and equipments for design needs.
- 11. Interfacing with RDSO/ICF for design issues.
- 12. To ensure that key tasks of design department are clearly understood and implemented in their respective areas.
- 13. To review/evolve Designs with concern for Environment.

III. THE RESPONSIBILITIES OF CDE ARE FURTHER DELEGATED AS BELOW:

SOME OF THE COMMON RESPONSIBILITIES OF ALL THE PERSONS ARE:

- 1. To ensure that INTEGRATED MANAGEMENT SYSTEM (ISO: 9001, ISO: 14001& OHSAS: 18001, 5S IRIS) are understood and implemented.
- 2. To control document and data.
- 3. To ensure that measures for corrective and preventive actions are taken and effectively implemented.
- 4. To review the C&P actions.

COMMON RESPONSIBILITIES OF DEPUTY CHIEF MECHANICAL ENGINEER'S:

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- 1. Overall management and control of the Design Units under their control.
- 2. Assessment of manpower requirements of the units.
- 3. Distribution of personnel among units.
- 4. Assessment of training needs of personnel under his control and make arrangements for the training.
- 5. Deal with references from Railways, RDSO, and Rly. Board.
- 6. Deal with references from Quality, Planning, and Stores & Shops.
- 7. Ensuring that extant instructions are implemented.
- 8. Any job responsibility assigned/ work allotted by superiors.
- 9. Standardization of design practices (e.g. work methods & procedures).
- 10. Approval/ clearance of prototypes & mockups.
- 11. To control, measure, monitor and improve process under his control.

IV. FURTHER UNCOMMON RESPONSIBILITIES ARE AS UNDER:

♣ DEPUTY CHIEF MECHANICAL ENGINEER / SHELL DESIGN:

- 1. All design and development activities related to Shell Design of LHB, ICF and Trainset coaches -sidewall, End wall, under frame & roof.
- 2. All types of coupling, buffers, all types of brake systems.
- 3. Coordination with RCF Planning, Stores, RDSO and Railway Board including CMG, WMG & PCDO.
- 4. Preparation of technical and purchase specification
- 5. Any other duties given by CDE/RCF.

♣ DEPUTY CHIEF MECHANICAL ENGINEER / FURNISHING DESIGN:

- Design development, modification, up gradation etc of all the designs for Furnishing areas of LHB, ICF and Trainset coaches including Vacuum Toilet & Bio Toilet systems.
- 2. Design & development regarding surface preparation, external, internal painting including vinyl wrapping.
- 3. Coordination with RCF Planning, Stores, RDSO and Railway Board including CMG, WMG & PCDO.
- 4. Preparation of technical and purchase specification
- 5. Any other duties given by CDE/RCF.

♣ DEPUTY CHIEF MECHANICAL ENGINEER / BOGIE DESIGN:

- 1. All aspects of bogie design for LHB, ICF and Trainset type coaches including air springs, dampers, FIBA and Disc Brakes.
- 2. All aspects of CAE group (Both FEA, Vehicle Dynamics and Calculations)
- 3. Quality certifications of project
- 4. All aspects of Raj Bhasha,
- 5. All aspects of Design projects
- 6. Preparation of technical and purchase specification

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- 7. All aspects of Jig & Tool design
- 8. Any other duties given by CDE/RCF.

DEPUTY CHIEF MECHANICAL ENGINEER / VENDOR DEVELOPMENT

- 1. Vendor Assessment & development for furnishing, shell and bogie items.
- 2. All Vendor registration cases.
- 3. Quality certifications like IRIS, 5S, IMS etc., of Design office
- 4. Preparation, updating and uploading changes in vendor directory from time to time as per ISP-04.
- 5. Preparation of layouts of coaches and obtain approval from RDSO/RB
- 6. All aspect of PSI sections
- 7. All aspects of Library, Logistics and Administrative of Design office
- 8. All aspects of Design IT section and follow up of all AMC of software with Finance & Stores
- 9. All aspects of Record and Filing section (Custodian of all drawings, PDM, intellectual property)
- 10. Any other duties given by CDE/RCF.

♣ COMMON RESPONSIBILITIES OF UNIT OFFICERS:

- 1. Overall management and control of the unit
- 2. Lateral coordination with shop officers.
- 3. Response to references from shops
- 4. Implementation of instructions from RDSO/Board/GM.
- 5. Maintain database of drawing errors and problems reported by shops and take preventive and corrective actions.
- 6. Ensuring that extant instructions are implemented.
- 7. Develop specialized know how in the unit for unit job functions.
- 8. To control, measure, monitor and improve process under his control.
- 9. Quality certifications like IRIS, 5S, IMS etc., of Design office

♣ COMMON RESPONSIBILITIES OF UNIT INCHARGE'S:

- 1. Management of the design unit.
- 2. Maintenance of workload register.
- 3. Prepare plan of work for the month and documented review at the end of the month.
- 4. Co-ordination between different sections of the unit.
- 5. Setting up of interface between design activities of units and monitoring of their implementation.
- 6. Control of Attendance and Leave Records of the Unit.
- 7. Monitoring of issue of designs and their cut-in-point.
- 8. Monitoring of issue of modification and their cut-in-points.
- 9. Ensure that the personnel know extant instructions.
- 10. Ensuring that extant instructions are implemented.
- 11. Any job responsibility assigned/ work allotted by superior.
- 12. Implementation of working instructions as per ISO,IRIS 5S IMS etc of Design office

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- 13. Monitoring of turnkey as wll as development of new Design,
- 14. Any Specific Duties assigned by

1. UNIT INCHARGES/BOGIE DESIGN:

- 1. Design and development of new design of bogies.
- 2. Modification in existing design of bogies.
- 3. Up gradation of existing design of bogies.
- 4. Preparation of technical, infrastructure requirement and purchase specification.
- 5. Design calculations.

2. UNIT INCHARGE JIG & TOOL UNIT:

- 1. Design and development of new Jig and Tool design.
- 2. Modification in existing design of Jig and Tool.
- 3. Up gradation of existing design of Jig and Tool.
- 4. Preparation of technical, infrastructure requirement and purchase specification.

3. UNIT INCHARGES / SHELL DESIGN UNIT:

- 1. Design and development of new design of shells.
- 2. Modification in existing design of shells.
- 3. Up gradation of existing design of shells.
- 4. Preparation of technical ,infrastructure requirement and purchase specification

4. UNIT INCHARGES / FURNISHING DESIGN UNITs:

- 1. Design and development of new design of furnishing, interiors, windows, Doors, water piping etc.
- 2. Modification in existing design of furnishing, interiors, windows, Doors, water piping etc.
- 3. Up gradations in existing design of furnishing, interiors, windows, Doors, water piping etc.
- 4. Preparation of technical infrastructure requirement and purchase specification

5. UNIT INCHARGES / VENDOR DEVELOPMENT:

- 1. To deal with vendor registration cases.
- 2. To deal with all vendor development cases.
- 3. Assisting higher authorities in preparing Vendor Directory.
- 4. Updating, recordkeeping and issue of Vendor Directory.
- 5. Documentation and preparing details for vendor evaluation.
- 6. Record keeping and updating status of individual Vendor's and correspondence with them.

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- 7. Preparation and updating of specifications & policy of Vendor related activities.
- 8. Preparation and update of vendor policy

6. UNIT INCHARGE / RECORDS & FILING UNIT:

- 1. To control design document and data.
- 2. To control and maintain specified quality records.
- 3. To handle filing and files of technical nature.
- 4. Custodian of new and closed volumes of Design Office files.
- 5. To upload the approved technical and purchase specification on RCF website

7. UNIT INCHARGE / CAE UNIT:

- 1. All Software Analysis of coach, Bogie and its related components.
- 2. To control and monitor Vehicle Dynamics-Group, FEA-Group, CFD Group, Crashworthy Group, Human Body Simulator, etc.
- 3. Design and development of paint scheme on coaches.
- 4. Modification in existing paint design on coaches.
- 5. Up gradation of existing paint design on coaches.

8. UNIT INCHARGE / OS DESIGN SECTION:

- 1. To handle establishment matters pertaining to design office including leave, attendance and D & AR matters.
- 2. To manage dak receipt and dispatch
- 3. To encouraging and monitoring use of Raj Bhasha
- 4. Custodian of Design office files.
- 5. To maintain RTI record

9. UNIT INCHARGE / LOGISTICS SECTION:

- 1. To ensure timely availability of consumable for design office and preparation of non-stock indent thereof.
- 2. To establish timely AMC of various machines of design office to ensure smooth functioning and liaison with firms in case of brake down.
- 3. Maintain imprest of Design office and its record.
- 4. Upkeep and storage of inventory in logistics store and ledgers thereof and disposal of non-moving/condemned items.
- 5. Procurement/disposal of T & P items and maintains records for the same.
- 6. Miscellaneous work of design office and any other job or responsibility assigned.

10. UNIT INCHARGE / IRIS & IMS SECTION:

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- 1. To look after Quality related certifications like IRIS, IMS, 5S, etc. of MECH.DESIGN OFFICE.
- 2. To prepare and update the design project document related to IRIS, IMS, 5S
- 3. To upload the IRIS/ IMS/5S documents on RCF website
- 4. To control and maintain specified quality records.

11. UNIT INCHARGE / CAD SYSTEM ADMINISTRATION GROUP:

- 1. Software development for Design office requirement from time to time.
- 2. To initiate for the AMCs of software and hardware linked to workstations
- 3. Overall maintenance and upkeep of CAD WORK-STATIONS.
- 4. Solving day-to-day bottlenecks of user's software, hardware and related consumables.
- 5. Taking backups of design drawings and other related documents.

12. UNIT INCHARGE / PSI SECTION:

- 1. To prepare layout of various types of coaches & GI.
- 2. To distribute and monitoring of design activities and progress amongst various sections of design
- 3. Function as a seed for implementation of PLM
- 4. Review and the final product model vis-a-is the initial approved layout
- 5. Weight & CG calculation
- 6. Uploading & updating External 3D model on Team Centre.

13. UNIT INCHARGE / SMART SYSTEMS SECTION:

- 1. To deal with the PAPIS, Smoke Detection & Fire suppression system in coaches
- 2. To deal with any new smart system to be introduced in Indian Railway in future.
- 3. To get the approval of the new systems requiring trials before implementations.
- 4. Preparation of technical infrastructure requirement and purchase specification.

14. UNIT INCHARGE / LIBARARY (MECH DESIGN):

- 1. To Purchase Books, National and International Specifications and Journals.
- 2. Liaison with other technical agencies/ Institutions
- 3. In charge of Design Library

♣ COMMON RESPONSIBILITIES OF SECTION ENGINEERS:

- 1) Management of the section.
- 2) Assessment of work content for the work plan for the month.
- 3) Assessment of resources required for the work plan for the month and need for any adjustments in resource deployment/ work plan.

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- 4) Deployment of the manpower of unit as per the plan.
- 5) Ensuring that the personnel know extant instructions.
- 6) Monitoring that the work is proceeding as per the plan, if short falls noticed, take remedial measures as well as bring the same to superiors notice.
- 7) Follow up of implementation of designs on shop floor and give documented feedback.
- 8) Supervisory check on quality of work done by personnel under his control.
- Maintain database of drawing errors and problems reported by shops and take preventive and corrective actions.
- 10) Ensure that design reviews are carried out and results of reviews documented as per extant instructions.
- 11) Responsible for meeting the section output and productivity plans.
- 12) Ensuring that extant instructions are implemented.
- 13) Any job responsibility assigned/ work allotted by superior.

♣ RESPONSIBILITIES OF DESIGN PERSONNEL:

- 1. Develop a thorough knowledge of his work area including the specific user requirements.
- 2. Responsible for quality of his/her output.
- 3. Preparation of work plan for work assigned.
- 4. Maintain daily log of work done.
- 5. Documentation of the work done.
- 6. Carry out the extant instructions.
- 7. Carry out work allotted/responsibility assigned by superior.

♣ RESPONSIBILITIES OF MACHINE OPERATORS:

- 1. Ensure safe custody of original documents.
- 2. Preparation of documents as directed by superior.
- 3. Ensure quality of documents prepared by the machine operator.
- 4. Carry out work allotted/responsibility assigned by superior.
- 5. Cleaning, routine maintenance and upkeep of equipment and work area.
- 6. Careful and safe operation of equipment.
- 7. Maintain a daily log of work done.

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