



GOVERNMENT OF KERALA

IRRIGATION DEPARTMENT MECHANICAL WING

Introduction

Based on the **Mechanical Branch special rules** as per Kerala Engineering Service and Kerala Engineering Subordinate service which came into force during **1976**, **Mechanical wing** has been organized and after **bifurcation of PWD & Irrigation**, in **1990**. Mechanical wing is under the **administrative control of Irrigation department** and under the **technical control of Chief Engineer, Mechanical** for carrying out the mechanical works of Irrigation department and PWD including the mechanical works related to all department vehicles too. The main objective and functions of Mechanical Wing under Irrigation department, PWD and other government departments are shown below.

- The **design, construction, repair and maintenance** of mechanical structures like shutters, hoisting mechanisms, lock gates, spill way shutters, sluice valves etc of all Dams, Barrages, regulators etc.
- **Dredging works** to increase the depth of lakes (deepening work), rivers in Kuttanad zone using department dredgers, **cleaning works** using weed harvester, silt pusher etc for removing water hyacinth, silt, sand, mud etc which are accumulated in different rivers, brooks and canals.
- **Operation and maintenance works of regulators** according to the tidal variation for safeguarding agriculture sector (paddy cultivation, fish cultivation etc.) and fresh water supply system especially in Kuttanad area from the terrific intrusion of salinity through Thottappally spill way shutters, Thanneermukkom SWB, and Thrikkunnappuzha NWW, navigational lock etc
- The mechanical wing is also undertaking **construction and maintenance of canal shutters** for smooth and regular or uninterrupted water distribution through canals of all dams of the State as periodical maintenance.

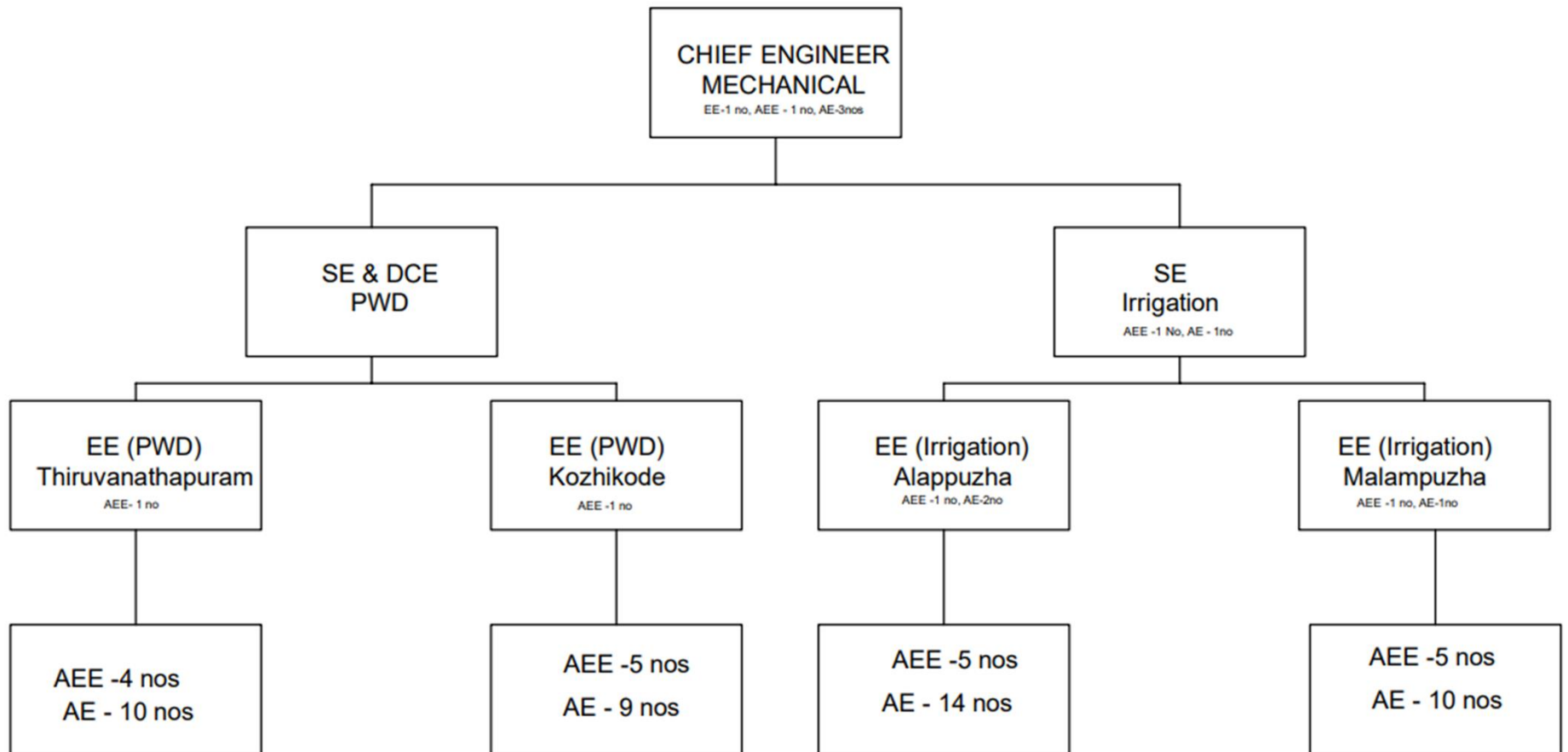
- Inspection for **repair & maintenance of vehicles of all Government departments** of State and autonomous bodies giving different sanction orders and certificates, conducting mileage tests and valuation of vehicles, machineries etc,
- Taking **mechanical procedures required for the construction works** of Multi Level Car Parking (MLCP) under PWD, inspection and certification of construction equipment's like HMP (Hot Mix Plants) in national highways.
- Mechanical works relating vehicles of Raj Bhavan, Courts, Government Press, Tourism garage etc.
- **Inspection & valuation of confiscated vehicles** of Police, Excise and Forest department including LSGD. Rendering the service of condemnation board meeting under Police and Fire & Rescue department etc. Construction, repair & maintenance works of lifts and air conditioners of Kerala Legislative Complex, MLA Hostels. condemnation of vehicles related to Police and Fire & Rescue department etc.
- **Fixing hire charge** of machineries under government departments
- **Purchasing pumps** which are essential for Lift Irrigation Schemes, purchase of machineries etc. as per store purchase manual,
- Rendering service of various High level committee meetings.
- Attending **valuation of tools and plants** of Government and semi Government institutions and companies.

Organizational Setup

- The Chief Engineer, Mechanical is the Head of Department
- One Superintending Engineer for **Irrigation** and one Superintending Engineer & Deputy Chief Engineer for **PWD** and others including dealing administrative matters.
- For irrigation activities one Executive Engineer for 7 (seven) districts from Trivandrum to Ernakulam and one Executive Engineer for other 7(seven) districts from Thrissur to Kasaragod.
- For PWD and others one Executive Engineer for 5 districts from Trivandrum to Alappuzha and one Executive Engineer for 9 districts from Ernakulam to Kasaragod.

Chief Engineer	1
Superintending Engineer/Deputy Chief Engineer	2
Executive Engineer	5
Assistant Executive Engineer	22
Assistant Engineer	49
Overseers (1 st Grade, 2 nd Grade & 3 rd Grade)	103
& Other Technical Staffs including Dredger Operator, Dredger cleaner etc.	

Organizational Setup



Images of recently renovated some mechanical regulators



THANNEERMUKKOM



CHAMRAVATTOM



BHOOTHATHANKETTU



THOTTAPPALLY

**Vision for the next 3 years illustrated
year wise below**

For the 1st year (Financial Year 2023-24)

- Repair of **Thottappally spill way** shutters
- Repair of **Illikkal** regulator
- Repair of **Kottenkottuvalavu** regulator
- Repair of **Pozhikkara** regulator
- Repair of **Maniyar** Barrage
- Overhauling of **Malankara Dam** Mechanical Structure
- Construction of lock cum bridge across Badagara- Mahe canal at **Moozhikkal** in Kozhikode
- **Dredging work** (as part of desiltation) of Chulliyar dam
- Cleaning of fresh water lake like **Sasthamkotta, Ashtamudi,**
- Cleaning of **Vellayani kayal, Parvathy puthanar**
- Overhauling of **Thannermukkom** SWB
- Routine maintenance work for an amount of **12.5 Crores** proposal is under preparation
- Construction of **Thrikkunnappuzha navigational lock** in NWW No 3
- Construction of **MLCP** under PWD Buildings
- Providing **Lifts** at Pampa Block under PWD Buildings
- Selection & Purchase of **Pumps** approximately 100 pumpsets

For the 2nd year (Financial Year 2024-25)

- Repair of **Kanakkankadavu** regulator
- **Dredging** of accumulated sands in Kuttanad, flood affected area
- Cleaning of fresh water lake like **Sasthamkotta, Ashtamudi**
- Cleaning of **Vellayani kayal, Parvathy puthanar**
- Construction of **Koottayi** regulator
- Construction of **Karingalimukku** RCB
- Overhauling **Chamravattom** RCB
- Repair of **Purapallikkavu** RCB

For the 3rd year (Financial Year 2024-25)

- **Dredging** of upper kuttanad zone
- Construction of **Pulikeezhu** RCB
- Construction at RCB at **Erumakayam**
- Construction of SWE Regulator on **Chitari River**
- **Dredging** of accumulated sands in Kuttanad, flood affected area
- Cleaning of fresh water lake like **Sasthamkotta, Ashtamudi**
- Cleaning of **Vellayani kayal, Parvathy puthanar**
- **Rejuvenation of department dredgers** and modernization of Dry Dock work shop
- Overhauling of **Neyyar Dam** mechanical structures
- Overhauling of **Parapparam dam** mechanical structures
- Overhauling of **Malampuzha Dam** mechanical structures

Delegation of Powers

Description		CE	SE	EE	AEE
Technical Sanction		Unlimited	Rs. 250 Lakhs	Rs. 100 Lakhs	Rs. 15 Lakhs
Sanction of Survey Report		Unlimited	Rs.5 Lakhs	Rs. 2 Lakhs	Rs. 50,000/-
Purchase of Stores		Rs. 50 Lakhs	Rs. 20 Lakhs	Rs. 10 Lakhs	Rs. 5 Lakhs
Disposal of Unservicable articles/ Vehicles		Rs. 15 Lakhs	Rs. 10 Lakhs	Rs. 5 Lakhs	Nil
AS Power for Repair of Vehicles all departments	LMV	Rs. 40,000/-	Nil	Nil	Nil
	Heavy	Rs. 60,000/-	Nil	Nil	Nil
Essentiality & Economy	LMV	Nil	Nil	Unlimited	Rs. 40,000/-
	Heavy	Nil	Nil	Unlimited	Rs. 60,000/-