



SOUTHERN RAILWAY
MEMU SHED PALAKKAD



Welcome

MEMU SHED / PGT

MILESTONES

SL NO	DATE	EVENTS
1.	2008	Foundation stone laid on 2008.
2.	02.01.2011	Trip inspection started (13011+13012).
3.	06.02.2011	Monthly schedule started (13007+13008).
4.	06.11.2011	Half yearly inspection started.
7.	07.07.2012	CBE – ED MEMU service extend up to SALEM (Train No. 66602 / 66603). (Now the train service has been cancelled)
9.	23.03.2013	TCR – ERS – TCR service started (Train No. 66611 / 66612)
10.	25.03.2013	TCR- PGT- TCR MEMU special train service started.(Train No. 06611/06612)
11.	12.05.2013	ED – PGTN – ED Service Started (Train No. 66609 / 66608)
12.	26.07.2013	PGT – ERS – PGT permanent service Started (Train No. 66611 / 66612)
13	Nov 2013	04 MEMU rakes maintenance shifted to MEMU Shed /QLN.
14.	04.10.2019	First 3 phase MEMU rake No. 198837 + 198838 received at PGT Divn.
15.	11.10.2019	First 3 phase MEMU service (Rake No. 198837 + 198838) started as Train No. 66611 / 66612 (PGT – ERS – PGT) on 11.10.2019.
16	30.10.2019	3 Phase MEMU rake service started between MTP-CBE-MTP passenger (08 services per day) replacing conventional rakes changed as 3 Phase MEMU rake.
17.	30.10.2019	03 Conventional MEMU rakes are replaced by 3 Phase MEMU rake.
18.	09.10.2020	Extended portion commissioned by DRM/PGT.
19.	23.07.2021	AGM / SRLY inaugurated extended portion of 2 nd phase of MEMU Shed.
20.	26.01.2022	First 3 Phase 12 car MEMU rake service started between CAN-MAQ-CAN passenger (02 services per day) replacing conventional rakes changed as 3 Phase MEMU rake.
21.	04.04.2022	III rd phase extension work for 12 car MEMU: LOA issued for first stage on 16.03.2022 and work started on 04.04.2022.
22.	13.04.2023	CAN-MAQ-CAN service is temporarily converted to IRS rake.
23.	19.07.2024	MTP-CBE-MTP 3 services extended up to PTJ

*This service is temporarily converted to IRS rake.

ORGANIZATION CHART

Sr. DEE / OP / PGT

ADEE / OP / PGT

SSE / MEMU / PGT (02)

JE / MEMU / PGT (01)

**TECHNICIAN
(12)**

**ASSISTANT
(14)**

1. HOLDING

3 Phase MEMU		Conventional MEMU		Total	
Motor coach	Trailer coach	Motor coach	Trailer coach	Motor coach	Trailer coach
08	24	04	12	12	36

SL No	Type of MEMU rakes / SPIC	Qty
1	Conventional 8 car MEMU	02 Rakes
2	3 Phase 8 car MEMU	04 Rakes
3	SPIC	01 No

2. DETAILS OF SEVEN DAYS WORKING OF MEMU SHED WITH ONE MEMU RAKE PER DAY

Week days		Rake No	Working sections	Train No
1	Alternative Sunday	198837+198838	MTP-PTJ / CBE-MTP	66611-66612-66613-66614-66615-66616-66617-66618-66619-66620
		13027+13028	PGTN- CBE-PGTN	66606 - 66605
2	Monday	NIL	NIL	NIL
3	Tuesday	198839+198840	PGT-ERS-PGT	66609 - 66610
4	Wednesday	NIL	NIL	NIL
5	Alternative Thursday	198835+198836	ED-CBE-SRR-CBE -ED	66601-66603-66604-66602
		198637+198638	ED-PGTN-ED	66607 - 66608
6	Alternative Friday & Saturday	13017+13018	Rake sent to POH at LW/PER on 28.03.2025	
		218277 + 218058	POH spare rake	---
		SPIC 1014		
7	SATURDAY	NIL	NIL	NIL

3. RAKE FORMATION

RAKE No	MC1	TC 1 (FC/L)	TC 2	TC 3	TC 4	TC 5	TC 6 (FC/L)	MC2
1	198839	198859	198860	198861	198862	198863	198864	198840
2	198637	198651	198652	198653	198654	198655	198656	198638
3	198837	198853	198854	198855	198856	198857	198858	198838
4	198835	198847	198848	198849	198850	198851	198852	198836
5	13027	13336	13331	13334	13333	13335	13332	13028
6	136017	118534	118533	118535	118538	118536	118537	136018

4. Train working & KM earned

Rake No.	Section	Train No.	Days	KMs/ Trip	KM”S/ Link/ day	No. of trips/ Day	Total KMs earned / Month	KM/ Link/ month	Night stabled at
1.	PGTN-CBE-PGTN	66606-66605	Ex. Sun	120	120	1	3,120	3120	PGTN
2.	CBE-SRR-CBE	66603-66604	Ex. Sun	198	400	1	5,148	11,208	ED
	ED-CBE-ED	66601-66602	Daily	202		1	6,060		
3.	ED-PGTN-ED	66607-66608	Ex. Thu	320	320	1	8,320	8,320	ED
4.	PGT-ERS – PGT	66609-66610	Ex. Tue	302	302	1	7,852	7,852	PGT
5.	MTP-PTJ-MTP	66611-66612	Daily	84	396	1	2,520	11,256	MTP
	MTP-CBE-MTP	66613-66614	Ex. Sun	72		1	1,872		
	MTP-PTJ-MTP	66615-66616	Daily	84		1	2,520		
	MTP-CBE-MTP	66617-66618	Daily	72		1	2,160		
	MTP-PTJ-MTP	66619-66620	Ex. Sun	84		1	2,184		
Average Total KM’s per Month							41,756		

5. MAINTENANCE ACTIVITIES PLANNING

REVISED MAINTENANCE SCHEDULE OF CONVENTIONAL & 3 PHASE MEMU RAKES

Ref : Dy. CEE/EMU/HQ letter No. E.221/IV/24 Dt 17.09.2019
(under RDSO letter ref No. 4.6.1/3 Dt. 06.09.2019)

SL No.	TYPE OF SCHEDULE	CONVENTIONAL MEMU	3 PHASE MEMU
1.	TRIP	15 (+0/-3) Days	15 (+0/-3) Days
2.	IA	60 (+0/-5) Days	60 (+0/-5) Days
3.	IC	240 (+0/-10) Days	240 (+0/-10) Days
4.	UT	210 ($\pm$ 30) Days	210 ($\pm$ 30) Days
5.	POH	18 Months	24 (+0/-1) Months

<u>3 PHASE MEMU IA (60 DAYS) SCHEDULE</u>	
CONVENTIONAL MEMU	3 PHASE MEMU
Close watch on cracks in coach body bolster	Close watch on cracks in coach body bolster
Checking Wear of wheel	Checking Wear of wheel
Schaku Coupler greasing	Schaku Coupler greasing
Dash pot oil	Dash pot oil
Transformer	Transformer
Traction Motor	Traction Motor
Rectifier and Aux circuit	Aux control Unit

SL No	Rake No. & Route	Night stabling point	Day of Maintenance	Type of maintenance done at PGT			Ultrasonic testing of axle @ PGT by CMS / LW / PER		Wheel turning	POH / LIFTING ACTIVITIES
				15 days Trip / Night G.C	60 days IA	240 days IC	MC 210 Days	TC 210 Days	When falling due	After 18+2 Months service
1	13027+13028 PGTN-CBE-PGTN	PGTN	Alternative Sunday	Yes	Yes	Yes	Yes	Yes	@ IOH/C&W SRR	CS / TBM
2	198837+198838 MTP-CBE-MTP	MTP	Alternative Sunday	Yes	Yes	Yes	Yes	Yes	@ IOH/C&W SRR	CS / TBM
3	198839+198840 PGT-ERS-PGT	PGT	Tuesday	Yes	Yes	Yes	Yes	Yes	@ IOH/C&W SRR	CS / TBM
4	198835+198836 ED-SRR-ED	ED	Alternative Thursday	Yes	Yes	Yes	Yes	Yes	@ IOH/C&W SRR	CS / TBM
5	198637+198638 ED-PGTN-ED	ED	Alternative Thursday	Yes	Yes	Yes	Yes	Yes	@ IOH/C&W SRR	CS / TBM
6	13017 + 13018	PGT	Maintenance Spare	Yes	Yes	Yes	Yes	Yes	@ IOH/C&W SRR	CS / TBM

6. MEMU SHED EXPANSION

6.1 Proposal for Umbrella works 2019-20 (Phase – III)

Creation of infrastructure facilities for inspection, major repair and maintenance of 12 car MEMU rake for 12 rake capacity, was sanctioned by GM / SRLY under Umbrella works 2019-20 for a total cost of Rupees 14.10 Cr.

	Work details
Item No. 1	Extension of existing shed from 8 car pit line to 12 car pit line
Item No. 2	Construction of One additional 8 car pit line in main shed
Item No. 3	Construction of 400 Mtrs of stabling line.
Item No. 4	Construction of new service building

LOA 1 issued by Sr. DEN-Co-Ord / PGT vide letter No: PALAKKAD DIVISION-ENGINEERING / PGT-Works-2021-N12-2 / 00861560051207 Dated: 16/03/2022, and extension work has been started on 04.04.2022. LOA 1 has been foreclosed as per contractor request.

LOA 2 issued by Sr. DEN-Co-Ord / PGT vide letter No: PALAKKAD DIVISION ENGINEERING / PGT-Works-2022: N12-07 /01024860067956 Dated: 16/12/2022. Work started from February 2023.

LOA-3 issued by Sr. DEN-Co-Ord / PGT vide letter No: PALAKKAD DIVISION ENGINEERING / PGT-Works-2024-N19-2/01024860120971 Dated: 08.01.2025. Work started from 24th January 2025.

Progress

SL No	Work description	Work progress
1	INSP shed	Shed roof work completed. Floor work 95%
2	First Pit line (4 coaches extension)	COMPLETE
3	Second pit line (8 coaches)	180 mts rail provided 100%. and connectivity Track laying pending. 70%
4	Cat walk pillar	cantilever concreting 95% completed
5	Service building	Structure completed 60%
6	Compound wall	90% completed
7	Inspection building wall	95% completed
8	400 mts stabling line	Not yet started
9	Road connectivity	70%
10	OHE arrangements	Extended portion completed . 20%
11	T&P and M&P	60 % completed.
12	Total progress	80% approx

6.2 Proposal submitted for expansion work MEMU shed PGT under PWP 2025-26 **PHASE - IV**

Phase IV extension of MEMU shed / PGT under name “MEMU shed / PGT: Extension of MEMU shed from 12 car length to 16 car length for 20 rake capacity” is proposed under PWP 2025-26 at the total cost of Rs 32.09 Cr. Proposal is uploaded in IRPSM portal.

1. Inspection shed extension for 16 car length (from 280 Mtrs to 380Mtrs).
2. First elevated pit line extension for 16 car length (from 280 to 380 Mtrs), with catwalk.
3. Second elevated pit line extension from 8 car length to 16 car length (from 180 to 380 Mtrs), with cat walk.
4. Extension of shunting neck from 330 Mtr to 430 Mtrs (100 Mtrs new).
5. Extension of washing pit from 200 to 400 Mtrs (200 Mtrs new).
6. New service building for size 5 Mtr X 40 Mtrs in two floors. Consisting 8 rooms each.
7. Generator room / Power switch room of size 10 Mtrs X 4Mtrs.
8. Concreting of 4 Mtrs width road of 800 Mtrs towards PGT station, nallah side is to be reinforced with retaining wall.
9. Compound wall for surrounding MEMU shed 2000 Mtr.
10. Connectivity of Rail at both end approx 100mtrs.
11. Rain water harvesting with 5 Lakh liters storage tank for inspection and service building.
12. Solar plant 10 KW capacity.
13. Asbestos sheet replacement with GI sheet of Inspection building and parking shed (15000 Sq Mtrs).
14. GI roofing of new service building with ladder connectivity (500 Sq Mtrs).
15. Construction of 12 Nos of type II and 2 nos of type IV quarters in MEMU pool.

Abstract estimate for expansion of MEMU Shed Palakkad under PWP 2025-26

SL No	Description	Cost
1	Civil Engineering portion	28.11 Cr
2	Electrical (TRD) arrangements	1.18 Cr
3	General Electrical arrangements	1.06 Cr
4	Essential M&P and T&P arrangements	1.64 Cr
	Total	32.09 Cr

7. Contracts

7.1. LOA has been issued for **AMC for IGBT based 3- phase** Propulsion System with OEM Medha, Hyderabad for Rs. 1,84,54,576 /- for two years vide LOA No. Palakkad Division-Electrical / E-MEMU-PGT-ST-01-2023-24/00987030115520 dated 22.10.2024

7.2. Rake washing & cleaning Rs. 9.5 Lakh / year

7.3. Bio toilets AMC Rs. 1.5 lacks / Year

8. ASSISTANCE REQUIRED

8.1. Creation of ministerial drawing posts

Clerical / ministerial / drawing staff has been not posted in this depot .One office suprendent is required for general office management, establishment of the MEMU maintenance staff, budget work, meeting, inspections, procurement of spares both stock non-stock item and consumable for maintenance of rolling stock and T&P item available in the shed. Also required to deal accounts, budget inspections and stock sheets etc.

Also SSE/JE drawing is to be posted for preparation of plans and estimates in connection with 3rd and 4th phase of expansion of MEMU shed.

8.2. User end modification requested

1. Inspection shed flooring epoxy coating is to be done for neat looks.
2. Additional ladders to cat walk is required at every 50 mts.
3. Water drainage from inspection pits is to be ensured.
4. Parking shed for staff vehicles may be provided

9. STAFF POSITION

STAFF POSITION AS ON 24.04.2025

Present staff position of MEMU Shed / PGT

SL No	Category	Scale of pay	Sanctioned posts	Present Strength	Vacancy
1	SSE	9300-34800 + GP 4600	2	2	0
2	JE	9300-34800 + GP 4200	1	1	0
3	Sr. Tech	9300-34800 + GP 4200	2	2	0
4	Tech Gr-I	5200-20200 + GP 2800	3	2	1
5	Tech Gr-II	5200-20200 + GP 2400	3	4	-1
6	Tech Gr-III	5200-20200 + GP 1900	4	4	0
7.	Helper	5200-20200 + GP 1800	16	14	2
Total			31	29	2

10. Stock item for 3 phase and Conventional MEMU

SL No	ITEM	PL No.	EAR
1	Composite Brake Block	31316001	2500 Nos
2	Sealing ring for axle box cover for use in MC & HCC coaches	31020150	1000 Nos
3	Hose: 1/2"x 700mm for air suspension connecting with LV at under frame.	31351876	60 Nos
4	PT Carbon strip for Shunk make PT model WBL 22.03 as per RDSO spec. 0114 (for 3 phase MEMU)	29880142	12 Nos
5	Metalized Carbon Strip AM-12 (for Conventional MEMU)	25881589	12 Nos
6	Drain Cock	31396355	15 Nos
7	9 W 2 Feet Length Led Tubular Lamps With Built In Drive (for Conventional MEMU)	45159336	60 Nos

8	Cloth Cotton Mull Bleached	79022236	250 meters
9	OIL: Servo Press - 150	80014975	210 Litre
10	OIL: Servo Syngear 460RR TM GC OIL	80012012	210 Litre
11	Servo Coat-170 T	80031365	1000 Kgs
12	Grease: Servoplex SHC 120 grease for TM bearing	80030166	23 Kgs

11. ROLLING STOCK PROGRAMME

11.1 RSP 2024-25 sanction

SN	Name of work	QTY	Total cost in Rs.	Stage
1	MEMU/PGT - converter module for line converter	02 No's	1873	P.O released
2	MEMU/PGT - Inverter module for traction converter/brake chopper	02 No's	1903	P.O released
3	MEMU/PGT- Line & traction conv. Cubicle MAE675 MEMU	1 No	15333	P.O released
4	MEMU/PGT -auxiliary converter for MAE675M MEMU	1 No	5313	P.O released
5	MEMU/PGT - Main transformer for MEDHA 3 phase MEMU	1 No	5925	retender

11.2 RSP 2025-26 proposal

SN	Name of work	QTY	Total cost in Rs.	Allocation
1	MEMU/PGT - 25 KV Pantograph	01 No	980	CAP
2	MEMU/PGT - HVPT sensor	02 Nos	785	CAP
3	MEMU/PGT- Electrical wiper set for one DMC (Driver side, Guard side wiper, Washer pump and washer tank)	4 Nos	1031	CAP
4	MEMU/PGT - Driver cab air conditioning unit	2 Nos	933	CAP

Thank You...
