#### **Railway Batteries - Low mainte**

Rail - Power LM

Batteries in Hard rubber/PPCP-FRP Tray For Train Lighting & Air conditioning, Diesel Locomotives & Diesel Electric Locomotives, Electric locomotives, EMU, Signalling and Traction distribution applications.











Low Maintenance Tubular Plate Batteries





#### **Railway Batteries - Low mainte**



Batteries in Hard rubber/PPCP-FRP Tray
For Train Lighting & Air conditioning, Diesel Locomotives
& Diesel Electric Locomotives, Electric locomotives, EMU,
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Microtex is a leading manufacturer of Industrial Batteries in Bangalore, India. The factory has a covered area of 26700 Sq ft on 5 acres of land, with 300 trained people. Established 45 years ago it is a company well known for its high quality. Microtex produces in house, the specially designed lead alloys, lead oxides, grid castings, pasted plates, injection molded containers, multi-tubular gauntlets, separators and produces the complete battery using state of the art industry standard battery making machinery. The Company started producing Industrials Batteries in the seventies for applications like Traction, Signaling, Train lighting, EMU and Diesel-Electric Locomotives Batteries for Indian Railways.

#### Advantages of using Low Maintenance Tubular Plate Rail Power Batteries.

FEATURES	ADVANTAGES
Special low Antimony Selenium grid alloy	Reduced watering requirements
Thicker spines for Positive Tubular plates	Cast at 150 bar ensures better compression and packing of lead ensuring long cycle life
High Impact Monoblock Hard Rubber/PPCP Containers and cell lids in FRP Tray	Resistant to breakage and leakage under Severest operating conditions.
Micro porous Ceramic Vent plugs	Prevents emission of acid spray and the risk of external corrosion
Hardened, Lead-alloy Pillar terminal posts	Provide better conductivity and tighter Connections requiring less maintenance
Factory Preformed Plates	For reliable performance and no excess cycling of the cells required in the field to reach rated capacity-saves money and time for users

Tested and approved Batteries as per RDSO Specifications: Supply to Indian Railways since 1991.

The Company is ISO 9001:2008 and ISO 14001:2004 certified

Low Maintenance Tubular Plate Batteries







# TECHNICAL DATA - MICROTEX TL and AC Cells/Batteries

	Overall Dimension in mm					Cell/Battery Weight (appx.) Kgs.		Flectrolyte	Initial filling	Cł	harging Current	
Cell/Battery Type	Material Of Container	Capacity in Ah at 27°C	L <u>+</u>	W <u>+</u>	H <u>+</u>	Without		Oty (Appx.) in Litres per	Electrolyte Specific	Initial	Initial No. of Hrs.	Normal
	/Lid	10Hr	5 mm	5 mm	10 mm	Electrolyte	Electrolyte			Charging rate (Amps)		Charging rate (Amps)
6VT 120 PP	PPCP	120	453	178	380	23.22	42	5.0	1.205	6	70	15
T210MH	HR	210	260	185	355	19.5	29.5	6.6	1.240	15	75	21
Mi 525	PPCP	525	385	174	495	32	54.3	18	1.240	26	75	52.5
Mi 8	PPCP	800	385	174	495	44	66	17.5	1.240	40	75	80
Mi 8 450 TL	HR	450	720	220	465	134	168.7	7.0	1.240	22.5	75	45
Note:												
H -Height is upto Terminal HR -Hard Rubb		ubber	PPCP- Poly P	ropylene Co	polymer							

All cells/Batteries are supplied in dry un charged condition The el

The electrical characteristics are nominal indicative value and can vary within ±5.0%.

In case of cells/batteries in Dry and Uncharged condition the intial filling and charging is to be carried out as per the parameters mentioned in Technical data sheet

# TECHNICAL DATA - MICROTEX Electric Locomotive and EMU Batteries

			Overall Dimension in mm			Battery Weight				Charging Current		
						(appx.) Kgs.		Electrolyte	Initial filling			
Battery Type	Material Of	Capacity in	L <u>+</u>	W <u>+</u>	H <u>+</u>			Qty (Appx.)	Electrolyte	Initial	Initial No.	Normal
	Container	Ah at 27°C				Without	With	in Litres per	Specific	Charging	of Hrs.	Charging
	/Lid	10Hr	5 mm	5 mm	5mm	Electrolyte	Electrolyte	cell	Gravity	rate (Amps)	Charging	rate (Amps)
Mi 10 75 LM	PPCP	75	356	220	365	25.67	41.00	2.6	1.240	5.0	75	7.5
Mi 10 90 LM	PPCP	90	356	220	365	27.03	42.00	2.4	1.240	6.0	75	9.0

Note:

H -Height is upto Terminal

PPCP - Poly Propylene Copolymer

All Batteries are supplied in dry un charged condition

The electrical characteristics are nominal indicative value and can vary within ±5.0%.

In case of cells/batteries in Dry and Uncharged condition the intial filling and charging is to be carried out as per the parameters mentioned in Technical data sheet

## **TECHNICAL DATA - MICROTEX Diesel Locomotive Batteries**

			Overall Dimension in mm			Battery Weight				Charging Current		
						(appx.) Kgs.		Electrolyte	Initial filling			
Battery Type	Material Of		L <u>+</u>	W <u>+</u>	H <u>+</u>			Oty (Appx.)		Initial	Initial No.	Normal
	Container	Ah at 27°C	_		_	Without		in Litres per	Specific	Charging	of Hrs.	Charging
	/Lid	10Hr	5 mm	5 mm	5mm	Electrolyte	Electrolyte	cell	Gravity	rate (Amps)	Charging	rate (Amps)
Mi 8 500 /8V 500Ah	PPCP/FRP	500	723	200	497	116	153	7.0	1.240	25.0	75	50.0
Mi 8 450 P 8V 450Ah LM	PPCP/FRP	450	722	208	465	113	145	7.5	1.240	22.5	75	45.0
8VT 450 MH	MHR	450	715	210	455	120	155	6.5	1.240	23.0	75	45.0
8VT 450MH - LM	MHR	450	720	220	465	120	155	7.0	1.240	22.5	75	45.0
8VT 290MH - LM	MHR	290	715	210	455	97	130	7.0	1.240	15.0	75	29.0

Note:

H -Height is upto Terminal

MHR -Monoblock Hard Rubber

PPCP/FRP - Poly Propoylene Copolymer cells in Fibre reinforcedTray

All Batteries are supplied in dry un charged condition

The electrical characteristics are nominal indicative value and can vary within  $\pm 5.0\%$ 

In case of cells/batteries in Dry and Uncharged condition the intial filling and charging is to be carried out as per the parameters mentioned in Technical data sheet

Low Maintenance Tubular Plate Batteries







TECHNICAL DATA - MICROTEX Stationary Cells												
			Overall Dimension in mm			Cell Weight (appx.) Kgs.		Electrolyte Qty 1.190	gg			
Cell Type	Material Of Container	Capacity in Ah at 27 <sup>0</sup> C 10Hr	L <u>+</u> 5 mm	W <u>+</u> 5 mm	H <u>+</u>	Without Electrolyte	With Electrolyte	Sp. Gr. (Appx.) in Litres	Initial Charging rate (Amps)	Initial No. of Hrs. Charging	Normal Charging rate (Amps)	Equalizing Charging rate (Amps)
T40H LM	HR	40	98	165	255	4.7	6.85	1.4	4	40	4	1.2
T80H LM	HR	80	110	165	355	7.65	10.3	2.8	5	70	8	2.4
T100H LM	HR	100	170	145	355	10.5	15.3	4	5	80	10	3
T120H LM	HR	120	170	145	355	10.5	15.3	4	6	80	12	3.6
T150H LM	HR	150	260	185	355	15	24	7.5	7.5	80	15	4.5
T200H LM	HR	200	260	185	355	20	26	6.6	15	65	20	6
T250H LM	HR	250	260	208	390	26	38.5	10.5	12.5	80	25	7.5
T300H LM	HR	300	260	208	390	28.5	40.1	9.75	15	80	30	9
T400H LM	HR	400	260	208	417	33	44.9	10	20	80	40	12
T500H LM	HR	500	260	208	478	39.5	53.18	11.5	25	80	50	15
T600P LM	PPCP	600	385	174	495	36	50	13	30	80	60	16
T800P LM	PPCP	800	385	174	495	52	66	17.25	40	80	80	24
T1000P LM	PPCP	1000	415	172	515	63	85	19	50	80	100	30
Note:												
HR -Hard Rubber		PPCP- Poly P	ropylene Co	polymer								

In case of cells/batteries in Dry and Uncharged condition the intial filling and charging is to be carried out as per the parameters mentioned in Technical data sheet

The electrical characteristics are nominal indicative value and can vary within ±5.0%.

#### **TECHNICAL DATA - MICROTEX Traction Distribution Cells** Cell Weight Overall Dimension in mm Charging Current (appx.) Kgs. Electrolyte Initial filling Cell cente W ± Cell Type L <u>+</u> H <u>+</u> Capacity in Material Of Qty (Appx.) Electrolyte Initial Initial No. Equalizing Normal Specific Container Ah at 27°C Without With in Litres per Charging of Hrs Charging Charging Distance in 5 mm 5 mm 10 mm /Lid 10Hr Electrolyte Electrolyte cell Gravity rate (Amps) Charging ate (Amps) rate (Amps) mm T 40H-LM 98 165 255 HR 40 4.75 7.2 1.205 4 50 5 1.2 117 T 200-LM 200 260 184 355 20.5 7.2 1.205 15 70 20 197 29.5 6 HR 10.5 T120H LM 120 145 170 355 15.3 4 1.205 6 80 12 3.6 155 HR T320H LM 320 260 208 390 28.5 40.1 9.75 1.205 80 32 10 HR 16 235 T400H LM 400 260 208 417 33 44.9 10 1.205 20 80 40 12 235 HR

H -Height is upto Terminal

HR -Hard Rubber All cells are supplied in dry un charged condition

All cells are supplied in dry un charged condition

The electrical characteristics are nominal indicative value and can vary within ±5.0%.

In case of cells/batteries in Dry and Uncharged condition the intial filling and charging is to be carried out as per the parameters mentioned in Technical data sheet

### Microtex - RDSO Approved products range

6volts 120Ah in Heat sealed Monoblock PPCP Container and lid

2volts 210Ah in Moulded Hard Rubber container and lid

2volts 800Ah in Heat sealed PPCP Container and lid

2volts 525Ah in Heat sealed PPCP Container and lid

8volts 450Ah in Monoblock Hard Container and lid

2V 40 Ah to 500 Ah in Hard Rubber container and lid

110volts 40Ah in Hard Rubber container and lid

110volts 200Ah in Hard Rubber container and lid

8volts 450Ah in Heat sealed PPCP Container and lid cells in FRP Tray

8volts 500Ah in Heat sealed PPCP Container and lid cells in FRP Tray

8volts 290Ah in Monblock Hard rubber container

10volts 75Ah in Heat sealed PPCP Container and lid

10volts 90Ah in Heat sealed PPCP Container and lid

Manufactured By

# Mysore Thermo Electric (P

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