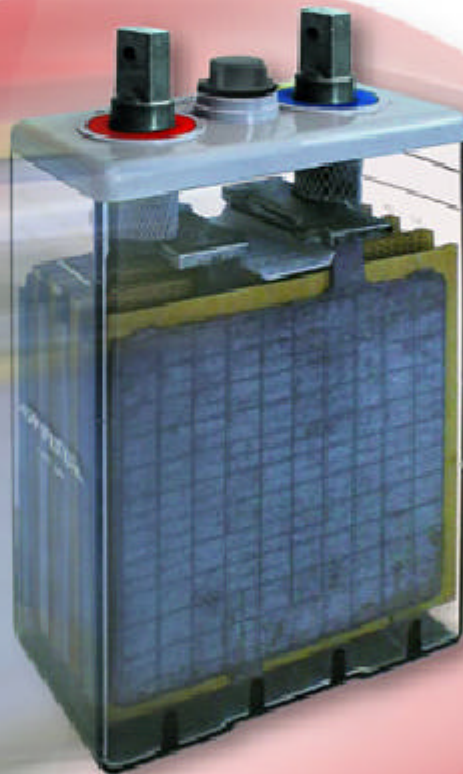




THROUGH CARING WE LEAD  
FIRST NATIONAL BATTERY  
INDUSTRIAL (Pty) Ltd



# Tubular Cells



ISO 14001  
ISO 9001: 2000  
ISO/TS 16949: 2002

Complies with: SABS IEC 60896-1,2: 1987

## Applications:

- Emergency Lighting
- Telecommunications
- Railway Signalling
- DC Emergency System

The RAYLITE Tubular Cell offers outstanding reliability over an expected working life of 10 to 12 years in float charge applications. These cells are capable of high cycling.

The round tube has the following advantages over the square tube:

- it offers a more uniform active material distribution around the supporting spines, resulting in more efficient utilisation of materials.
- it is less prone to distortion under operating conditions

## Design Features

### POSITIVE PLATE

The tubular gauntlet plate construction consists of special lead alloy spines in complete contact with superior active material, effectively retained by woven terylene tubes. The terylene gauntlets, which are resin impregnated, combine high tensile strength with resilience, retaining the active material while enabling the electrolyte to penetrate freely. This ensures a high power output per unit volume.

### NEGATIVE PLATE

The negative plate is of a special alloy grid, pasted with a highly-porous paste formulation, giving a balanced performance and life, and complementing the positive plate construction.

### VENT PLUGS

The special design effectively returns all acid spray to the cell, yet permits free exit of oxygen and hydrogen.

### CONTAINER

Moulded, DIN standard, transparent styrene acrylonitrile, giving very high insulating properties which eliminate the use of insulators. Age or acid contact will not cause deterioration.

### LIDS

Moulded from opaque styrene acrylonitrile.

### END BUFFERS

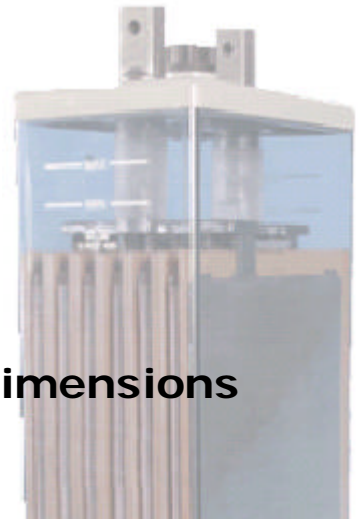
PVC end buffers provide additional lateral support at each end of the element, ensuring a compact assembly to prevent the plates from splaying.

### SEPARATORS

High quality, microporous rubber separators. Chemically-inert, with a high degree of porosity, they offer minimum internal resistance. The sleeve separators prevent short-circuiting caused by mousing.

## Product and Service Benefits

- **Locally-Manufactured Range**  
Manufactured by a South African company, proven under South African conditions.
- **Premier Quality**  
Conforms to DIN and IEC standards and manufactured to ISO 9001:2000 quality standards.
- **Nationwide After-Sales Support**  
Countrywide network of branches and agencies, with access to information to ensure sound technical backup.
- **Proven Reliability**  
Used successfully, achieving claimed life, in numerous applications.
- **Customer Care**  
Every Raylite standby cell carries a comprehensive product warranty backed by the industry leader and supported by a national distributor network.



## Tubular Capacities, Weights And Dimensions

Type	Capacity in amp-hours at 25°C when discharged in			Initial Charge Current	Weight		Approx. quantity of acid 1.250sg	External dimensions of cell container			Overall height of cells	Centres of cells	Width of single row stillage or stand	Width of double row stillage or stand
	10 Hrs	3 Hrs	1 Hr		Cell compl. filled	Acid only 1.250sg		Length	Width	Height				
Final voltage	1.85	1.80	1.75	Amps	Kg	Kg	Litres	mm	mm	mm	mm	mm	mm	mm
3RCT150	150	108	51	10.5	16.3	4.8	3.8	103	206	355	435	113	376	649
4RCT200	200	144	68	14.0	19.9	4.6	3.7	103	206	355	435	113	376	649
5RCT250	250	180	85	17.5	24.8	5.6	4.5	124	206	355	435	134	376	649
6RCT300	300	216	102	21.0	29.8	6.8	5.4	145	206	355	435	155	376	649
5RCT350	350	260	180	24.5	34.7	7.9	6.3	124	206	471	551	134	376	649
6RCT420	420	312	216	29.4	41.2	9.0	7.2	145	206	471	551	155	376	649
7RCT490	490	364	252	34.3	48.0	10.4	8.3	166	206	471	551	176	376	649
6RCT600	600	432	294	42.0	42.4	9.0	7.2	145	206	646	726	216	376	649
7RCT700	700	504	343	49.0	57.1	18.1	14.5	191	210	646	726	220	361	687
8RCT800	800	576	392	56.0	61.1	16.6	13.3	191	210	646	726	220	361	687
9RCT900	900	648	441	63.0	73.0	22.9	18.3	233	210	646	726	220	403	756
10RCT1000	1000	720	490	70.0	77.1	21.4	17.1	233	210	646	726	220	403	756
11RCT1100	1100	792	539	77.0	88.1	26.9	21.5	275	210	646	726	220	445	840
12RCT1200	1200	864	588	84.0	92.2	25.4	20.3	275	210	646	726	220	445	840
11RCT1375	1375	990	660	96.3	108.8	32.3	25.8	275	210	771	851	220	275	620
12RCT 1500	1500	1080	720	105.0	114.7	31.2	25.0	275	210	771	851	220	275	620
13RCT1625	1625	1170	780	113.8	138.3	46.8	37.4	397	212	771	851	222	397	864
14RCT1750	1750	1260	840	122.5	144.1	45.6	36.5	397	212	771	851	222	397	864
15RCT1875	1875	1350	900	131.3	150.5	44.9	35.9	397	212	771	851	222	397	864
16RCT2000	2000	1440	960	140.0	156.3	44.1	35.3	397	212	771	851	222	397	864
17RCT2125	2125	1530	1020	148.8	181.0	61.3	49.0	487	212	771	851	222	487	1094
18RCT2250	2250	1620	1080	157.5	185.1	58.4	46.9	487	212	771	851	222	487	1094
19RCT2375	2375	1710	1140	166.3	188.9	55.1	44.1	487	212	771	851	222	487	1094
20RCT2500	2500	1800	1200	175.0	194.3	53.5	42.8	487	212	771	851	222	487	1094
24RCT3000	3000	2160	1440	210.0	244.0	55.0	44.0	576	212	771	851	222	-	-

# First National Battery

ESTABLISHED IN 1931, FIRST NATIONAL BATTERY IS A LEADING MANUFACTURER OF LEAD ACID BATTERIES IN SOUTH AFRICA.

THE COMPANY PRODUCES MORE THAN 2 000 000 BATTERIES ANNUALLY TO PROVIDE ELECTRICAL POWER FOR PASSENGER CARS, TRUCKS, TRACTORS, FORKLIFT TRUCKS, BOATS, RAILWAY LOCOMOTIVES AND COACHES, UNDERGROUND LOCOMOTIVES AND MINERS' CAP LAMPS, POWER STATIONS, SWITCH YARDS, FARM LIGHTING, SOLAR SYSTEMS, COMPUTERS, TELECOMMUNICATIONS EQUIPMENT ... AND A HOST OF OTHER USES.

FIRST NATIONAL BATTERY ACKNOWLEDGES THAT SUPERIOR TECHNOLOGY, CONSISTENT PRODUCT QUALITY AND DEDICATED CUSTOMER SERVICE ARE MINIMUM REQUIREMENTS TO ENABLE THE COMPANY TO MAINTAIN ITS POSITION AS AN INDUSTRY LEADER.

THE COMPANY'S VALUES ARE REPRESENTED BY ITS MOTTO: THROUGH CARING WE LEAD  
PROOF OF THESE VALUES IS TO BE FOUND IN THE MANY PRODUCT AND SERVICE QUALITY AWARDS AND CERTIFICATES PRESENTED TO FIRST NATIONAL BATTERY OVER MANY YEARS OF SERVICE TO BATTERY USERS.  
TRACTION BATTERIES AND CELLS ARE MANUFACTURED AND COMPLY WITH ISO 9001:2000, IEC 60254-1 AND 2 (1997).

## 4 DEDICATED MANUFACTURING SITES

BUFFALO VIEW ROAD, EAST LONDON 6 000M<sup>2</sup> FACTORY  
ISO 9001: 2000 AND ISO 14001 CERTIFIED  
INDUSTRIAL BATTERY MANUFACTURING  
FORKTRUCK BATTERIES: STANDBY BATTERIES: MINING BATTERIES

SETTLERS WAY, EAST LONDON 9 200M<sup>2</sup> FACTORY  
ISO/TS 16949:2002 AND ISO 14001 CERTIFIED  
AUTOMOTIVE BATTERY MANUFACTURING  
7 000 BATTERIES PER DAY  
ALSO TECHNICAL CENTRE

FORT JACKSON 5 000M<sup>2</sup> FACTORY  
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PLASTIC INJECTION MOULDING  
50 TON-860 TON INJECTION MOULDING MACHINES  
18 MILLION PIECES PER ANNUM  
ALSO TOOLROOM

LIVERPOOL ROAD BENONI  
ISO/TS 16949:2002 AND ISO 14001 CERTIFIED  
LEAD SMELTER  
8 000 TONS RECYCLED LEAD PER ANNUM  
ALSO WAREHOUSING & DISTRIBUTION  
FORMATION & FINISHING LINE  
MARKETING & FINANCE DIVISIONS



FIRST NATIONAL BATTERY WILL REMAIN THE EXCLUSIVE MANUFACTURER OF BATTERIES AND SUPPLIER OF PRODUCTS AND SERVICES TO FIRST NATIONAL BATTERY INDUSTRIAL. IN KEEPING WITH THEIR OBJECTIVE TOWARDS TRUE BLACK EMPOWERMENT THEY PLAN TO FURTHER INCREASE

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