



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



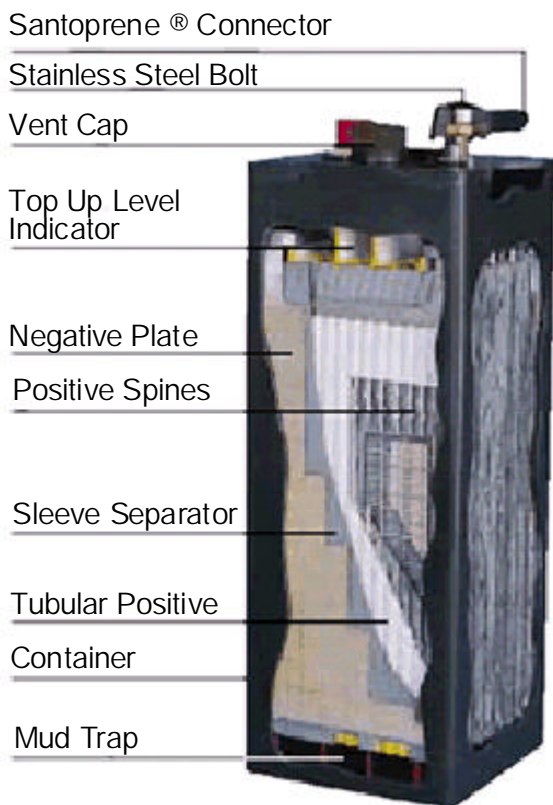
# M-Solar Cells



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

Complies with SABS IEC 60254-1,2

# RAYLITE™ M-Solar Battery



## Positive Plate

The tubular plate construction incorporates low antimony lead alloy spines in complete contact with the active material, which is retained by an outer gauntlet. This enables the electrolyte to penetrate freely, ensuring a high power output per unit volume.

## Top-up Level Indicator

Two ribs on the separator guard serve both as level indicators, and to strengthen the guard.

## Negative Plate

The negative plate is of a highly porous paste on a lead alloy grid. This complements the positive plate construction, providing a balanced performance and superior life.

## Sleeve Separators

Sleeve separators are manufactured from microporous polyethylene. They are impervious to acid attack. The sleeve separators prevent short-circuiting caused by mousing.

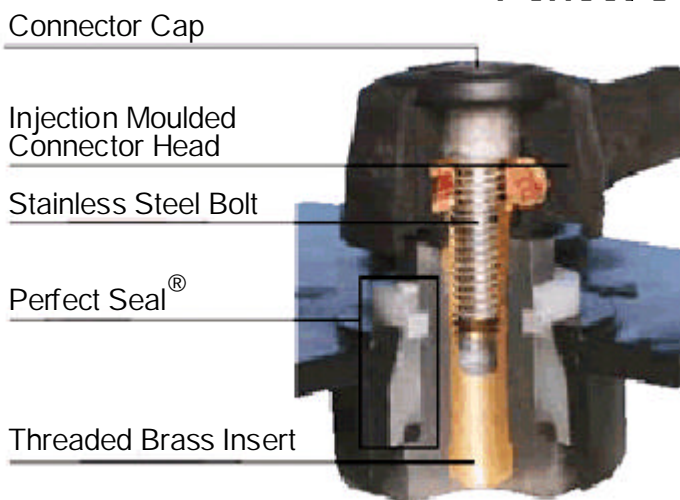
## Mud Trap

Prevents possible shorting between plates due to active material shedding during the life of the cell.

## Container and Lid

The lid is heat-sealed to the container ensuring an excellent bond. This is vital to mechanical strength and safety.

## Perfect Seal® Bolt-On Connector



## Injection Moulded Connector Head

The bolt-on connector facilitates easy cell replacement. Acid resistant, totally enclosed terminal post, maximum safety. Orifice for voltage readings.

## Stainless Steel Bolt

Corrosion resistant.

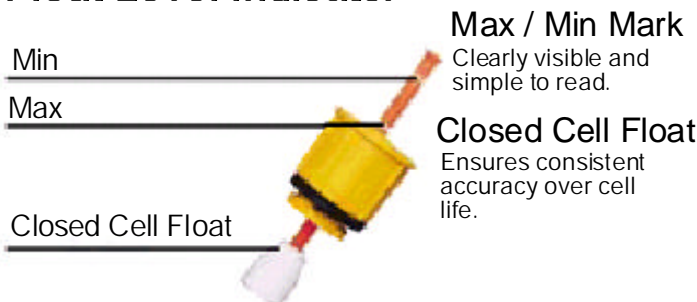
## Threaded Brass Insert

Maximises terminal connector conductivity.

## Perfect Seal®

A polypropylene pressure bushing seated on a rubber "O" ring, locked in place by a polycarbonate ring. The cell is welded to the container, and polypropylene is injection moulded into the post to lid cavity. This design eliminates acid leaks through the post assembly.

## Float Level Indicator

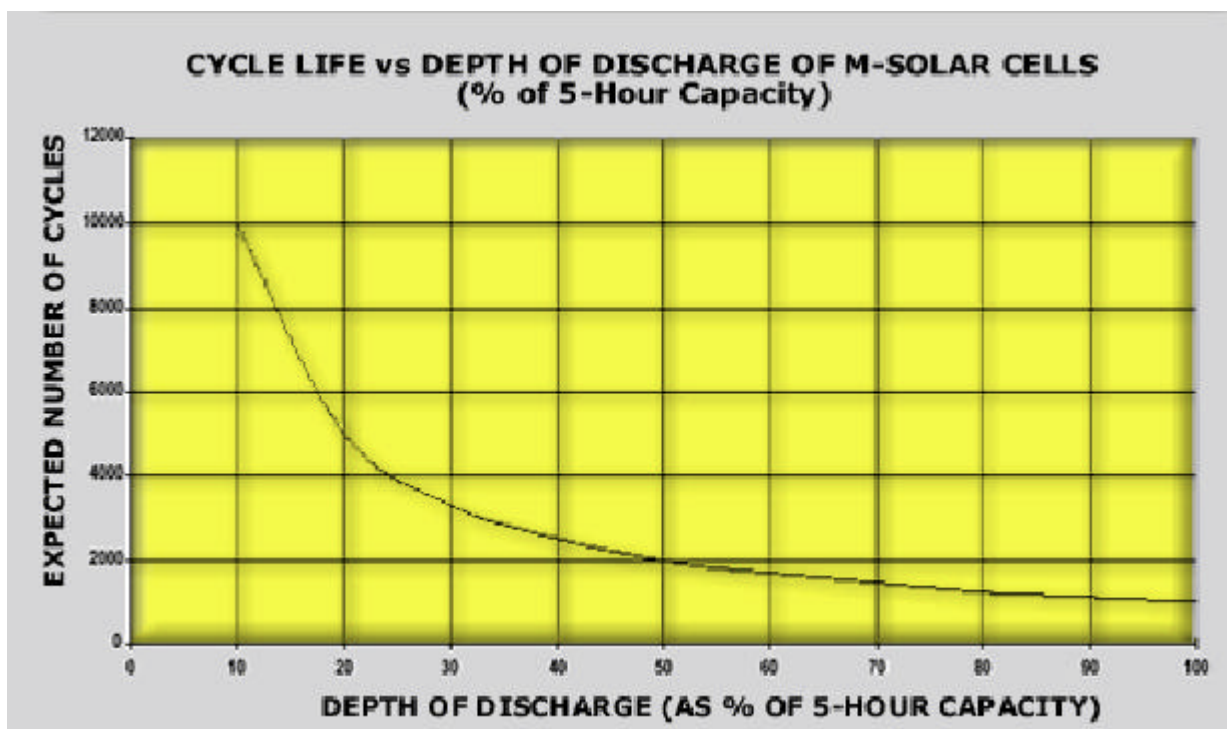
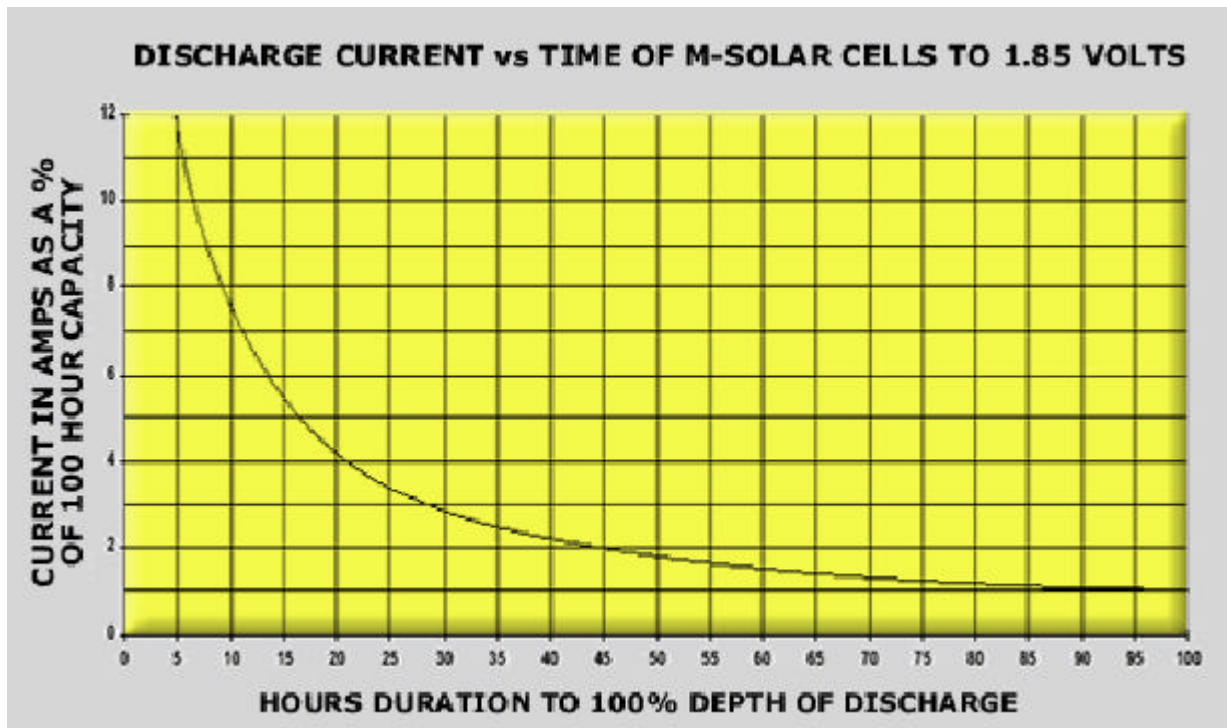


## Santoprene® Connectors

- \* Made of Thermoplastic Rubber
- \* Acid Resistant
- \* Abrasion Resistant
- \* Fatigue Resistant
- \* Access for Easy Voltage Checking
- \* More Flexible than PVC Cable
- \* Exceptional Moulding Bond Eliminates Contamination
- \* Built in "O" Rings
- \* Easy and Simple to Connect.

# Battery Specification

Cell Type	Battery Voltage (volts)	Capacity @ 25°C C <sub>100</sub> (Ah)	Battery Dimensions (mm)			Approx Battery Mass (kg)	Acid Volume Per Cell (litres)
			Length	Width	Height		
3 MIL 15 S	6	530	585	182	460	80	5.6 l
3 MIL 17 S	6	600	585	198	460	91	6.3 l
3 MIL 21 S	6	750	585	230	460	116	8.0 l
3 MIL 25 S	6	900	585	262	460	133	8.2 l
2 MTL 25 S	4	1050	411	262	530	97	10.7 l
2 MTE 21 S	4	1380	415	230	740	127	14.0 l
2 MTE 25 S	4	1660	415	262	740	145	15.0 l





# 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.

## 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  
ISO/TS 16949:2002 AND ISO 14001 CERTIFIED  
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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