

Rolls Surrette

DUAL CONTAINER

**A NEW GENERATION OF BATTERIES NOW IN THE
"NON BREAKABLE DUAL CONTAINER CONSTRUCTION"
MORE POWER with LESS WEIGHT**

The engineers at Rolls have taken another step in designing the latest in high capacity deep cycle batteries for solar, stationary, UPS and Marine. In order to build higher power density into their batteries, they have redesigned the battery case. Called the Rolls "Dual Container" batteries, these batteries provide a leap in large capacity deep cycle battery construction.

By using newer high strength materials they have reduced the thickness of the battery case walls thus increasing the internal cell space. This, in turn, allows more plate material and higher quality plates. The "Dual Container" Case utilizes a thin wall construction which allows for a lighter case without sacrificing strength.

The Case for the New "Dual Container" Case:

This new design eliminates breakage due to rough handling and abuse. Complete single cell replacements are possible. The new design utilizes an inner and outer container, plus a removable outer protective lid. Each cell is assembled in its own container made of durable polypropylene. The cells are then inserted into a high density, tough polyethylene outer container. Even if the outer container is punctured, the battery would still be operable! The outer and inner container can be hit with a mallet without breaking!

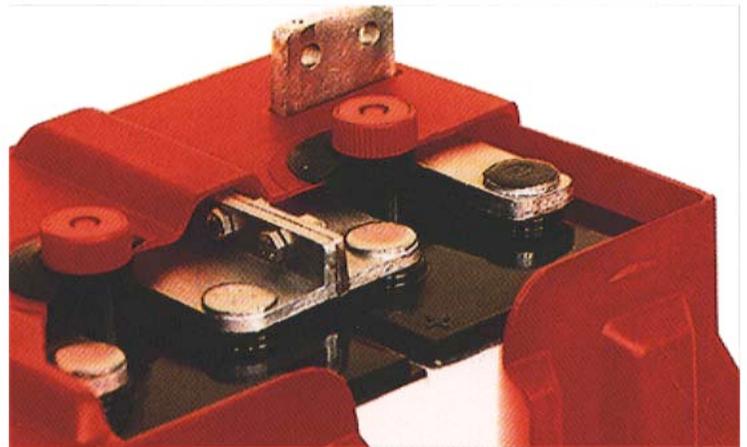
Preventative maintenance is much simpler and safer. The outer protective cover allows the battery to be washed and cleaned with ease! Maintenance personnel do not have to worry about falling metal objects shorting the cell connectors, which can cause an explosion and burns, not to mention damage to the battery. Short circuits due to water, dirt, and falling

DC BATTERY SPECIALISTS

a division of DC Marine Systems, Inc.

Florida Battery Distributor of ROLLS • SURRETTE • DOUGLAS • LIFELINE • OPTIMA

160 NW 73 Street • Miami, FL 33150 **(305) 758-5041** • fax (305) 758-3469



Cut-away showing the "Dual Container" bolt-together connectors and removable lid.

DUAL CONTAINER

metal objects are eliminated. Servicing is much safer as there are no exposed metal connectors.

Replacing a cell is simple as there is no compound to remove, nor "dripping" acid! The outer cover snaps off exposing the individual cells. Bolt on cell connectors allow cell replacement to be made without special skills. This allows the battery to be disassembled, installed as components and reassembled on site, making it possible to simply and easily install Hugh banks of heavy batteries.

The battery is environment friendly as breakage is eliminated, thus reducing the harmful effects of sulfuric acid spills.



The "Dual Container" Battery is easy to disassemble

Due to the additional cell space, improved plates and insulating materials can now be used. The positive plates are triple insulated, the first layer consisting of a thick woven glass mat, and then a thick layer of silver (CS type only) and finally, an envelope which eliminates separator punctures, missing separators and separator misalignment, which are principle causes of defective cells. The plate and matting are sealed in this indestructible microporous, polyethylene envelope. The envelope eliminates plate shorts due to shedding, cracked separators, and treeing.

Due to the additional "Dual Container" cell space and the envelope design, a mud rest (sediment well) at the bottom of the cell is not necessary. This allows for a deeper plate and therefore more capacity.

The larger cell volume of the "Dual Container " batteries allows for plates which maximize the use of high density active material and reinforced grid (current carrying conductor) design. This allows Surrette to put their best plates into their "Dual Container " batteries

The "Dual Container " batteries are designed to accept the optional Hydrocap vent cap. These recombine the gasses back to a liquid, and return the liquid to the cell, therefore, providing the "Dual Container System" with combined characteristics. The Rolls/Hydrocap combination offers the low maintenance of a sealed battery, and the higher capacity and internal access for evaluation of a flooded plate battery.

DC BATTERY SPECIALISTS

a division of DC Marine Systems, Inc.

Florida Battery Distributor of **ROLLS • SURRETTE • DOUGLAS • LIFELINE • OPTIMA**

160 NW 73 Street • Miami, FL 33150 **(305) 758-5041** • fax (305) 758-3469

HYDROCAP

ELIMINATES ROUTINE MAINTENANCE ON FLOODED PLATED STATIONARY BATTERIES

TO FULLY CHARGE ANY STORAGE BATTERY A CERTAIN AMOUNT OF OVERCHARGE IS NECESSARY. THIS OVERCHARGING EQUALIZES THE POWER IN THE CELLS OF THE BATTERY. WHEN THE CELL REACHES 80% CAPACITY, SURPLUS ENERGY IS DISSIPATED THROUGH BOILING, WHICH CAUSES THE WATER IN THE ELECTROLYTE TO SEPARATE INTO HYDROGEN AND OXYGEN GASSES. THESE GASSES ESCAPE FROM THE BATTERY AND CAUSE A REDUCTION IN THE ELECTROLYTE LEVEL- WHICH YOU MUST COUNTERACT BY 'TOPPING UP' THESE CELLS WITH DISTILLED WATER.



HYDROCAPS ARE ABLE TO CATALYTICALLY RECOMBINE THE HYDROGEN AND OXYGEN GASSES INTO PURE WATER WHICH RETURNS TO THE BATTERY CELL. THIS DRASTICALLY REDUCES THE AMOUNT OF "TOPPING UP" AND VIRTUALLY ELIMINATES THE DANGER OF A HYDROGEN GAS EXPLOSION. CORROSION IS ELIMINATED BECAUSE THE ACID SPRAY AND FUMES ARE CONTAINED WITHIN THE CELL.

IN SUMMARY - HYDROCAPS

1) DRASTICALLY REDUCE THE AMOUNT OF TIME AND MONEY (FOR DISTILLED WATER) YOU SPEND ON "TOPPING UP" YOUR BATTERIES.

2) VIRTUALLY ELIMINATE THE RISK THE VENTING OF HYDROGEN GAS CAN CAUSE.

3) CONTAIN CORROSIVE ELEMENTS - WHICH INCREASES THE LIFE OF YOUR BATTERY AND DECREASES CLEANING TIME.

4) PROVIDE THE USER WITH ALL THE BENEFITS OF A FLOODED TYPE BATTERY WITH THE MINIMAL MAINTENANCE, SIMILAR TO SEALED BATTERIES



DC BATTERY SPECIALISTS

a division of DC Marine Systems, Inc.

Florida Battery Distributor of ROLLS • SURRETTE • DOUGLAS • LIFELINE • OPTIMA

160 NW 73 Street • Miami, FL 33150 **(305) 758-5041** • fax (305) 758-3469