

A BATTERY FOR THE SPACE-AGE

OPTIMA SPIRAL CELL TECHNOLOGY®

Optimal starting power regardless of temperature

Extreme vibration resistance

1,5 - 2 times longer life than traditional batteries

Long storage time

Non spillable in any position

Maintenance free

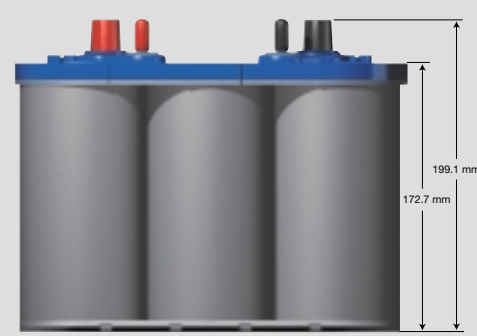
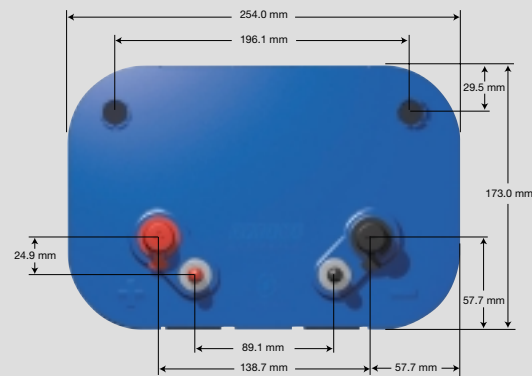


The assignment was to create an energy source that could power the first moon buggy. The requirements were for a battery design that could function under extreme stress and still deliver considerably more power than conventional batteries. A compact battery that guaranteed function and performance. The result is the unique Spiral Cell Technology® that OPTIMA batteries are based on. A new formula that delivers higher starting power, faster charging, no acid leakage, high vibration resistance and is maintenance free. The technology has been around for over 30 years and has continued to grow as OPTIMA sets new standards for function and performance in the battery market.



TECHNICAL INFORMATION OPTIMA BLUE TOP™

	BLUE TOP DC 4,2L	BLUE TOP SLI 4,2L
Cold Cranking Amps (EN)	690 CCA	815 CCA
Capacity (EN)	55 Ah	50 Ah
Reserve Capacity (EN)	120 min	104 min
Weight	19,5 kg	17,2 kg



AUTHORIZED
OPTIMA
BATTERIES
DEALER

Marketed in Europe, Africa, Middle East and Asia by: Optima Batteries AB, Phone: +46 (0) 8 622 32 00

www.optimabatteries.se

A JOHNSON CONTROLS COMPANY

THE HARDEST WORKING BATTERIES IN THE MARINE-WORLD



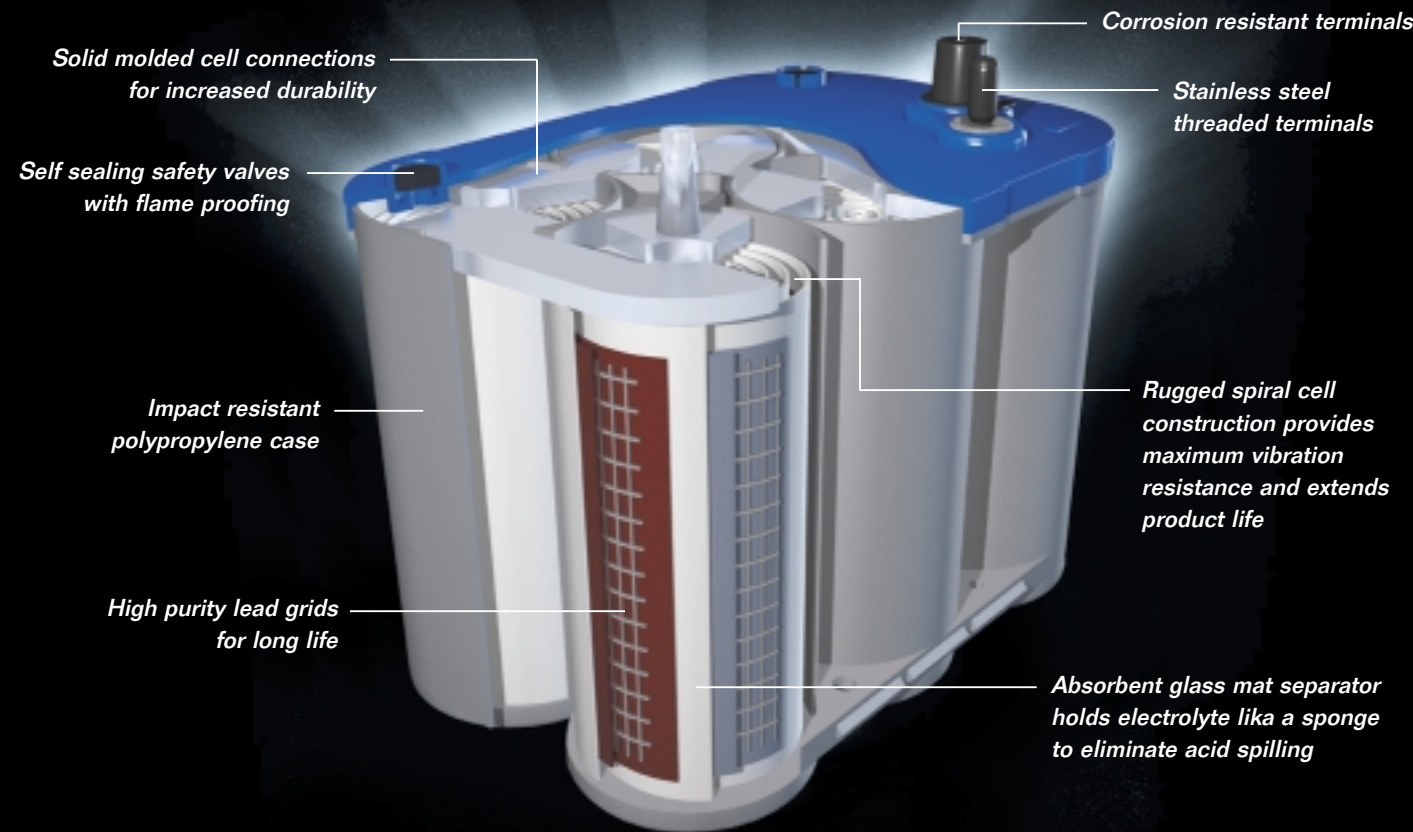
OPTIMA
BATTERIES
THE ULTIMATE POWER SOURCE™



OPTIMA BLUE TOP™

Batteries for professional marine use

In demanding marine conditions the OPTIMA Blue Top battery shows its true colors. The Blue Top is leak proof so the power supply can't be interrupted by engine vibrations or rough sea conditions. All of this is thanks to the OPTIMA Spiral Cell Technology®, which allows a compact battery with low self discharge and the flexibility to be mounted in very tight spaces. These features along with its power make the Blue Top the obvious choice for any watercraft where high demand for power security is crucial. It comes in two styles, as a start battery for those that have a divided system and need maximum starting power, and as a deep cycle battery where the advantages of the start battery are combined with the deep cycle battery. The Blue Top is ideal for anyone who needs maximum starting power as well as the energy to run onboard accessories.



Solid molded cell connections for increased durability

Self sealing safety valves with flame proofing

Impact resistant polypropylene case

High purity lead grids for long life

Corrosion resistant terminals

Stainless steel threaded terminals

Rugged spiral cell construction provides maximum vibration resistance and extends product life

Absorbent glass mat separator holds electrolyte like a sponge to eliminate acid spilling

THE ANATOMY OF POWER

OPTIMA SPIRAL CELL TECHNOLOGY®



A UNIQUE FORMULA

OPTIMA's unique anatomy is built on Spiral Cell Technology®. Instead of flat plates used in ordinary batteries, OPTIMA uses two thin lead plates wound into a spiral cell with a glass-mat between to contain the acid. The technique of winding the cells, which are linked with solid connections, gives maximum performance with a minimum of size and weight. This makes the battery compact, robust and easy to mount.

POWER TO MAKE WAVES

OPTIMA Spiral Cell Technology® allows an extremely compact battery that withstands high stress with maximum power output. This power makes OPTIMA batteries the natural choice for professional mariners the world over.



Maximum durability

The electrolyte solution is contained in a sealed system, surrounded by a durable and weather resistant plastic, and completely welded together. Neither bumps, collisions, nor sudden temperature changes can interrupt power supply or allow the battery to leak.

Considerably longer life span

The thin lead plates give 50-100% more lead surface than traditional lead/acid batteries. The design minimizes resistance and gives even pressure over the entire lead surface, providing fast energy and an extra long life span. The larger lead surface also allows faster recharging than

regular batteries. In an ordinary battery, the water evaporates in the heat and the acid density increases, which shortens battery life. This will never happen in an OPTIMA battery. The sealed system turns the gases to liquid so you will never have to worry about water levels.

Maintenance free

A major difference from ordinary batteries is that OPTIMA batteries are maintenance free because of the sealed system and no flowing electrolyte. No corrosion can form around the posts.

Easy mounting

The sealed system allows the battery to be permanently mounted on its

side, on end, or even upside-down, making it ideal for narrow or poorly ventilated spaces.

Maximum starting power

The technology gives maximum and sure starting power regardless of temperature or the number of deep discharges. Compact OPTIMA batteries have been tested starting large diesel motors from plus 40° to minus 40° Celsius.

Very low self discharge

OPTIMAS batteries are ideal for seasonal use. The low rate of self discharge guarantees plenty of starting power even after long periods of storage.